Unified Patent Court
Einheitliches Patentgericht
Juridiction unifiée du brevet

# Düsseldorf Local Division
# UPC_CFI_758/2024
# UPC_CFI_259/2025

## Decision
**of the Court of First Instance of the Unified Patent Court**
**delivered on 10 June 2026**
**concerning EP 2 352 431 B1**

Headnote:

The claimant's legitimate interest in the publication of a decision (Art. 80 UPCA) may, depending on the circumstances of the individual case, follow from the fact that the defendant has marketed the attacked embodiment by explicitly referencing to the key technology protected by the patent.

Keywords:

spatially and physically defined feature; inferior embodiment; Art. 28 UPCA; private prior use right; positive right of use; Art. 64 UPCA; recall; removal; channels of commerce; depriving of infringing property; software-based modification; proportionality; interests of third parties; patients; joint and several liability; Art. 68 UPCA; Art. 80 UPCA; publication of decision

CLAIMANT / COUNTERDEFENDANT:

**Hologic, Inc.,** 250 Campus Drive, Marlborough, MA 01752, United States of America, represented by its President & CEO Stephen MacMillan

represented by: Attorney-at-law Dr Thure Schubert, Attorney-at-law Christian Leopold Zapp, Patent Attorney Arnold Asmussen, Attorney-at law Dr Christoph Eisenmann, Vossius & Partner Patentanwälte Rechtsanwälte mbB, Siebertstraße 3, 81675 Munich, Germany

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DEFENDANTS / COUNTERCLAIMANTS:

1. **Siemens Healthineers AG**, Siemensstr. 3, 91301 Forchheim, Germany

2. **Siemens Healthcare GmbH**, Henkestr. 127, 91052 Erlangen, Germany

3. **Siemens Healthineers Nederland B.V.**, Prinses Beatrixlaan 800, 2595 BN Den Haag, The Netherlands

4. **Siemens Healthcare SAS**, 6 rue du Général Audran, 92400 Courbevoie, France

Defendants 1 to 4 represented by: Attorney-at-law Dr Matthias Meyer, Attorney-at-law Dr Daniel Misch, Patent Attorney Dr Felix Harbsmeier, Patent Attorney Cameron Walker, Bird & Bird LLP, Carl-Theodor-Straße 6, 40213 Düsseldorf, Germany

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PATENT AT ISSUE:

European Patent n° EP 2 352 431 B1

PANEL/DIVISION:

Panel 2 of the Local Division in Düsseldorf

DECIDING JUDGES:

The decision is issued by Presiding Judge Dr Thom, the legally qualified Judge Dr Rinken acting as judge-rapporteur, the legally qualified Judge Rinkinen and the technically qualified Judge Dr Kitchen.

*LANGUAGE OF THE PROCEEDINGS:* English

*SUBJECT OF THE PROCEEDINGS:* Infringement action and counterclaim for revocation

DATE OF ORAL HEARING: 14 April 2026

*SHORT SUMMARY OF FACTS:*

1 The Parties argue about the infringement and validity of EP 2 352 431 B1 (Exhibit CC 1; hereinafter "patent in suit"). The patent in suit with the European application number 09 760 415.1 has a filing date of 23 November 2009 and claims the priority of US 117453 P dated 24 November 2008. The application was published as WO 2010/060007 on 27 May 2010 and the publication of the grant of the patent in suit is dated 15 August 2018. The patent in suit was opted-out from the Unified Patent Court (UPC) on 26 May 2023. This opt-out was withdrawn on 21 November 2024 (Exhibit VB 01).

2 The patent in suit is particularly in force in the UPC member states Federal Republic of Germany, French Republic and in the Kingdom of the Netherlands. The Claimant is the sole proprietor of the national designations of the Patent (cf. excerpts from the national patent registers, Exhibit VB 02).

3 An opposition against the grant of the patent in suit was filed with the European Patent Office (EPO) on 14 May 2019 by Defendant 2. On 24 June 2021 the EPO Opposition Division rejected the opposition. On 5 October 2021 Defendant 2 filed an appeal against the first instance decision of the EPO Opposition Division. On 14 February 2024 the EPO Technical Boards of Appeal (hereinafter "TBA") rejected the appeal (Exhibit VB 06).

4 The patent in suit protects a "method and system for controlling x-ray focal spot characteristics for tomosynthesis and mammography imaging". Claims 1, 4, 5 and 7 of the patent in suit read as follows:

Claim 1:

*"A breast tomosynthesis system (100), comprising an x-ray tube (110) a detector (160) and compression paddles (130, 135), wherein the x-ray tube (110) is arranged to move during an exposure period comprising:*

*a cathode (112) for providing an electron stream; an anode (114) comprising a target for receiving the electron stream and generating a photon stream in response thereto;*

*a focusing cup which focuses the electron stream on the anode during the exposure period; a port (120) for passing the photon stream out of the x-ray tube, wherein the cathode, anode and port together define a static focal spot (127) of the x-ray tube; and*

*a controller coupled to at least one of the anode, the cathode and focusing cup wherein, in a first operational mode, the x-ray tube moves in a first direction during an exposure period, wherein the controller is arranged, in a first operational mode, to move the static focal spot*

*(127) within the x-ray tube in a second direction, opposite from the first direction and generally synchronized with the directional movement of the x-ray tube, so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure."*

Claim 4:

*"The breast tomosynthesis system of any of the previous claims, being arranged to support both two dimensional (2D) and three dimensional (3D) imaging capabilities to provide a combination of mammography and tomosynthesis imaging capabilities."*

Claim 5:

*"The breast tomosynthesis system according to claim 4, wherein the controller is arranged, in a two dimensional image acquisition mode, to decrease, compared with the first operational mode, the size of the static focal spot to provide standard mammograms or magnified images."*

Claim 7:

*"A method of acquiring a breast tomosynthesis x-ray image using a breast tomosynthesis system comprising a detector (160), compression paddles (130,135) and an x-ray tube (110) comprising a cathode (112) for providing an electron stream; an anode (114) comprising a target for receiving the electron stream and generating a photon stream in response thereto; a focusing cup which focuses the electron stream on the anode during the exposure period; a port (120) for passing the photon stream out of the x-ray tube, wherein the cathode, anode and port together define a static focal spot (1270) of the x-ray tube; and wherein the x-ray tube further comprises a controller coupled to at least one of the anode, the cathode and focusing cup, the method including the steps of:*

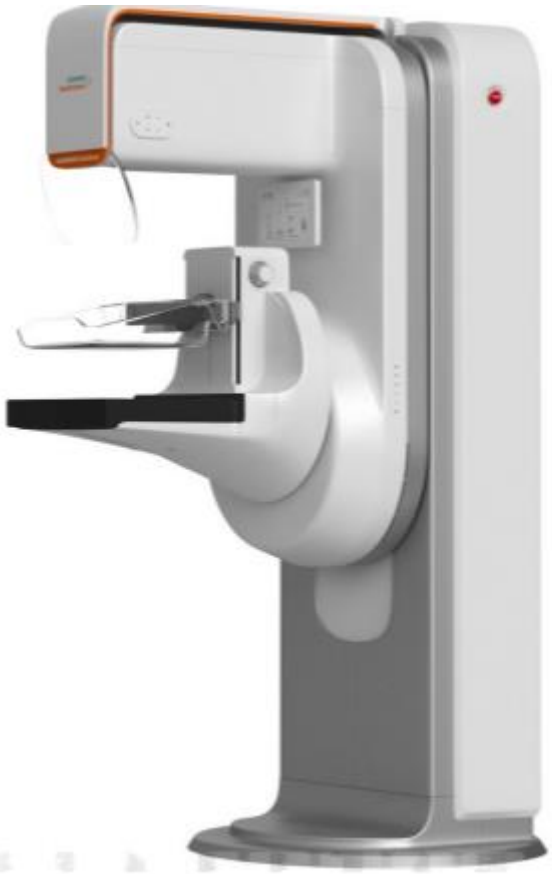
*moving the x-ray tube in a first direction while moving the static focal spot under the control of the controller, within the x-ray tube in a second direction, opposite to the first direction and generally synchronised with the directional movement of the x-ray tube, so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure."*

5 With regard to the wording of the other claims, reference is made to the patent in suit.

6 The Claimant is a US medical technology company, primarily focusing on women's health. It sells medical devices for diagnostics, surgery, and medical imaging.

7 Defendant 1 is a Germany based company which provides healthcare services. It was spun off from its parent company Siemens AG in 2016/2017. Until 1 October 2023, Defendant 1 did not have any operational business, in particular it was not involved in the production and marketing of the attacked embodiment, which was - at least - until then handled by Defendant 2. On 18 August Defendants 1 and 2 entered into a Spin-off and Transfer Agreement, under which Defendant 2 transferred its entire business operations and almost all its assets and liabilities to Defendant 1. The transfer became effective on 1 October 2023.

8 One of the various medical fields Defendant 1 is involved in is medical imaging, and more particularly also mammography. The product portfolio includes a mammography system designated MAMMOMAT B.brilliant (hereinafter attacked embodiment, cf. picture below) which has been introduced to the market end of September 2023.



9 The attacked embodiment is a breast tomosynthesis system with an x-ray tube. The attacked embodiment can be operated in two different imaging modes, a 2D mammography mode and a 3D tomosynthesis mode. For this purpose, […]

10 Defendants 2 to 4 are European wholly owned subsidiaries of Defendant 1. As their parent company, Defendant 1 controls and manages Defendants 2 to 4 regarding the offer of and supply for the attacked embodiment in Contracting Member States. Defendant 2 is based in Germany, Defendant 3 is based in the Netherlands and Defendant 4 is based in France.

11 With its infringement action, the Claimant targets the attacked embodiment.

*REQUESTS OF THE PARTIES:*

Infringement action:

The Claimant finally requests the Court,

I. to order Defendants in the territories of Germany, France, and the Netherlands to cease and desist from

1. making, offering, placing on the market, using or importing or storing for those purposes within the states mentioned in item I. above

a breast tomosynthesis system, comprising an x-ray tube, a detector and compression paddles, wherein the x-ray tube is arranged to move during an exposure period comprising: a cathode for providing an electron stream; an anode comprising a target for receiving the electron stream and generating a photon stream in response thereto; a focusing cup which focuses the electron stream on the anode during the exposure period; a port for passing the photon stream out of the x-ray tube, wherein the cathode, anode and port together define a static focal spot of the x-ray tube; and a controller coupled to at least one of the anode, the cathode and focusing cup wherein, in a first operational mode, the x-ray tube moves in a first direction during an exposure period, wherein the controller is arranged, in a first operational mode, to move the static focal spot within the x-ray tube in a second direction, opposite from the first direction and generally synchronized with the directional movement of the x-ray tube, so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure.

(direct infringement of independent claim 1 of the patent in suit),

in particular, if

the breast tomosynthesis system is being arranged to support both two dimensional (2D) and three dimensional (3D) imaging capabilities to provide a combination of mammography and tomosynthesis imaging capabilities;

(dependent claim 4 of the patent in suit)

in particular, if

the controller of the breast tomosynthesis is arranged, in a two dimensional image acquisition mode, to decrease, compared with the first operational mode, the size of the static focal spot to provide standard mammograms or magnified images;

(dependent claim 5 of the patent in suit)

alternatively as an auxiliary request to I.1 ,

2. offering and/or supplying in the territory of one or more of the States mentioned in item I. above for use in the territory of one or more of these States:

a breast tomosynthesis system, suitable for performing a method of acquiring a breast tomosynthesis x-ray image using a breast tomosynthesis system comprising a

detector, compression paddles and an x-ray tube comprising a cathode for providing an electron stream; an anode comprising a target for receiving the electron stream and generating a photon stream in response thereto; a focusing cup which focuses the electron stream on the anode during the exposure period; a port for passing the photon stream out of the x-ray tube, wherein the cathode, anode and port together define a static focal spot of the x-ray tube; and wherein the x-ray tube further comprises a controller coupled to at least one of the anode, the cathode and focusing cup, the method including the steps of: moving the x-ray tube in a first direction while moving the static focal spot under the control of the controller, within the x-ray tube in a second direction, opposite to the first direction and generally synchronised with the directional movement of the x-ray tube, so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure;

(indirect infringement of independent claim 7 of the patent in suit)

in particular, but not limited to, the ”MAMMOMAT B.brilliant” devices as exemplarily shown below:

II. to order the Defendants 1 to 4 for each case of violation of the order under item I. to make penalty payments to the Court, which are to be determined by the Court in reasonable proportion to the importance of the order to be enforced, whereby an amount of EUR 10,000.00 for each case of violation is suggested;

III. to declare that Defendants 1 to 4 have individually and jointly infringed European Patent No. 2 352 431 in respect to the breast tomosynthesis system as specified in item I.;

IV. to order the Defendants 1 to 4, under the forfeiture of a recurring penalty payment of up to EUR 10,000.00 for each day of delay, within a period of 1 month from the date of service of the judgment subject to Rule 118.8 of the Rules of Procedure,

to provide Claimant with information in a complete and orderly list in an electronic form that can be analyzed by means of electronic data processing (EDP), broken down by month of a calendar year and by infringing product, as to the extent to which they (the Defendants 1 to 4) have committed the acts referred to in item I above since 15 August 2018, specifying

1. the origin and distribution channels of the infringing products;

2. the quantities produced, manufactured, delivered, received and/or ordered, as well as the price obtained for the infringing products;

3. the identity of any third person involved in the production and/or distribution of the infringing products;

4. the individual offers, broken down by the quantities, dates, prices and type designations as well as the names and addresses of the commercial recipients of the offers;

5. the advertising carried out, broken down by advertising medium, its circulation, distribution period and distribution area, in the case of Internet advertising the domain, the access figures and the placement periods; and

6. the actual costs broken down by individual cost factors and the profit made,

   whereby as proof of the information provided the corresponding receipts (i.e., invoices, alternatively delivery notes) are to be submitted in copy with the proviso that data to which the information owed does not relate and with regard to which there is a justified interest in confidentiality on the part of the Defendants may be covered or blacked out;

V. to order the Defendants 1 to 4, under the forfeiture of a recurring penalty payment of up to EUR 10,000.00 EUR for each day of delay, within a period of 1 month from the date of service of the judgment subject to Rule 118.8 of the Rules of Procedure,

1. to recall and permanently remove from the channels of commerce the products as specified in item I. above which have been placed on the market in Germany, France and the Netherlands since 15 August 2018, to notify the third parties from whom the products are to be recalled that this Court has found that the respective product infringes the European patent No. EP 2 352 431, with a binding undertaking by Defendants to repay the purchase price already paid, if any, to reimburse the third parties for the costs incurred, to pay the necessary transport, shipping and packaging costs incurred, to reimburse the customs and storage costs associated with the return of the products, and to take back the products;

2. to destroy the products as specified in item I. above and the advertising materials and implements for manufacture which are in Defendants' direct or indirect possession and/or ownership in Germany, France and the Netherlands (including any products and advertising materials that come into its direct or indirect possession and/or ownership pursuant to item V.1 or otherwise) and to provide Claimant

with proof of the destruction, or, at its option, to hand them over to a bailiff to be appointed by Claimant for the purpose of destruction;

VI. to declare that Defendants are individually and jointly liable to compensate Claimant for all damages that incurred (including interest) and will incur due to the acts specified in item I. above and committed since 15 August 2018, as to be specified in separate damage proceedings;

VII. to order Defendants to pay interim damages, with the amount at the discretion of the Court, whereby at a minimum, Claimant's expected costs of the proceedings for the award of damages and compensation must be covered, whereby an amount of at least EUR 300,000.00 is suggested;

VIII. allow Claimant to display the Court's decision and to publish it (including the announcement thereof) in full or in part on its website and in public media, including industry journals of its choice;

IX. to order Defendants to pay the reasonable and proportionate legal costs of these proceedings and other expenses in a provisional amount to be specified in the course of these proceedings and to declare that Defendants are to pay any further reasonable and proportionate legal costs of these proceedings and other expenses as to be further specified in separate cost proceedings;

X. to declare that the orders according to items I., II., IV., V., VII. to IX. are immediately enforceable not withstanding any appeal, alternatively, in the event that a security is ordered, to permit Claimant to provide it by bank or savings institution guarantee, and to determine the amount of the security separately for each claim awarded and for the decision of cost liability

alternatively,

to permit Claimant to avoid enforcement with respect to the costs of the proceedings against provision of a security.

The Defendants request to

I. dismiss the action;

II. order the Claimant to bear the costs of the proceedings and to an interim award of the Defendants' costs of at least EUR 125,085.20;

III. in the auxiliary, to make the enforcement of the decision subject to the provision of security by the Claimant in the amount of at least EUR 4,000,000,000 (four billion Euros);

IV. in the auxiliary, to allow the Defendants to deprive the attacked embodiments of their infringing property instead of ordering their recall and destruction.

Counterclaim for revocation

The Counterclaimants 1, 2, 3 and 4 (hereinafter: “Defendants”) request that

I. European patent EP 2 352 431 B1 is revoked for the territories of the French Republic, the Federal Republic of Germany and the Kingdom of the Netherlands;

II. the Claimant shall bear the costs of the revocation proceedings;

III. to order an interim award of the Defendants’ costs at first instance in the amount of at least EUR 125,085.20.

The Claimant requests:

I. The Counterclaims for revocation are dismissed and the patent in suit EP 2 352 431 B1 is maintained as granted;

II. The Defendants are ordered to bear the costs of the proceedings.

Application to amend the patent

The Claimant requests:

> In case it is found that the patent in suit cannot be maintained in unamended form, it is then requested to maintain the patent in suit in amended form based on one of the Auxiliary requests I. to VIII., submitted as Exhibits VB 27 to VB 34.

The Defendants 1 to 4 request,

> to dismiss the infringement action also in view of the Auxiliary requests I. to VIII. as filed in the Application to Amend the patent in suit.

12 The Defendants contend that their rejoinder to the reply to the defence to the application to amend the patent - uploaded on 3 March 2026 - was filed already on 24 September 2025, via a secure Tresorit link provided by the clerk of the Local Division Düsseldorf on the same day via email. They contend that filing via the Tresorit link provided by the Sub-registry was necessary because the new CMS was not yet functioning properly at that time. By order of 9 March 2026, the Claimant’s request to allow it to submit brief formal comments on Defendants’ submissions dated 24 September 2025, and filed 3 March 2026, was rejected by the Judge-Rapporteur. This order was not appealed.

13 Initially, the Claimant based its request for an injunction on both direct and indirect infringement. In response to the Court's question in the oral hearing, the Claimant changed that request so that the injunction would be based on indirect infringement (auxiliary

request) only if there were no findings of direct infringement (main request).

*POINTS AT ISSUE*

A. Claim construction

14 The features of claim 1 are identified here below with references 1 to 4.1 based on the claim chart of the parties (Exhibit B&B 1 and below para. 77). This feature identification was not disputed between the parties.

15 The Defendants argue that the Claimant's view is wrong insofar it seems to construe (for the first time in their statement of defence regarding the counterclaim (hereinafter DCC; mn. 237)) the plural term in feature 1.3 in the sense that Claim 1 requires the presence of at least two compression paddles.

16 In the view of the Claimant the patent in suit does not teach that a focusing cup needs to be "cup-shaped" in order to fulfil its function to focus the electron stream on the anode during the exposure period: A "focusing cup" (features 2.2.3; 2.2.3.1) covers any control electrode for focusing the electron stream onto the anode during the exposure period of the device that at least partially surrounds a cathode filament or flat emitter being recessed therein. According to the Claimant the term "focusing cup" originates from the earlier cup-shaped control electrodes and has become a generic term without requiring such device to be cup-shaped. The TBA in its decision, in particular, did not take the skilled person's understanding of the historical development of the term "focusing cup" (cf. Exhibits VB 04 and VB 05) into account, but believed that also nowadays a focusing cup has to be cup shaped.

[…] (passages marked with „[…]" in this decision are such that are subject to confidentiality).

17 The Defendants agree that "focusing cup" is a generic term, independent of the shape of the cup. However, the Defendants also argue that, if the term "focusing cup" were to be interpreted narrowly (as, in the view of the Defendants, TBA construed it in the terminated opposition proceedings), the narrow definition provided by the patent specification in question would also have to be applied.

[…]

18 The Defendants contest the Claimant's view as far as it seems to construe feature 2.2.4.2 requiring an interplay between the cathode, the anode and the port such as to facilitate a definition of the static focal spot and a resulting "synergy effect" of this interplay, wherein an independent operation of them does not constitute such an interplay with synergic effect.

19 The Claimant is of the opinion that already from claim 1 of the patent in suit it is clear that the controller (feature 2.2.5) is not necessarily a single component of the claimed tomosynthesis, especially not a single physical means. The controller therefore includes

both, a controlling software and (possibly) physical means. The Defendants are – in the view of the Claimant – further wrong insofar as they argue that the physical means of the controller must be "within" the x-ray tube.

20 According to the Defendants, the wording of claim 1 (feature 2.2.5) and all embodiments described in the specification and the figures of the patent in suit require that the x-ray tube comprises the controller, i.e. the controller must be located within the x-ray tube. They think that a controller according to claim 1 is not only a high-level control software but refers to the means for physically manipulating the position of the static focal spot.

21 According to the Claimant, the skilled person would interpret feature 2.2.5.1 as requiring any kind of coupling allowing a communication between the controller and at least one of the anode, cathode and focusing cup. The controller also includes the controlling software of the overall system according to claim 1.

22 The Defendants are of the opinion that said coupling (feature 2.2.5.1) serves to modify a characteristic of the static focal point. In their view, this means that the control unit must act on the anode, cathode, and/or focusing cup in order to modify the location of the static focal point. They contend that not all embodiments described in the description of the patent in suit fall within the scope of claim 1: As far as, according to one embodiment, the anode, cathode and/or focusing cup are not used for moving the static focal spot but rather the two parallel metal plates, this embodiment is not in accordance with claim 1 due to the missing coupling to anode, cathode and/or focusing cup.

23 In the view of the Claimant, feature 4.1 allows for variations in the size of the focal spot. Further, the effective focal spot does not have to exactly maintain a fixed position. Rather it is sufficient that it appears to remain relatively fixed from the position of the breast and/or the detector.

24 The Defendants interpret feature 4.1 to mean that the static focal spot must always appear at the same location relative to the detector, regardless of when during an exposure period it is viewed. In their view, this also means that the effective focal spot must remain the same (minimum) size throughout the entire exposure period, i.e. it has to maintain the size of the static focal spot.

## B. Infringement

25 The Claimant contends that the attacked embodiment realises all features of claim 1, of the dependent claims 4 and 5 and as well (if used) of the independent method claim 7 of the patent in suit, both in a structural and in a functional way.

### I. Claim 1

26 According to the Claimant, the attacked embodiment comprises two compression paddles wherein the object table is the lower one of them. The Defendants generally do not contest

this view, however they auxiliary argue that the Claimant seems to more narrowly construe the plural term in feature 1.3 in the defence to the counterclaim.

27 The Claimant is of the opinion that the focusing cup does not have to be cylindrical in shape, but generally covers any control electrode for focusing the electron stream to the anode during the exposure period of the device that at least partially surrounds a cathode filament or flat emitter being recessed therein; the recessed configuration defines a bottom and wall surrounding the cathode filament or flat emitter. According to the Claimant, feature 2.2.3 is fulfilled even under the - auxiliary - narrower interpretation by the Defendants.

28 The Defendants are primarily of the opinion that a focusing cup is an element which is not necessarily cup-shaped. Auxiliary, they acknowledge that allegedly the TBA's decision (cf. Exhibit VB06, section 5.2) relies on the reasoning that a focusing cup must have the form of a cup. They contend that if this narrow interpretation is to be applied in the present proceedings, the attacked embodiment would not infringe the patent in suit:

[…]

29 With regard to feature 2.2.3.1, the Claimant argues: As far as para. [0012] specifies that the focusing cup of the embodiment shall be […]

30 According to the Defendants, even if the attacked embodiment comprises a focusing cup, it would not realize feature 2.2.3.1: […]

31 The Defendants auxiliary argue that the Claimant seems to opine that there must be a common […] Based on this interpretation, the Defendants hold that the attacked embodiment does not realize feature 2.2.4.2: […]

32 According to the Claimant, […] , is a part of the controller in accordance with feature 2.2.5. The Claimant holds the view that feature 2.2.5 is realized[…] Auxiliary, the Claimant is of the opinion that the Defendants are wrong to[…] Thus, the skilled person would also consider components […]

33 The Defendants are of the opinion that the controller must be […], since the x-ray tube "comprises" the controller according to the wording of claim 1. Furthermore, the Defendants hold that the x-ray tube is exclusively the component holding the vacuum and the elements within the vacuum. […]

34 According to the Claimant, any direct or indirect connection allowing communication between the overall controlling (software) of the attacked embodiment and at least one of the anode, cathode and focusing cup is sufficient for the fulfilment of feature 2.2.5.1. Against this background, the Claimant states: […]

35 The Defendants argue that the controller must act on the anode, the cathode and or/focusing cup for modifying the location of the static focal spot[…]

36 With regard to feature 4.1, the Claimant points out that the Defendants' argumentation contradicts their own advertisement material (cf. Exhibits VB 08 and VB 09), since they are marketing the attacked embodiment by emphasizing that it "*utilizes an electron beam that's*

*accurately deflected by an electromagnetic field*", has a focal spot "*that is thus stationary when observed from outside*" and is "*effectively static during the X-ray pulse*". Furthermore, the Claimant states that Defendants' measurements provided in the SoD are imprecise and lack relevant details which significantly affect the measurement results. The Claimant also takes the view that the Defendants' measurements were obtained in a laboratory environment without a confirmation that a commercial system would produce the same results or that the system can be manipulated to perform in a self-serving way. As an auxiliary point, the Claimant states (cf. written statement of Mr. [redacted] (Exhibit VB 15); cf. a bundle of scientific research papers on which the Claimant bases its calculations (Exhibits VB 16 – VB 20): Even assuming that these statements and experiments provided by the Defendants are fully correct, feature 4.1 is fulfilled when applying the correct interpretation of the feature, as feature 4.1 only requires that the movement is compensated to an extent that the effective focal spot "appears" to be "relatively" fixed in space from the perspective of the breast and/or the detector. […] Even though the effective focal spot of the attacked embodiment may not be considered to be mathematically perfectly fixed in space, the effective focal spot appears to be fixed when considering the aim of the patent in suit, i.e. improving image quality.

37 According to the Defendants feature 4.1 is not realized: […]

II. Claims 4 and 5

38 The Claimant argues […] According to the Defendants the attacked embodiment also does not infringe dependent claims 4 and 5 which relate to the non-infringed claim 1. Furthermore, they are of the view that claim 5 is in addition not infringed because the […] of the attacked embodiment […]

III. Claim 7

39 The Claimant contends that the method claim 7 is realised whenever the attacked embodiment is operated. The Defendants are of the view that the features of claim 7 mirror claim 1 and must be interpreted in the same way. Thus, they also contest an infringement of claim 7.

C. Infringing activities of the Defendants

40 The Claimant argues that it is irrelevant that Defendant 2 allegedly has terminated its operational business, since it confirms that it is still mentioned as the "legal manufacturer" in the sense of the Medical Devices Regulation (EU) 2017/754 (hereinafter "MDR"). In any case, the risk of repetition of manufacturing the attacked embodiments regarding the Defendant 2 arises from the previous manufacturing. Defendant 2 points out that it merely remains the "legal manufacturer" according to the MDR; in its view, fulfilling the obligations according to Art. 10 MDR does not amount to any of the acts prohibited under Art. 25 UPCA, in particular not "making" the attacked embodiments.

41 The Defendants further raise the following issue: Although the Claimant alleges that (only) Defendant 2 manufactures the attacked embodiment, the cease-and-resist request I.1. does not differentiate between the four Defendants.

D. Private prior use right for Germany (Art. 28 UPCA; Sec. 12 German Patent Act)

42 The Defendants are of the opinion that they are in any case entitled to a prior use right at least for the territory of Germany according to Art. 28 UPCA in connection with Section 12 German Patent Act (hereinafter "GPA"). They allege they were in possession of the invention according to the patent in suit already before the priority date of the patent in suit (24 November 2008). [redacted] and [redacted] two employees of the Defendants' predecessor Siemens AG (hereinafter "Siemens"), submitted a notification of an employee invention on 17 October 2008, which was received on 29 October 2008 (cf. Exhibits B&B 7; B&B 7a). The Defendants are of the view that the invention notification, at least implicitly, discloses all features of claims 1, 4, 5 and 7 of the patent in suit. On 17 February 2009, a patent application was filed with the German Patent and Trade Mark Office and resulted in the grant of the German Patent DE 10 2009 009 052 B4 (hereinafter "DE '052"; cf. Exhibits B&B 8 and 8a). The Defendant 1 is the owner of DE '052 (cf. Exhibit B&B 9).

43 Furthermore, the Defendants allege that after the receipt of the invention notification, they put the invention into practice and continuously undertook steps to develop a corresponding product (cf. Exhibits B&B 10, B&B 10a, B&B 11, B&B 12, B&B 13).

44 The Claimant is of the opinion that the Defendants failed to credibly demonstrate possession of the invention before the priority date of the patent in suit. Under established German and UPC case law it would be necessary that a firm and final decision to use the form of alleged prior use took place before the priority date of the patent in suit.

E. Positive right of use

45 The Defendants argue they are in any case entitled to a so-called positive right of use under Art. 25 UPCA. They are of the opinion that the priority date of the patent in suit – as explained in detail in the counterclaim for revocation (s. below) – does not validly claim its priority of 24 November 2008. Therefore, – in the view of the Defendants – the effective date is the filing date of the patent in suit (23 November 2009) so that DE '052 (filing date: 17 February 2009) is an earlier right. The Defendants contend that the attacked embodiment is a device pursuant to the generic term of claim 8 of DE '052 and that the patent in suit does not disclose any additional features which go beyond the technical teaching of DE '052 and which the attacked embodiment makes use of. Finally, the Defendants are of the view to be authorized users with regard to DE '052.

46 Further, the Defendants argue that they have a positive right of use based on the European Patent 2 262 428 B1 (hereinafter "EP '428"; Exhibit B&B 15), granted on 25 January 2012 and claiming the priority from EP 08103234 of 31 March 2008. They contend – as in detail discussed in the counterclaim for revocation – that the published application of EP '428 discloses all features of claim 1 and of claim 7 of the patent in suit and is therefore novelty destroying. Further, claims 4 and 5 – in the view of the Defendants – do not contribute

anything novel to the prior art. Finally, the Defendants are of the opinion to be authorized users of EP ‘428, because the owner Philips granted them a license.

47 According to the Claimant, as regards the UPC, such a right would not even exist from a legal perspective. In any case, the Claimant argues that the Defendants make use of additional features disclosed in the patent in suit which go beyond the technical teaching of DE ‘052 and EP ‘428.

F. Legal consequenses

I. Proportionality of an injunction; recall claim; claim for destruction

48 The Defendants argue that at least issuing a permanent injunction would be disproportionate in view of their interests: They allege that the Claimant does not offer a product according to the teaching of the patent in suit and that the attacked embodiment is not based on a simple copying of the technical teaching of the patent in suit. Further, the Defendants hold the view that issuing an injunction would also be disproportionate in view of the patients’ interest in access to secure imaging systems, because in this case the Court would deprive patients of the considerable medical benefits of the attacked embodiment in the early detection and diagnosis of breast cancer.

49 The Defendants hold the view that an order against them to recall the attacked embodiment from the channels of commerce must be rejected even if the patent in suit was found to be infringed. They allege that the attacked embodiment is exclusively sold directly to end users, who are – in the view of the Defendants – not part of the channels of commerce; this would at least apply to universities. Further, they argue that a recall would in any case be disproportionate because of the individual development of the attacked embodiment, prevailing interests of patients and scientific studies involving the attacked embodiment (cf. Exhibit B&B 18). Auxiliary, the Defendants contend that a modification of the attacked embodiments which have already been sold to medical practitioners is possible; a change of the software of the attacked embodiments (control of the movement of the flying focal spot) would be permanent and could not be reversed by the customers.

50 The Defendants are of the opinion that the requested order for destruction of the attacked embodiment would be disproportionate in any case and that this would apply even more to the equipment used to manufacture the attacked embodiments. Finally, ordering the destruction of the advertising material would also be disproportionate.

51 The Claimant has explicitly restricted the requested recall to the channels of commerce. Further, it contends that the alleged disproportionality is based on an incomplete and inaccurate statement of facts. There are – as the Claimant states – several other tomosynthesis systems from the Claimant, the Defendants as well as other competitors on the market on which patients may rely upon. The alleged disadvantages of these alternative systems are unfounded in the view of the Claimant. Moreover, the Claimant alleges that its new system is already announced to be available in many countries and will be on the market in all UPC Member States soon.

II. Claim for publication of the judgment

52 The Claimant argues that it should be taken into account that Defendants have marketed the attacked embodiment explicitly with regard to the invention, namely the movement of the focal spot (i.e. the "Flying Focal Spot").

53. The Defendants state that the Claimant has not presented any reasons why it requires a separate publication of the decision; on the other hand, publishing the decision in public media would have severe detrimental effects on the Defendants' goodwill.

III. Provision of security by Claimant (Art. 82 (2) UPCA)

54 The Defendants are of the opinion that an enforcement of a judgment granting the Claimant's requests would have to be made subject to the provision of security in the amount of at least EUR 4,000,000,000 (four billion Euros) pursuant to Art. 82 (2) UPCA: The attacked embodiments were technologically sophisticated products with a significant sales price in the six-figure Euro range. The resulting damages would amount to several billion Euros.

55 In the auxiliary, the Defendants state that a security in the amount of EUR 5,000,000 is sufficient if the request for destruction does not include manufacturing equipment (as far as not used solely for manufacturing the attacked embodiment).

56 The Claimant contends: Despite the fact that the Defendants did not even substantiate the alleged damages claim of (exorbitant) 4,000,000,000 EUR at all, Defendants did not demonstrate and justify that the Claimant would not be in a position to fulfil Defendants' hypothetical damages claim.

G. Validity / Counterclaim for Revocation

57 The Defendants who are of the opinion that the priority claim is not valid (cf. already above) contest the validity of the patent in suit. In their counterclaim, the Defendants raise the following reasons for invalidity of the patent in suit:

58 They contend that the invention is not sufficiently disclosed (Art. 138 (1) b), 83 EPC), particular regarding the terms "focal spot" and "focal spot controller" in claim 1.

59 They raise the issue of added subject matter (Art. 123 (2) EPC) regarding the "breast tomosynthesis system" (whereas originally filed claim 1 related simply to an x-ray tube) and regarding feature 2.2.5, feature 2.2.5.1, feature 3 and feature group 4 of claim 1.

60 The Defendants attack the novelty of claim 1 in the light of the documents PCT/IB2009/051257 (hereinafter "CC 10"), DE 10 2009 009 052 A1 (hereinafter "CC 15"), US 7,212,606 B2 (hereinafter "CC 4"), DE 10 2006 046 741 A1 (hereinafter "CC 18"). The Defendants attack the novelty of claim 7 arguing that the subject matter of claim 7 lacks novelty for the same reasons as claim 1.

61 The Defendants are of the view that the subject-matter of claim 1 lacks an inventive step over the prior art:

- starting from US 7,212,606 B2 (CC 4) combined with Common General Knowledge ("CGK") or with US 6,438,207 B1 (hereinafter "CC 5") or with US 5,907,595 (hereinafter "CC 12") or US 2007/0258564 A1 (hereinafter "CC 13");

- starting from US 2006/0291618 A1 (CC 6) combined with CC4 or JP 2008159317 A (hereinafter "CC 17");

- starting from JP 2007165236 A (hereinafter "CC 7") combined with CGK.

62 The Defendants contend that the subject matter of claim 7 lacks an inventive step for the same reasons as claim 1.

63 With regard to the attacks on the validity of the dependant claims, reference is made to the submissions of the Defendants.

64 The Claimant considers the patent in suit to be valid.

65 With regard to all other arguments put forward by the parties, reference is made to the written submissions and exhibits, as well as to the recording of the oral hearing.

## H. Value in dispute

66 The Claimant has estimated that the value in dispute of the infringement claim is EUR 5,000,000. The Defendants have not contested this estimation. The same applies - vice versa - to the counterclaim for revocation.

## *GROUNDS FOR THE DECISION:*

67 The infringement action is admissible and, for the most part, well founded. The admissible counterclaim for revocation is unsuccessful.

## A. Admissibility

### I. Jurisdiction and Competence

68 The infringement action is admissible. In particular, the UPC has international jurisdiction and the Düsseldorf Local Division is competent to hear the case (Art. 71a (1),(2)(a), 71b (1), Art. 4(1) Brussels Ibis Regulation, Art. 32(1), 33(1)(a) UPCA). Further, the Defendants have not filed a preliminary objection within the one-month period stipulated in R. 19.1 RoP. Therefore, both the jurisdiction of the Unified Patent Court and the competence of the Düsseldorf Local Division are deemed to be accepted, R. 19.7 RoP.

69 There are no concerns regarding the admissibility of the counterclaim for revocation of Defendants 1 to 4. In particular, the UPC has international jurisdiction for the counterclaim for revocation on the basis of Art. 24(4) in conjunction with Art. 71b(1) and 71a(2)(a) of the

Brussels I bis Regulation.

II. Modification of requests I.1 and I.2

70 In case the modification of the request I.1 (direct infringement of claim 1) and I.2 (indirect infringement of claim 7) of the infringement action into the relation of main and auxiliary request would be considered as a change of the claim pursuant R. 263.1 RoP, this change would be granted leave pursuant to Rule 263.2 RoP. It was made in response to a question asked by the Court during the oral hearing and therefore could not have been made by the Claimant at an earlier stage. Furthermore, it did not hinder the Defendants in its conduct, because all the underlying facts presented in the written procedure remain the same.

B. Teaching of the patent in suit and claim construction

71 The technical teaching of the patent in suit relates to a digital breast tomosynthesis system. Digital breast tomosynthesis is a three-dimensional (3D) imaging technology that involves acquiring a plurality of images by means of x-ray radiation of a stationary compressed breast at multiple angles during a short scan. The individual images are then reconstructed into a 3D image data set allowing the representation of a series of thin high-resolution slices that can be displayed individually or in a dynamic ciné mode (para. [0001] of the patent in suit (hereinafter paragraphs without citation of a source are such of the patent in suit)).

72 As the patent in suit explains, reconstructed tomosynthesis slices reduce or eliminate the problems caused by tissue overlap and structure noise in a single slice two-dimensional mammography imaging. Further, digital breast tomosynthesis offers the possibility of reduced breast compression, improved diagnostic and screening accuracy, fewer recalls and 3D lesion localization (para. [0002]).

73 According to the patent in suit, digital tomosynthesis combines digital image capture and processing with simple tube/detector motion as used in computed tomography (CT), however over a smaller rotational angle than that used in CT. The patent in suit describes breast tomosynthesis systems as similar to mammography systems, with a distinct difference being that the x-ray source is moved to a variety of different imaging positions during tomosynthesis image acquisition (para. [0003]).

74 As the patent in suit further explains, it is undesirable to stop the x-ray source at each imaging location, since this reduces image quality (e.g. because of the vibrations of the system caused by the “stop and go” procedure). Many known tomosynthesis systems are arranged to smoothly and continuously move the x-ray tube along a given path during the entire tomosynthesis scan. As the x-ray source moves along the imaging path, the x-ray source is activated several times (while moving), each activation having a short exposure time (app. 10-100 ms) and exposure is repeated with a cycle period of 200 ms to 2 seconds to take a respective image. After each exposure, the x-ray source is deactivated. As the x-ray source continues its movement along the given path to reach the next position, where the x-ray tube is activated to take the next image, the contents of the digital image detector are read out and stored. There is a minimum time period associated with reading the image from the detector, and the overall speed of the tomosynthesis scan is determined by the

minimum time period for detector read, the exposure time at each location and the number of exposures (para. [0004]).

I. Prior Art

75 In a conventional x-ray tube according to the prior art, the focal spot is static relative to the tube. Since in a tomosynthesis system, the x-ray source is continuously moved through space during each exposure period, the focal spot is moving as well. The patent in suit criticizes that the resultant focal spot movement causes undesirable image blurring and reduces diagnostic accuracy (para. [0005]). As further set forth in the patent in suit, methods for moving the focal spot to improve image resolution were already known from the prior art, in particular, the patent in suit mentions the US 7 286 645 B2, US 7 110 490 B2 and WO 2009/136349 A2.

76 Against this technical background, the patent in suit considers it to be desirable to identify a mechanism for reducing undesirable image artifacts that result from x-ray source movement during a tomosynthesis or other image scan (para. [0005]).

77 To solve this technical problem, the patent in suit proposes a tomosynthesis system according to independent claim 1 which can be broken down in the form of a feature breakdown (Exhibit B&B 1) as follows:

Claim 1

A breast tomosynthesis system (100),

(1) comprising

(1.1) an x-ray tube (110),

(1.2) a detector (160) and

(1.3) compression paddles (130, 135),

(2) wherein the x-ray tube (110)

(2.1) is arranged to move during an exposure period

(2.2) comprising

(2.2.1) a cathode (112)

(2.2.1.1) for providing an electron stream;

(2.2.2) an anode (114)

(2.2.2.1) comprising a target

(2.2.2.1.1) for receiving the electron stream and

(2.2.2.1.2) for generating a photon stream in response thereto;

(2.2.3) a focusing cup

(2.2.3.1) which focuses the electron stream on the anode (114) during the exposure period;

(2.2.4) a port (120)

(2.2.4.1) for passing the photon stream out of the x-ray tube (110),

(2.2.4.2) wherein the cathode (112), anode (114) and port (120) together define a static focal spot (127) of the x-ray tube (110); and

(2.2.5) a controller

(2.2.5.1) the controller is coupled to at least one of the anode (114), the cathode (112) and focusing cup,

(3) wherein, in a first operational mode, the x-ray tube (110) moves in a first direction during an exposure period,

(4) wherein the controller is arranged, in a first operational mode, to move the static focal spot (127) within the x-ray tube (110) in a second direction, opposite from the first direction and generally synchronized with the directional movement of the x-ray tube (110),

(4.1) so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure.

II. Scope of protection

78 With regard to the dispute of the parties some features of claim 1 need further interpretation.

1. Legal framework

79 In accordance with Art. 69 (1) EPC and the Protocol on its interpretation, a patent claim is not only the starting point, but the decisive basis for determining the scope of protection of a European patent. The interpretation of a patent claim does not depend solely on the strict, literal meaning of the wording used. Rather, the description and the drawings must always be used as explanatory aids for the interpretation of the patent claim and not only to resolve any ambiguities in the patent claim. However, this does not mean that the patent claim merely serves as a guideline and that its subject-matter also extends to what, after examination of the description and drawings, appears to be the subject-matter for which the patent proprietor seeks protection (Court of Appeal, UPC_CoA_335/2023, Decision of

26 February 2023 in conjunction with Decision of 11 March 2024 – NanoString v. 10x Genomics; UPC_CoA_1/2024, Order of 13 May 2024 – VusionGroup v. Hanshow; UPC_CoA_768/2024, Order of 30 April 2025 – Insulet v. EOFlow, UPC_CoA_405/2024, 19 June 2025 – Alexion/Amgen; UPC_CoA_579/2025, Order of 7 November 2025 – OTEC/STEROS). Rather, Art. 69 EPC and its Protocol establish a primacy of the claims. The underlying legal principle is legal certainty.

80 These principles for interpreting a patent claim apply both to the question of patent infringement and to the question of validity. The understanding of a claim by the skilled person must be consistent for all purposes of the evaluation of infringement and validity (Court of Appeal, UPC_CoA_335/2023, Order of 26 February 2024 – NanoString v. 10x Genomics).

2. Skilled person

81 The skilled person is undisputedly a master's or diploma physicist with several years of experience in the field of 2D/3D x-ray imaging.

3. Claim 1

*Feature 1.3 (the breast tomosynthesis system comprises compression paddles)*

82 The skilled person will consider also the surface or cover of the detector as a suitable (lower) compression paddle. In this context it is not decisive whether the term "compression paddles" can be understood in a generic sense or whether (due to the plural "paddles") at least two "veritable" compression paddles are required.

83 The technical function of the compression paddles is simply to allow a patient's breast to be positioned and fixed between them in such a way that the x-ray machine is enabled to produce a burst of x-rays that pass through the breast to the detector located on the opposite side. Moreover, the patent in suit does not further specify the nature or shape of the compression paddles which are only mentioned – and without giving further details – in para. [0010] of the description.

84 As Fig.1 of the patent in suit illustrates, inter alia the flat surface (135) of the detector (160) can be used as a compression paddle. The patient's breast can be placed between the upper compression paddle (130) and the surface or cover (135) of the detector (160). Accordingly, the patent in suit even expressively illustrates that the surface or a cover of the detector is a suitable lower compression paddle.

85 As far as Claimant´s statements in the defence to the counterclaim, which contradicts its interpretation in the statement of claim, were to be understood that the surface or cover of the detector is not a compression paddle according to the patent in suit, this view could therefore not be considered as convincing.

*Features 2.2.3 (a focusing cup)*

86 Feature 2.2.3 teaches the skilled person that the x-ray tube comprises a focusing cup. The skilled person would consider “cup” as the spatial requirement of a depression within an electrode that at least partially surrounds the filament of the x-ray tube’s cathode, whereas not any component that merely assists in focusing the electron stream is sufficient.

87 The protected subject-matter of a patent claim directed to a physical device or article is primarily characterized by the structural, geometrical and physical features as set out in the claim. Although functional interpretation is required, it must not reduce spatially and physically defined features to their mere function. The required functional consideration of claim features must not lead to the result that the specific spatial-physical or material definitions contained in the patent claim are disregarded. Otherwise, the boundary between literal infringement and equivalent infringement would be dissolved. These principles ensure that the scope of protection of a device patent is not extended arbitrarily into the realm of pure functionality, while still allowing a sensible, purpose-oriented interpretation within the limits of the claim wording.

88 Having said that, the skilled person understands that the term “focusing cup” indicates that the respective focusing device must not be reduced to its mere function (= focusing the electron stream, see below), but has to be “cup-shaped”. The mere fact that the focusing cup is not specifically shown in the figures of the patent in suit does not justify the conclusion that it can be designed in any way.

89 Both parties generally agree in their arguments against what they claim is a narrow interpretation of the feature, as allegedly advocated by the TBA: Indeed, according to the TBA (Exhibit VB06, section 5.2) the focusing cup should have the "form of a cup" as a general requirement. However, as far as the TBA further has referred to "a cylinder with a closed bottom" this merely has been offered as an example and therefore must not be understood as a mandatory requirement. Contrary to the Defendants’ auxiliary assertions, the TBA has only stated that the focusing cup “has to have the form of a cup, for example in the form of a cylinder with a closed bottom.” (emphasis by underlining added by the Court).

90 Thus, contrary to the Defendants’ auxiliary interpretation which they seem to apply in the SoD (mn. 140), the term “cup-shaped” does not necessarily mean a right circular cylinder (in the geometric sense of a 3D solid two parallel, congruent circular bases and a curved side, where the axis connecting the centers is perpendicular to the bases).

91 Insofar both parties contend that the wording “cup” has only been maintained for historical reasons but does not mean that the focusing cup needs to be cup-shaped at all, their allegations refer to party expert declarations without providing any further evidence to support this view. In particular, the Defendants argue that a focusing cup is allegedly “always essential” and therefore an implicit feature in the prior art (cf. in particular, expert opinion [redacted] Exhibit B&B 19, p. 7, fourth para.), this is not convincing. The provided absolute assertion is a mere opinion but not an established fact from a neutral source (e.g. a standard or textbook). Further, the Defendants’ attempt to create an alleged consensus between the parties’ experts (cf. expert opinion [redacted] VB 04) fails: State-of-the-art devices might “typically” utilize focusing cups but “typically” is not synonymous with “always” because known alternatives undisputedly exist. Whether they might be rare or not, is not decisive.

*Feature 2.2.3.1 (which focuses the electron stream on the anode during the exposure period)*

92 Contrary to the Defendants' view, feature 2.2.3.1 does not require a separate control electrode in the sense that a voltage would have to be applied to the focusing cup which is different from the voltage applied to the filament of the cathode. Neither the wording of the claim nor the description teaches a mandatory requirement of such a limitation. As far as the Defendants try to base their auxiliary narrow interpretation on para. [0012], this argument is not convincing. The Defendants do not take into account that this passage merely describes an example in a preferred embodiment. Therefore, it can be left open whether such a limitation would be technically advantageous, since the patent in suit is at least not exclusively directed thereto.

*Feature 2.2.4.2 (wherein the cathode, anode and port together define a static focal spot of the x-ray tube)*

93 As far as the Defendants (auxiliary) argue that a common interplay is required between the cathode, the anode and the port resulting in a synergetic effect which facilitates a definition of the static focal spot, this approach fails. Neither the wording of claim 1 nor any passage of the description defines such a specific interplay, at least not in an exclusive way. Feature 2.2.4.2 merely requires that the cathode, anode and port together define a focal spot of the x-ray tube while leaving the technical details of said construction to the discretion of the skilled person.

*Feature 2.2.5 (a controller)*

94 According to feature 2.2.5 the x-ray tube of the system comprises a controller. The Defendants may argue correctly that the second use of the word "comprising"' in claim 1 of the patent in suit relates specifically to the x-ray tube. However, they are mistaken insofar they interpret this feature in a sense that it shall require the controller or at least the physical means included by the controller to be "within" the x-ray tube i.e. inside the vacuum tube.

95 As the Defendants themselves rightly acknowledge, the said "controller" can also be a "higher-level control software or control logic" and it does at least not exclusively relate to the "physical means to influence the position of the static focal spot".

96 As the wording of claim 1 of the patent in suit indicates, the "controller" is not necessarily a single component of the claimed tomosynthesis system, especially not a single physical controlling device. Feature 4 of Claim 1 requires the controller to be arranged to move the static focal spot "generally synchronized with the directional movement of the x-ray tube".

97 Against this background, it is clear that the controller includes means to move the focal spot differently depending on the particular needs of the exposure (e.g. depending on the size

of the target, the speed of the movement of the x-ray tube). Thus, the controller must provide possibilities of reacting to the specifics of the patient and the situation. Therefore, it is obvious to the skilled person that additionally to the physical means to move the focal spot, a software (as part of the controller) is necessary for controlling the physical means of the controller.

98 This interpretation can also be based on subclaim 5 of the patent in suit, since it teaches that the controller is arranged to operate differently in a 2D and a 3D operational mode. The same applies to subclaim 6 of the patent in suit stating that the controller is arranged to operate the x-ray tube with different spot sizes depending on the situation.

99 This interpretation is confirmed by para. [0038] which states as follows:

> *"… in its simplest form, the controller comprises two parallel metal plates located next to the focusing cup, with bias voltage applied across the plates that can shift electron motion direction. …*
>
> *… the bias voltage can be dynamically or statically configured prior to x-ray exposure".*

100 The skilled person understands in the light of para. [0038] that the voltage applied may vary during x-ray exposure ("dynamically configured") and thus a software controlling mechanism of the controller is in practice required.

101 Furthermore, para. [0041] of the patent in suit states in this context:

> *"… in such an embodiment, the motion controller would include plates aligned along the Z axis. Suffice it to say that the plates 601 can be in different geometric locations than shown in the figure, and there can be more than 1 set of plates. The number and arrangement of the plates, as well as the selection of voltage to be applied across the plates, be determined by the desired locations of the focal spots. Controller 603 will change the voltage over time to create the desired effective focal spot distribution, synchronized in an appropriate way with the tube motion and image receptor acquisition sequences."*

102 Accordingly, para. [0041] clarifies that the controller includes the overall operating software, in particular a software operating the means of deflecting the electronic beam. Against this background, the controller may according to the patent include both, a controlling software and physical means.

103 It is obvious for the skilled person that the software as such will never be "within the x-ray tube", so that an interpretation that the controller shall be "within the x-ray" tube seems to make no sense from this perspective.

104 Moreover, the Defendants interpretation is also incorrect insofar they argue that at least the controller´s physical means must be "within the x-ray tube": Firstly, such interpretation is not mandatory considering the wording of the claim 1. The term "comprising" is to be interpreted in a way that the x-ray tube comprises a controller allocated to it irrespective

of its exact location: In particular, it can be located within or outside the vacuum of the x-ray tube. In general patent claim language, the word “comprising” does only mean that the respective device must “also have” the respective component but can have additional elements not explicitly mentioned. Moreover, the word “comprising” does not require a specific structural arrangement, particularly not in a way that the comprised component must be located within the “comprising” component.

105 The patent in suit providing its own lexicon explicitly confirms the prior interpretation: Claim 1 does not require the controller’s logic, such as a microprocessor, to be physically located within the vacuum tube or envelope. In addition, there is no reason to implicitly read the controller as being located within the vacuum tube or envelope. This follows in any event from Fig. 8B: The respective embodiment shows a voltage source 602 and a controller 603 arranged outside the vacuum tube. Against this background, the patent in suit itself discloses that the controller may be arranged outside the vacuum tube or envelope and this supports that the interpretation proposed by the Defendants cannot be accepted.

106 Both paragraph [0011] and Fig. 6, to which the Defendants have supported their view, of the patent in suit are merely illustrative examples, and the technical scope of the patent in suit must not be reduced to them. The Defendants are therefore mistaken in assuming that it can be inferred from them that no variations are permitted. Against this background, the Defendants’ contrasting claim interpretation is based on arguments contrary the principle that the scope of a claim may not be limited to the scope of preferred embodiments (cf. LD Düsseldorf, Decision of 31 October 2024, CFI_323/23, SodaStream v. Aarke). In this context also para [0057] is relevant: Para. [0007] as part of the general description of the patent in suit does not describe the controller at all. Especially, Fig. 6 and the description (para. [0038]) describe a merely preferred embodiment of the invention (“For example, Fig. 6 illustrates…”; “According to one aspect of the invention…”; “In its simplest form, the controller…”). Therefore, all these passages must not be used to limit the scope of the broader claim 1.

107 Based on the above “wherein the x-ray tube comprises a controller” must be interpreted to mean that a device that controls the movement of the static focal spot according to feature 4 (and fulfils feature 2.2.5.1) is considered to be such a controller regardless of its physical position in relation to the vacuum tube of the x-ray tube.

108 As far as the Defendants argue that locating the controller within the x-ray tube would bring technical advantages, it can remain open, whether this is really the case. Regardless of this question, the skilled person is aware of the fact that the scope of the patent in suit is not limited to the optimal embodiment: If the contested embodiment incorporates all the spatial and physical features of the patent claim identically, the fact that the effects specified in the patent are not (fully) achieved does not mean that there is no infringement. Rather, even such an “inferior embodiment” infringes the patent to the letter.

*Feature 2.2.5.1 (the controller is coupled to at least one of the anode (114), the cathode (112) and focusing cup)*

109 The skilled person would interpret feature 2.2.5.1 in the way that any kind of coupling allowing a communication between the controller and at least one of the anode, cathode and focusing cup is sufficient. As already mentioned, the controller cannot be limited to the physical means of the controller, but the controller also includes the controlling software of the overall system according to claim 1.

110 The Defendants unsuccessfully argue that "not any kind of coupling" shall realize feature 2.2.5.1 but that the purpose of the controller of moving the focal spot during exposure would have to be considered in this respect. Contrary to the Defendants' view, not only embodiments in which the controller directly acts on either the cathode, anode or focusing cup for modifying the focal spot shall be covered by the claim. The Defendants' argument, that different methods of modifying a characteristic of the focal spot shall allegedly not realize feature 2.2.5.1, fails.

111 The Defendants' view lacks already persuasiveness as they themselves have to admit that the description discloses several embodiments for modifying the focal spot characteristic without directly influencing the anode, cathode or focusing cup. As far as the Defendants are of the opinion that those methods shall, however, not be covered by the scope of the claims of the patent in suit, the claims and the description of the patent in suit do not provide any support for their narrow view. Moreover, the patent in suit - as already mentioned - expressly explains that the embodiments taught in the specification shall be exemplary embodiments of the invention covered by the patent in suit (para. [0057]). Thus, the general principle that a claim should be interpreted in a way that all disclosed embodiments are aligned, applies also in the present case.

112 Para. [0044] of the patent in suit confirms this interpretation, as it states as follows:

> "… there are a variety of other methods that may be used to move the x-ray focal spot".

This passage makes it clear to the skilled person that the claim shall not be limited to an embodiment having a direct physical coupling between the controller and at least one of the anode, cathode and focusing cup.

113 As far as the Defendants argue that their contrasting interpretation is allegedly confirmed by claim 1 of the original application WO 2010/060007 A1, it can remain open whether the original wording of the patent claims as filed may be used as an aid to interpretation (cf. LD Munich, order of 20 December 2023, UPC_CFI_292/2023, SES-imagotag v. Hanshow; CoA, final order of 20 December 2024, UPC_CoA__402/2024, Alexion v. Samsung). Since claim 1 as originally filed, referred to a "controller coupled to at least … a focusing cup for modifying at least one characteristic of the static focal spot during the exposure period", also in the light of the original application any kind of coupling between the controller and the anode, cathode or focusing cup which is suitable for fulfilling this technical purpose, is in accordance with feature 2.2.5.1.

114 Consequently, this does not definitively establish a requirement that there must be a direct physical connection. Contrary to the Defendants' view, the subject matter of claim 1 has

not changed by deleting the passage “for modifying at least one characteristic of the static focal spot during the exposure period” and by the newly including of feature 4.

115 Finally, the Defendants’ argument that such an allegedly “extremely broad interpretation” deprives feature 2.2.5.1 of any independent technical and functional meaning, falls flat. It is not mandatory that every feature of a patent claim has an “independent” technical and functional meaning. The claim can also include features describing technical functions which the skilled person would have understood without claiming them because they describe a standard technical context.

*Feature 4.1 (so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure)*

116 Features 4 and 4.1 provide the central inventive step of claim 1, as they define the specific action performed by the controller.

117 Feature 4 stipulates that the static focal spot is moved within the x-ray tube. Thus, the controller moves the point of x-ray origin relative to the tube's own housing, not the entire tube assembly. Feature 4.1 defines the technical purpose and result of the action described in feature 4. It is not merely moving the focal spot but moving it in order to achieve this specific effect. As para. [0007] states, according to one aspect of the disclosure, an improved x-ray tube is provided with the capability of modifying a focal spot characteristic to improve image clarity in a tomosynthesis system. In this embodiment [0007], a focal spot is moved during a tomosynthesis exposure period in a direction which opposes a directional movement of the x-ray tube through space such that an effective focal spot remains in substantially the same position during the entire tomosynthesis exposure. Such focal spot movement may be achieved by altering a position of a target on an anode or other methods. With such an arrangement a blurring of tomosynthesis images is reduced. As described in para. [0021], for example, this internal movement compensates for the external movement of the x-ray tube itself. The claim feature also inherently means that it is the path of the electron stream defined in feature 2.2.1.1, which is modified to provide the movement of the focal spot in the second direction.

118 The term “in a second direction, opposite from the first direction” defines that the internal focal spot movement is compensatory. Para. [0029] states the movement is “in a direction opposing the direction of the movement of the x-ray tube”.

119 The term “generally synchronized” clarifies that the movement is not random but is coordinated with the x-ray tube’s movement, as also mirrored in the language of para. [0021].

120 The term “effective focal spot appears to be fixed in space” defines the outcome of the two opposing motions: the motion of the x-ray tube and the motion of the focal spot, thus providing a substantially net-zero movement of the x-ray source point relative to the patient. Para. [0021] states this directly: “[…] the effective focal spot appears to be fixed in space, relative to one of the breast and/or detector […]”.

121 With regard to the position of said effective focal spot, feature 4.1 does not require to exactly ("mathematically") maintain it in a fixed position. This follows from the term "appears" in feature 4.1. Accordingly, the effective focal spot does not have to be exactly fixed in the same position, but it is even sufficient that it merely appears to remain relatively fixed from the position of the breast and/or the detector. The mere wording of the claim by using the word "appears" already indicates that claim 1 does not exclusively require an exact maintenance of the position of the effective focal spot during an exposure period.

122 Furthermore, the following passages of the description of the patent in suit confirm this interpretation:

para. [0031]

> "… thus, although the x-ray tube is moving, the effective focal spot 190 appears to remain relatively fixed".

para. [0054]

> "… during the exposure period such that an effective focal spot remains relatively fixed in space relative to the breast and/or detector during the exposure period".

123 Thus, contrary to the Defendants' view, the term "appears" relativizes the requirement "fixed in space in one position". Even though the Defendants correctly argue that there are two opposed movements at play (on the one hand: the x-ray tube moves in one direction; on the other hand: the static focal spot is moved to the opposite direction), the term "appears" is, in particular, not limited to describing the fact that the effective focal spot appears fixed despite these two movements cancelling each other out. At least the wording of claim 1 is to be interpreted in line with the above cited para. [0031] and para. [0054]. In this context, the Defendants do not take into account that the description of a patent must always be used as explanatory aids for the interpretation of the patent claim and not only to resolve any ambiguities in the patent claim (see above cited case law).

124 As far as the Defendants argue that the term "relatively" would only indicate that the effective focal spot is fixed relative to the breast/the detector, this approach also fails: The Defendants do not consider that both paras. [0031] and [0054] state that the "[…] effective focal spot 190 remains in a fixed or relatively fixed size and position relative to the detector 160 or […]". Accordingly, these passages of the description use the term "relatively" specifically in relation to the fixed position of the effective focal spot, whereas the further term "relative" relates to the detector or the imaged object (the patient's breast). Thus, the term "relatively" exclusively relativizes the requirement of the fixed position of the effective focal spot.

125 Against this background, the Defendants' opinion that the Claimant deliberately directed its scope of protection to the full compensation of the movement of the x-ray tube, is not convincing at all. Rather, any compensation is sufficient that reduces undesirable image

artifacts that result from x-ray source movement during the tomosynthesis scan. To meet this technical requirement, it is not necessary to fully fix the position of the effective focal spot during the entire exposure period. The permissible deviation thus clearly exceeds mere measurement tolerances. Therefore, claim feature 4.1 can broadly be seen as a consequence of the generally synchronised movement recited in feature 4.

126 Contrary to the Defendant's assertion, claim feature 4.1's reference to the duration of the exposure does not lead to any contradiction or any conclusion that the shape of the focal spot needs to be stationary. Claim feature 4.1 only refers to the spatial position of the focal spot, and this position needs to be substantially stationary relative to the breast and/or detector.

127 The term "during the entire duration of the exposure" makes it clear that this is maintained throughout the image capture time to prevent any blurring from occurring. Para. [0031] confirms that with this method, "the effective focal spot 190 appears to remain relatively fixed". The result is a reduction or elimination of motion blur (see para. [0021]).

128 According to para [0008] and para. [0022], the focal spot size may be varied in accordance with a type of imaging that is performed, such that a different focal spot size is used to obtain a mammogram or a tomosynthesis image. Regarding the case at hand, it can remain open whether the Defendants' view that the second approach is not taught in claim 1 itself is correct. At least, the skilled person understands that whenever the requirements of the first approach (which relies on the position of the focal spot) are fulfilled, the mere changing of size and/or orientation cannot change the position of an object. Feature 4.1 merely requires that the focal spot appears to be (relatively) fixed in space. Thus, in this case (relatively fixed focal spot) any changes of the size and/or orientation of the focal spot are irrelevant for the fulfilment of the first approach which as such provides an independent solution according to the patent in suit. It is, in fact, obvious that if an object holds one position while only changing its size and/or orientation, it is - or at least it appears to be - still at the same position despite of the change of its size and/or its orientation.

4. Claims 4 and 5

129 The dependent subclaim 4 teaches that the system is a dual-mode system capable of performing both 3D tomosynthesis and 2D mammography. The skilled person understands that this requires to design and configure it with the necessary hardware, software, and control logic to be operable in both modes.

130 Subclaim 5 is dependent on claim 4 wherein it requires further limitations on how the controller operates when switching between both modes. It describes an action that occurs when the system is set to perform a standard mammogram. Said action is relative to what happens during a 3D tomosynthesis scan.

5. Method Claim 7

131 The parties rightly agree that the independent method claim 7 closely mirrors the features of product claim 1. Thus, all considerations regarding the claim construction of claim 1 also apply to claim 7.

## C. Counterclaim for revocation

132 The admissible counterclaim for revocation is unfounded with regard to independent claim 1 and the independent method claim 7. Against this background, regarding the dependent subclaims 4 and 5 no decision is required for lack of Defendants' legal interest, since the counterclaim for revocation is already unsuccessful with respect to the independent patent claim 1, to which dependent patent claims 4 and 5 refer back and which therefore has a scope of protection that also encompasses patent claims 4 and 5 (cf. UPC CoA, decision of 17 February 2026, UPC_CoA_302/2025 & UPC_CoA_305/2025, Rematec GmbH & Co.KG v. Europe Forestry B.V., headnote 1 and para. 91).

## I. Lack of sufficient disclosure of the invention (Art. 138 (1) b), 83 EPC)

### 1. Legal framework

133 Sufficiency has to be examined on the basis of the patent as a whole, thus on the basis of the claims, description and drawings, from the perspective of the skilled person with his common general knowledge at the filing or priority date (UPC CoA, decision of 25 November 2025, UPC_CoA_528/2024 and UPC_CoA_529/2024, Amgen, Inc. v. Sanofi-Aventis Deutschland GmbH et al. & Regeneron Pharmaceuticals Inc., headnotes 5 - 9):

134 The test to be applied is whether the skilled person is able to reproduce the claimed subject matter on the basis of the patent without any inventive effort and without undue burden. An invention is sufficiently disclosed if the patent specification shows the skilled person at least one way – and in case of functional features: one technical concept – of performing the claimed invention.

135 Where a claim contains one or more functional features, it is not required that the disclosure includes specific instructions as to how each and every conceivable embodiment within the functional definition(s) should be obtained. A fair protection requires that variants of specifically disclosed embodiments that are equally suitable to achieve the same effect, which could not have been envisaged without the invention, should also be protected by the claim. Consequently, any non-availability of some embodiments of a functionally defined claim is immaterial to sufficiency, as long as the skilled person through the disclosure is able to obtain suitable embodiments within the scope of the claim.

136 The burden of presentation and proof lies with the party invoking invalidity of the patent.

2. Case at hand

a) "Static focal spot"

137 Contrary to the Defendants' view the "static focal spot" is sufficiently disclosed in the patent in suit to enable the skilled person to reproduce the invention.

138 Firstly, the patent in suit defines the static focal spot by its physical origin, wherein para. [0013] states:

> *"*[…] *For the purposes of this application, the x-ray photons which come out of the tube port define the static focal spot 127 …."*

139 Then the patent in suit explains the relevant frame of reference for observing this spot ( para. [0014])

> *"The static focal spot 127 is therefore the focal spot as it appears from directly beneath the x-ray tube as seen by the breast […].*"

140 This provides a sufficiently precise instruction to the skilled person to consider the focal spot from the perspective of the object being imaged and the detector, since said perspective is the only one that matters for the aimed reduction of motion blur.

141 Insofar the Defendants contend that these definitions are contradictory, they do not take into account that these definitions describe the nature of the static focal spot (the photon stream from the port) and as well how it is to be considered (from the perspective of the breast/detector). Thus, there is no contradiction at all.

142 The Defendants further unsuccessfully argue that the description of the static focal spot's location as it appears from directly beneath the x-ray tube as seen by the breast is deemed unclear because the breast is a volume, not a point: The purpose of the invention is to reduce motion blur at the detector to improve the quality of the final image. Against this background, the phrase "as seen by the breast" (para. [0014]) is a sufficiently precise way of defining the relevant frame of reference. The skilled person understands that the static focal spot's position as it is projected through the breast is being imaged onto the detector. Therefore, the breast and the detector form the stationary frame of reference against which the motion of the x-ray tube and the countermotion of the static focal spot are to be judged. As far as the Defendants suggest that the location would vary depending on the observation point within the breast, this is not convincing approach. The patent in suit does not require to measure the static focal spot from an arbitrary point inside a patient's tissue. Thus, the Defendants' focus on an "exact location" is wrong, as the patent in suit is not based on the measurement of static coordinates but on the controlled, relative motion between the static focal spot and the moving x-ray tube.

143 In this context para. [0021] explains that the sole technical purpose of this relationship is to suppress motion blur. This technical problem is solved by a synchronized countermovement of the static focal spot against the tube's motion during the exposure period. Because the effective focal spot remains stationary relative to the detector, the desired reduction in blur is achieved. In this technical context the absolute position of the focal spot in space is not

relevant to the skilled person's ability to carry out the invention. Moreover, Figure 3B visualizes this technical principle.

144 Furthermore, it is obvious for the skilled person that the static focal spot is physically generated inside the x-ray tube assembly (at a "circumferential region", cf. Fig. 4A and Fig. 4B), while its effect is observed underneath the tube on the imaging plane. In this context one has to differ between the cause (cf. para. [0013]) and the effect (cf. para. [0014]).

145 As far as the Defendants criticize the description of the port as a mere "window", arguing that this is deficient as the claim requires the port to actively define the static focal spot, which a simple window cannot do, they falsely premise that the port must define the focal spot in isolation. In this context feature 2.2.4.2 states that the cathode, anode, and port "together" define the static focal spot. Additionally, para. [0013] explains that "the x-ray photons which come out of the tube port define the static focal spot."

b) "Focal spot controller"

146 The patent in suit also sufficiently discloses the "focal spot controller".

147 A controller that modulates voltage on deflection plates to steer the electron beam, is described in paragraphs [0038] and [0051]. As far as the Defendants demand for details on feedback loops or solutions to standard engineering challenges like anode mounting, they do not take into account that the invention is the method of motion compensation as such and not the routine implementation of control systems or mechanical designs. The patent sufficiently discloses the respective focal spot controller by teaching its technical function and by providing at least one clear example of how to achieve it.

## II. Added subject matter (Art. 123 (2) EPC)

### 1. Legal framework

148 There is added subject matter if the claim as granted contains subject-matter that extends beyond the content of the application as filed. In order to ascertain whether there is added matter contrary to Art. 123 (2) EPC, the court must thus first ascertain what the skilled person would derive directly and unambiguously using his common general knowledge and seen objectively and relative to the date of filing, from the whole of the application as filed, whereby implicitly disclosed subject-matter, i.e. matter that is a clear and unambiguous consequence of what is explicitly mentioned, shall also be considered as part of its content (UPC CoA, decision of 14 February 2025, UPC_CoA_382/2024, Abbott Diabetes Care Inc. v. Sibio Technology Limited et al. paras. 52 et seq; CoA, decision of 5 November 2025, UPC_CoA_762/2024 & UPC_CoA_773/2024, Seoul Viosys Co., Ltd. v. expert e-Commerce GmbH et al., headnotes).

149 The assessment of whether there is added matter is a question of law to be decided on the basis of the facts brought forward by the parties. The facts are the relevant claims and the application as filed. Since the test is whether the relevant claims have basis in the application as a whole, the Court is allowed to look at the entire document (UPC CoA,

decision of 25 November 2025, UPC_CoA_528/2024 & UPC_CoA_529/2024, Amgen, Inc. v. Sanofi-Aventis Deutschland GmbH et al. & Regeneron Pharmaceuticals Inc., paras. 4, 54 – 55).

2. Case at hand

150 None of the arguments put forward by the Defendants supports the conclusion of added subject matter. The amendments introduced during prosecution of the patent application are directly and unambiguously derivable from the patent application as filed. Hence, the provisions of Article 123 (2) EPC are fulfilled.

a) breast tomography system

151 During prosecution of the patent application, the claims were amended several times. Granted claim 1 was amended as follows with underlined features showing added features and strikethroughs showing features that were deleted:

> "A breast tomosynthesis system (100), comprising an x-ray tube (110), a detector (160) and compression paddles (130, 135), wherein the x-ray tube (110) is ~~An x-ray tube~~ arranged to move during an exposure period comprising:
>
> a cathode (112) for providing an electron stream;
>
> an anode (114) comprising a target for receiving the electron stream and generating a photon stream in response thereto;
>
> a focusing cup which focuses the electron stream on the anode during the exposure
>
> period; and
>
> a port (120) for passing the photon stream out of the x-ray tube, wherein the cathode, anode and port together define a static focal spot (127) of the x-ray tube; and
>
> a controller coupled to at least one of the anode, the cathode and focusing cup ~~for modifying at least one characteristic of the static focal spot during the exposure period~~
>
> wherein, in a first operational mode, the x-ray tube moves in a first direction during an exposure period,
>
> wherein the controller is arranged, in a first operation mode, to move the static focal spot (127) within the x-ray tube in a second direction, opposite from the first direction and generally synchronized with the directional movement of the x-ray tube, so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure."

152 The claim category was changed from defining an x-ray tube to more broadly defining a breast tomography system. The Defendants have not as such provided any arguments against this change but merely argue that only paragraph [0020] of the published application (Exhibit CC 2) describes the system in detail.

153 Although the patent application mentions that the x-ray tube can be used for other purposes, the patent application as a whole describes a breast tomosynthesis system. Examples to the paragraphs of the patent application as filed (Exhibit CC 2) are as follows:

- para. [0001] discloses breast tomosynthesis;
- para. [0007] discloses that one aspect of the invention relates to an improved x-ray tube … in a tomosynthesis system;
- para. [0010] discloses a breast tomosynthesis system which includes an x-ray tube;
- para. [0020] discloses a breast tomosynthesis system which includes an x-ray tube, upper and lower compression paddles, an anti-scatter grid and a detector; and
- para. [0062] explains that the invention relates to a system and method of improving tomosynthesis image clarity in a tomosynthesis system for breast imaging.

154 The Defendants unconvincingly argue as follows: The amendments introduced during examination lead to an impermissible intermediate generalisation by omitting features. In particular, the Defendants argue that paragraph [0020] is the only paragraph, which describes the tomosynthesis system in detail. The Defendants for instance argue that the omission of the feature “anti-scatter grid 140” from paragraph [0020] constitutes such an impermissible intermediate generalisation, since it is one of only a few mentioned features and hence must be considered important.

155 The skilled person understands that the omitted feature is not inextricably linked to the claimed features and in particular to the functionality of synchronising the movement of the static focal spot with the movement of the x-ray tube. Accordingly, the skilled person understands that this feature is not necessary for achieving the desired effect. Indeed, the required technical effect can be achieved with the features recited in claim 1.

156 As far as the Defendants argue that para. [0021] of the published patent application recites that the anode is made from tungsten and rotated by a motor to prevent overheating and that the omission of these features also constitutes an impermissible intermediate generalisation, this argument is also not convincing. First of all, the two features appear to be recited as optional. Further, the two features are also not inextricably linked to the functionality of synchronising the movement of the static focal spot with the movement of the x-ray tube. Accordingly, the omission of the above-mentioned features in the claim is permissible.

157 Moreover, the Defendants do not address para. [0010] of the application as filed: Said para. [0010] (“Figure 1 illustrates a breast tomosynthesis system 100 which includes an x-ray tube of the present invention.”) provides a direct and unambiguous basis for claiming a “breast tomosynthesis system” that incorporates the x-ray tube in accordance with the invention. Thus, the amendment is not a generalization, but just a mere clarification.

b) features 2.2.5 and 2.2.5.1

158 The original application (claim 1 as filed) specified that a controller was coupled "for modifying a characteristic of the static focal spot".

159 Removing this explicit functional link in the granted claim does not broaden the scope of the coupling to any undefined connection. The skilled person would not read the claim as a disconnected list of components but as a whole. The Defendants assertion that the link between the controller's coupling and its function has been “lost” is not convincing: The purpose of coupling the controller to the anode, cathode, and focusing cup is to support the function that the claim simultaneously requires (e.g. to move the static focal spot). This movement is achieved by communicating with the components to which the controller is coupled to.

160 Para. [0063] as a basis of the original main claim discloses a controller “coupled to” the tube components “for modifying” the focal spot location. Furthermore, para. [0064] of the application as filed discloses that this controller “may move” the spot. The patent application clearly teaches that other means, such as metal plates, may be involved in moving the static focal spot. Against this background, the Defendants unsuccessfully contend that the deletion of the feature “for at least one characteristic of the static focal spot during the exposure period” constitutes a broadening of the scope of claim 1. The granted claim 1 is a mere combination of the disclosures (cf. also TBA, Exhibit VB 06, mn. 65: no technical substance was lost or altered by the respective rewording).

c) feature 3 and feature group 4

“approach” / “operational mode”

161 As far as the Defendants allege that changing the “approach” from the description to “operational mode” constitutes added subject matter, their argument fails for the following reasons:

162 The alleged distinction between a “theoretical” approach and an allegedly ”technical” mode sounds rather artificial. In particular, “approaches” described are concrete technical methods for operating the device to achieve a specific goal (reduction of image blur). If an “approach” for solving a technical problem is implemented in a machine, it becomes an “operational mode” of said machine. The change in the wording therefore merely clarifies the subject matter.

163 Insofar the Defendants further argue that the term “modes” is only used in combination with the 2D and 3D imaging modes described in the patent application as filed, this is not convincing: The patent application refers to different operational approaches, modes, or operating conditions. As the skilled person understands the “first approach” and the “second approach” refer to different operational modes that can also be combined.

"generally synchronised"

164 Contrary to the Defendants' opinion, the feature of the "generally synchronized" movement has not been added to the granted claim 1 without any basis. The claim as amended explicitly recites the movement in a first direction of the x-ray tube and the movement of the static focal spot in a second direction so that the effective focal spot appears to be fixed in space. Synchronisation is mentioned in para. [0031] and para. [0061] of the published patent application. Additionally, the desired technical effect of the effective focal spot remaining relatively fixed relative to the breast and/or detector is recited in paras. [0031], [0038], [0039], [0041], [0064], and [0066]. The skilled person understands that the desired effect inherently means that the movement in the second direction compensates for the movement of the x-ray tube in the first direction, so that the effective focal spot can remain relatively fixed in space. Furthermore, para. [0061] states that the motion is synchronised to exposure start and to exposure end times.

165 The application as filed provides many explicit references to different "modes" (para. [0034] directly links a specific technical implementation to a "3D mode"; para. [0058] is even more specific, referring to both the "static 2D mode" and the "3D pulse mode"; paras. [0057], [0059], and [0066] explicitly refer to a system with different "modes of imaging" or the capability of "operating in two modes"). Against this background, the term "operational mode" cannot be seen as an addition of new matter.

"during the entire duration of the exposure"

166 The term "during the entire duration of the exposure" does not lack basis in the application as filed.

167 Para. [0031] of the application as filed describes the action, stating that the static focal spot is moved in a manner "generally synchronized with the directional movement of the x-ray source during the exposure period". Further, it describes the technical result of this very action: "...so that the effective focal spot appears to be fixed in space (...) in one position during the entire duration of the exposure." As already mentioned, the skilled person does not consider the term "generally synchronized" as being vague in this technical context but clearly conveying that the counter movement of the static focal spot is functionally coupled to the movement of the x-ray tube to achieve a compensatory effect. The modifier "generally" appropriately merely clarifies that minor, technically insignificant deviations from perfect synchronization are inevitable but do not detract from the overall inventive concept.

"the controller may move the static focal spot" (para. [0064]) to the claim's "the controller is arranged to move"

168 Finally, changing the wording from the description's "the controller may move the static focal spot" (para. [0064]) to the claim's "the controller is arranged to move" does not constitute added matter, as it does not introduce a different technical meaning. The skilled person understands that the said disclosure in the application as filed means that the controller is configured with the capability to perform the respective action. Thus, the term "is arranged to move" in the granted claim is merely a more precise and appropriate way to

define this function and, thus, merely provides a permissible clarification (cf. also TBA, Exhibit VB 06, item 2.6, pages 22-23).

169 Additionally, this view can be based on several passages in the application as filed (inter alia: paras. [0048], [0051], [0052]).

## III. Validity of the priority claim of the patent in suit (Art. 87 EPC)

170 The Defendants' challenges to the priority (24 November 2008) claimed in the patent in suit are unsuccessful.

### 1. Legal framework

171 A claimed invention is to be considered the "same invention" as meant in Art. 87 EPC (priority right) if the skilled person can derive the subject-matter of the claim directly and unambiguously, using common general knowledge, from the previous application as a whole (Central Division (Section Munich), decision of 16 July 2024, UPC_CFI_ 14/2023; Local Division Düsseldorf, decision of 5 December 2025, UPC_CFI_712/2025; cf. EPO Enlarged Board of Appeal, decision of 31 May 2001, G2/98).

### 2. Case at hand

172 The priority filing and the PCT application as filed generally has the same description and figures except for annotations in the priority filing and the addition of paragraph [0067] in the PCT application as filed.

#### a) Claim 1

"includes" /"comprises"

173 The Defendants' argument that features 2.2.1 through 2.2.4 of claim 1 suffer from an unallowable broadening due to the amendment from "includes" to "comprises" fails: As the Board of Appeal of the EPO (T 1072/00) rightfully has found, as a rule, the German word "aufweisen" (the direct equivalent of "comprise") should be understood in the sense of "enthalten" (include) or "umfassen" (encompass). This wording is contrary to the term "consisting of", that limits a claim to including only the explicitly cited features.

"de-linking"

174 As far as the Defendants allege an unallowable "de-linking" of the controller's function from its coupling, this is not convincing. The priority document provides a direct basis for the claimed features in paras. [0063] and [0064], since they disclose a controller coupled to the

tube components for supporting the purpose of moving the static focal spot (see also TBA, Exhibit VB 06, item 2.6, page 22-23).

175 The functional link is not lost but is inherent in the term “arranged to move”.

“the controller may move the static focal spot...”

176 The Defendants are not correctly arguing that the priority document does not disclose that the controller is responsible for the movement of the focal spot, and that the synchronized movement occurs during the exposure period:

177 Para. [0064] of the priority document (“the controller may move the static focal spot...”) provides a direct disclosure of the controller’s functionality. Additionally, para. [0051] describes how “Controller 603 will change the voltage” on the plates to achieve the movement.

178 Further, para. [0031] explicitly describes the core inventive approach as a synchronized movement occurring “during the exposure period.”

“electron stream”

179 Contrary to the Defendants’ opinion, the term “electron stream” is not only disclosed in the priority document in the specific context of modifying the focal spot size but is claimed in the broader context of modifying focal spot location.

180 An electron stream is an essential and inherent component of any x-ray tube, including the one described in the priority document. Thus, the Defendants’ attempt to characterize it as a single, specific embodiment fails. The skilled person knows an x-ray tube functions by generating a stream of electrons from a cathode, accelerating them, and colliding them with an anode to produce x-rays, since this is its basic principle.

181 Further, para. [0023] of the priority document states:

> *“The dislodged electrons collide with the tungsten atoms of the anode, and x-ray photons are generated [...]”.*

182 These “dislodged electrons” moving from cathode to anode are, by definition, an electron stream. Therefore, the skilled person would immediately understand that an electron stream is not an optional feature of one specific embodiment, but the very foundation on which the entire operation of the disclosed apparatus is based.

183 Additionally, para. [0048] of the priority document explicitly states that the controller may be coupled to the cathode to “deflect the electron trajectory in the ’width’ direction” and para. [0052] of the priority document describes exemplarily that the controller can control

the anode's tilt to change the angle at which the “electron stream from the cathode hits the anode target”.

b) method claim 7

184 Method claim 7 is also entitled to the priority of the patent in suit.

185 The Defendants misinterpret para. [0065] of the priority document, insofar they argue it would only disclose a method for varying the size of the focal spot but not its location. It rather provides a direct and unambiguous basis for the method of claim 7, since it explicitly describes a method of acquiring an x-ray image that “...includes the step of moving a focal spot of the x-ray tube in a second direction opposite to the first direction during the exposure period to reduce an effective focal spot size during the exposure period”.

186 To move a focal spot in a second direction opposite to the first direction, is the central feature also of method claim 7. As far as the Defendants focus on the concluding phrase of the sentence (“...to reduce an effective focal spot size...”), their interpretation is not convincing. The phrase describes the technical result or purpose of the method step – and not the step itself. In the light of the context of the entire disclosure (e.g., priority document, para. [0005], [0028]) it is clear for the skilled person that the “effective focal spot” is the blurred or “stretched” spot that results from the tube motion. By the step of moving the static focal spot’s location, the invention prevents said stretching. The direct technical consequence of this step is the resulting reduction of “effective focal spot size” back to the size of the static focal spot.

187 Whenever a document discloses an apparatus for a specific function, it inherently discloses the corresponding method of using that apparatus. The priority document clearly discloses the apparatus for performing this method (para. [0031]: “static focal spot is moved in a direction opposite to and generally synchronized with the directional movement of the x-ray source...”; para. [0064]: “controller may move the static focal spot...").

IV. Novelty (Art. 54 EPC)

188 The technical teaching of the patent in suit is novel.

1. Legal framework

189 The assessment of novelty within the meaning of Art. 54 (1) EPC requires that the disclosure of the prior publication must be considered as a whole. It depends on whether the subject-matter of the patent at issue with all its features is directly and unambiguously disclosed in the prior art citation (UPC CoA, order of 25 September 2024, UPC_CoA_182/2024, Ortovox v. Mammut, paras. 150 – 171).

190 In addition, the disclosure also may be implicit when a person skilled in the art would objectively consider such disclosure as necessarily implied in the explicit content of a prior-art document or would arrive, inevitably and without any reasonable doubt, at the result falling within the scope of the claim by applying the teaching of the prior-art document (see e.g. LD Paris, 10 April 2026, UPC_CFI_1594/2025, SharkNinja v. Groupe SEB, and LD Düsseldorf, 28 January 2025, UPC_CFI_355/2023, FujiFilm v. Kodak).

2. Case at hand

a) Claim 1

aa) CC 10 (WO 2009/122328 A1)

191 Claim 1 of the patent in suit is novel over CC 10. CC 10 does not directly and unambiguously disclose, at least, a focusing cup pursuant to feature 2.2.3.

192 With regard to the interpretation of a “focusing cup” reference is made to the above provided claim construction. Although a focusing cup may be generally known and shown in other prior art documents, alternative means for directing an electrode beam towards an anode, such as coils or magnets, can be employed. Against this background, a focusing cup is not an implicit feature of CC 10, since (for example) a cylinder with a closed bottom is not disclosed in CC 10 (see also TBA, Exhibit VB 06, section 5.2, p. 28).

bb) CC 15 (DE 10 2009 009 052 A1)

193 Claim 1 of the patent in suit is furthermore novel over CC 15.

194 As already explained, due to the valid priority claim, the effective filing date of the patent in suit is 24 November 2008, whereas the filing date of CC 15 is 17 February 2009. Thus, CC 15 is not prior art against the patent in suit.

195 Against this background, it can be left open whether CC 15 discloses cup-shaped focusing means in its fig. 9 and whether CC 15 directly and unambiguously discloses compression paddles as argued by the Defendants.

cc) CC 4 (US,212,606 B2)

196 Claim 1 is novel over CC 4.

(1) focusing cup

197 As far as the Defendants argue that CC 4 discloses a "focusing cup" this is not convincing.

198 They rightfully acknowledge that CC 4 does not explicitly disclose a focusing cup but concede that because CC 4 mentions a "focal spot" (11) created by an electron beam, a focusing means is required, and a focusing cup is the standard choice. However, the existence of known alternative focusing technologies, such as magnetic coils or different electrode geometries, means a focusing cup is not an inevitable choice for the skilled person (cf. already above). Thus, the requirement for a direct and unambiguous disclosure is not met.

199 Further, CC 4 does not provide any motivation or teaching whatsoever that would lead the skilled person to consider, let alone modify, the specific internal components like the focusing means.

(2) movement of the static focal spot

200 Apart from that, the movement of the static focal spot pursuant to feature 4 is not directly and unambiguously disclosed by CC 4. Its disclosure of using a "multi-leaf collimator" to "shift the focal spot in a direction opposite to that of the motion of the tube" is not a direct disclosure of the claimed feature:

201 CC 4 discloses two main embodiments, neither of which teaches moving the static focal spot within the tube to compensate for the tube's motion.

202 The first embodiment of CC 4 does not use a compensatory counter movement as explained in the patent in suit. Instead, it mechanically moves the x-ray tube along a specific cycloid or epicycloid path (Col. 4, lines 55-60; Figs. 3a and 5a). The purpose of this path is to create "cusp points" (13, 14) where the focal spot's speed is naturally at a minimum (Col. 4, lines 35-40; Fig. 3b). Exposures are taken during these periods of very slow movement.

203 The described embodiment is a "slow-down" technique, not a substantially stationary compensation technique. The focal spot is not kept stationary by an opposing internal movement; rather, the entire system's movement profile is designed to have moments of near-stillness and only take exposure at these instances. This is fundamentally different from the teaching of the patent in suit.

204 The second embodiment of CC 4 relates to the collimator movement described in relation to Fig. 6. This embodiment does use a form of compensation, but it is achieved by a different mechanism. Further, the second embodiment does not appear to be a completely different embodiment. Rather, as explained in the brief description of the drawings, the embodiment is only a variant of the already described embodiments. This also follows from the claim dependencies of CC 4. The collimator is recited in claim 33, which is dependent on claim 17,

9, and 1 (which describes the claimed solution of making exposure during periods, where the speed of the focal spot is minimal).

205 The second embodiment uses a multi-leaf collimator (57) located outside the x-ray tube's vacuum envelope to steer the x-ray beam. As described in col. 7, lines 20-44, while the x-ray tube and its focal spot (11) move in space from position 11a to 11b, the leaves of the collimator (57) are subjected to shifts (62, 62') in the opposite direction. The result is that the irradiated zone (62) on the object remains the same. The x-ray beam is kept aimed at the same spot. As also explained, the beam orientation of the tube is modified during the exposure or imaging. This is exactly done, because the focal spot is not stationary and to compensate the radiated angles relative to the new position. However, as shown in Fig. 6, reproduced below, the focal spot clearly does not appear to be stationary relative to the detector.

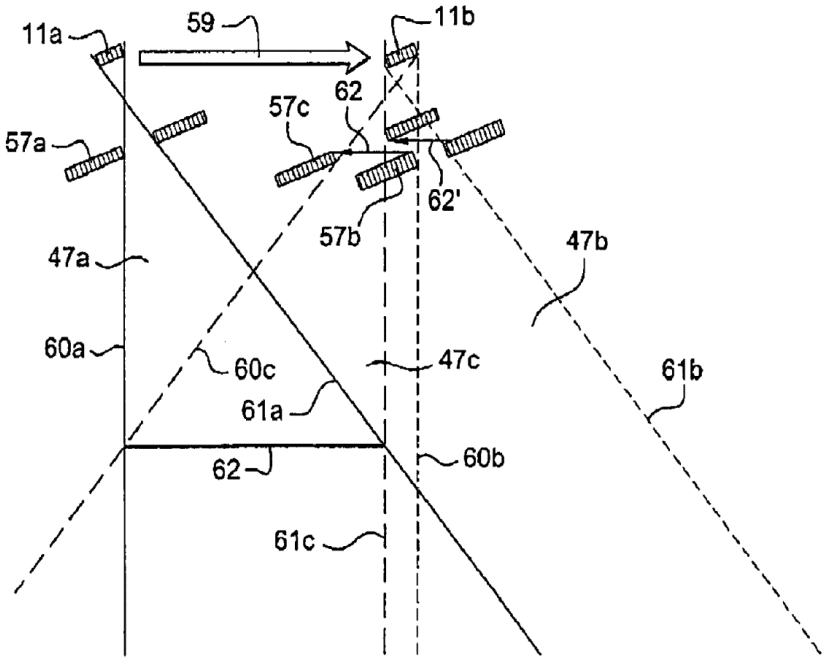



Fig. 6

206 This is a crucial distinction to features 4 and 4.1, because in this embodiment of CC 4, the static focal spot itself is not moved within the x-ray tube. The focal spot moves along with the tube housing. The compensation is also in the shown embodiment performed externally to the tube by steering the emitted photon beam with a moving collimator, and the focal spot does not appear to be stationary, quite the contrary.

207 Insofar the Defendants (referring to the recited "(temporarily) stationary state of the focal spot") argue that the disclosure in CC 4 at col. 8, lines 54-65, anticipates the claimed invention, the skilled person notices that the meaning of this paragraph is different when read in context. The explanatory remark in col. 8, lines 60-62, clarifies the disclosure by stating: "More exactly in this case the mean axis of irradiation is oriented, at least approximately, to a particular fixed point in the object, for example a midpoint." Thus, the skilled person would understand that the embodiment corresponds to the embodiment of

Fig. 6 and that the purpose of this embodiment is still to irradiate the same area of the object despite the movement of the x-ray tube.

208 However, even assuming that the teaching of col. 8, lines 54-65, implies a stationary focal spot, this disclosure still does not read on the claim. The claim requires that the static focal spot itself is moved within the x-ray tube, which means that it is the path of the electron beam that is modified to provide the movement of the focal spot in the second direction. CC 4, however, achieves its effect by shifting a "collimation slit", which is a distinct mechanism and not a movement of the focal spot within the tube of CC 4.

209 Further, the claim defines that the "cathode, anode, and port together define a static focal spot", and then specifies that it is this ("the") static focal spot which is moved. A "collimation slit", as described in CC 4, is not the same as the "port" defined in the claim. This definitional difference also points towards a lack of correspondence between the static focal spot defined in claim 1 and the focal spot described in col. 8 of CC 4.

dd) CC 18 (DE 10 2006 046 741 A1)

210 Finally, claim 1 of the patent in suit is novel over CC 18.

211 The Defendants contend unsuccessfully that the "focusing cup" (feature 2.2.3) would be implicitly disclosed: As CC 18 describes a system with a defined focal spot ("Fokuspunkt"), a focusing means would be a technical necessity. The mere existence of a focal spot does not directly and unambiguously disclose the specific structure of a cup for an alleged focusing means. As already mentioned, due to known alternatives a cup is not a technical necessity, but a decision of choice.

212 Apart from that, the technical teaching of CC 18 is about the arrangement and sequential activation of multiple distinct radiation sources ("Strahlquellen"), not the specific method of focusing the electrons for each one.

213 Contrary to the Defendants' opinion, the movement of the static focal spot (features 4; 4.1) is not directly disclosed by CC 18: The mechanism of sequentially activating two distinct focal spots (26a, 26b) while the x-ray tube moves continuously does not realise the requirements of features 4 and 4.1, which refer to a single static focal spot. A mere switching between two physical locations is not the claimed "movement of the static focal spot within the x-ray tube". It does not create the impression of a single, fixed focal spot relative to the object, directly corresponding to the effect described in the patent in suit.

b) Claim 7

214 The comments regarding the novelty of claim 1 apply accordingly to claim 7 of the patent in suit since method claim 7 mirrors the features of claim 1.

## V. Inventive step (Art. 56 EPC)

### 1. Legal framework

215 According to the case law of the Court of Appeal, the approach taken by the Unified Patent Court when establishing inventive step is as follows (UPC_CoA_464/2024, Decision of 25 November 2025, headnotes 4 – 13, paras. 128 – 136, Meril v. Edwards; UPC_CoA_528/2024, Decision of 25 November 2025, headnotes 10 – 22, paras. 122 – 138, Amgen v. Sanofi):

216 It first has to be established what the object of the invention is, i.e. the objective problem. This must be assessed from the perspective of the skilled person (m/f – hereinafter referred to as 'it'), with its common general knowledge, as at the application or priority date (also referred to as the relevant date) of the patent. This must be done by establishing what the invention adds to the state of the art, not by looking at the individual features of the claim, but by comparing the claim as a whole in context of the description and the drawings, thus also considering the inventive concept underlying the invention (the technical teaching), which must be based on the technical effect(s) that the skilled person on the basis of the application understands is (are) achieved with the claimed invention.

217 In order to avoid hindsight, the objective problem should not contain pointers to the claimed solution.

218 The claimed solution is obvious when at the relevant date the skilled person, starting from a realistic starting point in the state of the art in the relevant field of technology, wishing to solve the objective problem, would (and not only: could) have arrived at the claimed solution.

219 The relevant field of technology is the field relevant to the objective problem to be solved as well as any field in which the same or similar problem arises and of which the person skilled in the art of the specific field must be expected to be aware.

220 A starting point is realistic if the teaching thereof would have been of interest to a skilled person who, at the relevant date, wishes to solve the objective problem. This may for instance be the case if the relevant piece of prior art already discloses several features similar to those relevant to the invention as claimed and/or addresses the same or a similar underlying problem as that of the claimed invention. There can be more than one realistic starting point and the claimed invention must be inventive starting from each of them.

221 The skilled person has no inventive skills and no imagination and requires a pointer or motivation that, starting from a realistic starting point, directs it to implement a next step in the direction of the claimed invention. As a general rule, a claimed solution must be considered not inventive / obvious when the skilled person would take the next step prompted by the pointer or as a matter of routine and arrive at the claimed invention.

222 A claimed solution is obvious if the skilled person would have taken the next step in expectation of finding an envisaged solution of the technical problem. This is generally the case when the results of the next step were clearly predictable, or where there was a reasonable expectation of success.

223 The burden of proof that the results were clearly predictable for the skilled person would have reasonably expected success, i.e. that the solution it envisages by taking the next step would solve the objective problem, lies on the party asserting invalidity of the patent. A reasonable expectation of success implies the ability of the skilled person to predict rationally, on the basis of scientific appraisal of the known facts before a research project was started, the successful conclusion of that project within acceptable time limits.

224 Whether there is a reasonable expectation of success depends on the circumstances of the case. The more unexplored a technical field of research, the more difficult it was to make predictions about its successful conclusion and the lower the expectation of success. Envisaged practical or technical difficulties as well as the costs involved in testing whether the desired result will be obtained when taking a next step may also withhold the skilled person from taking that step. On the other hand, the stronger a pointer towards the claimed solution, the lower the threshold for a reasonable expectation of success.

225 When the patentee brings forward and sufficiently substantiates uncertainties and / or practical or technical difficulties, the burden of proof that these would not prevent a skilled person from having a reasonable expectation of success, falls on the party alleging obviousness.

2. Case at hand

a) Claim 1

226 Taking into account all the objections raised by the Defendants, claim 1 is based on an inventive step.

aa) Starting from CC 4 combined with common general knowledge ("CGK")

227 Independent from the question whether or not CC 4 discloses a focusing cup or whether the incorporation of a focusing cup into CC 4's device would have been obvious (which is not the case: cf. above with regard to novelty) claim 1 is also inventive over CC 4 at least due to distinguishing feature 4.

228 The Court can assume in favour of the Defendants that the skilled person was to combine CC 4 with the common general knowledge of a focusing cup. However, in that case the resulting system would still lack the central inventive concept of claim 1 teaching that a controller is arranged to actively move the static focal spot within the tube. Thus, the respective combination would not lead to the new, internal motion control system provided by the patent in suit.

229 As far as the Defendants argue regarding the motion control (feature 4) that CC 4 already teaches the central technical goal (namely, to hold the focal spot stationary to reduce motion blur) and that the skilled person would find the claimed solution (= moving the focal spot internally by steering the electron beam) in the CGK, this merely contains considerations based on hindsight. CC 4 teaches a solution for solving the problem of motion blur two highly specific, external control systems, namely a complex mechanical epicycloid movement of the entire x-ray tube assembly or in the alternative an optical shift

of the emitted x-ray beam using a multi-leaf collimator. Against this background, the skilled person would not abandon CC 4's approaches entirely and instead seek a completely different, internal solution. Moreover, the Defendants formulate an objective technical problem ("how to hold the focal spot fixed in space") which already contains a pointer to the claimed solution of the patent in suit. Furthermore, CC 4's disclosure does not identify any problem with the internal focusing that needs to be addressed by the skilled person. The patent in suit relates to the objective technical problem of how to achieve motion blur reduction via a new, internal control mechanism, whereas CC 4 does not contemplate such a problem.

230 Finally, even if the skilled person started from CC 4 in order to solve a focusing problem, the combination with CGK would fail to arrive at the invention as a whole. Insofar the Defendants contend the skilled person would "obviously" apply the known internal steering technique from CGK this consideration is merely based on hindsight. CC 4 does not provide any teaching and/or motivation to develop an actively moving of the focal spot within the tube.

bb) Starting from CC 4 combined with CC 5 (US 6,438,207 B1) and/or with CC 12 (US 5,907,595) and/or with CC 13 (US 2007/0258564 A1)

231 The combination of CC 4 and CC 5 does not preclude the recognition of an inventive step. As already explained CC 4 does not disclose features 4 and 4.1 and the same applies to CC 5 (as the Defendants themselves rightfully acknowledge: cf. RDCC mn. 351).

232 Since neither CC 12 nor CC 13 disclose the requirements of features 4 and 4.1 the respective inventive step attacks also fail. The Defendants only cite CC 12 and CC 13 to argue that it would be obvious for the skilled person to implement a focusing cup into the system of CC 4.

cc) Starting from CC 6 (US 2006/0291618 A1) combined with CC 4

233 Claim 1 involves an inventive step over CC 6 combined with CC 4.

234 CC 6 relates to a tomosynthesis system for mammography with an x-ray source (11) that moves along a path (e.g., an arc path 4) to acquire images from multiple positions, and a detector (13) (cf. paragraphs [0016] and [0017] as well as Fig. 1). CC 6 addresses the problem of image blurring by identifying two types of blurring in tomosynthesis: vibration blurring from "step and shoot" mode and motion blurring from continuous mode (cf. paragraphs [0005] and [0024]).

235 The primary solution proposed in CC 6 to reduce motion blur is to move the detector (13) in a direction opposite to the movement of the x-ray source (11) during the exposure (cf. paras. [0021] and [0027]). As a secondary solution it discloses the concept of moving the focal spot within the x-ray tube, but for a different primary purpose of changing the movement of the focal spot follow a linear path instead of an arc, which in turn simplifies algorithms to reconstruct the 3D image (cf. inter alia paras. [0038] and [0041]).

236 CC 6 might teach some kind of movement of the focal point. Anyway, it does not disclose a synchronized movement as outlined in features 4 and 4.1. Therefore, claim 1 involves an inventive step over CC 6 combined with CC 4. Even if CC 6 was chosen as a starting point and there was a motivation for the skilled person to combine its teachings with CC 4, he would not arrive at the solution of features 4 and 4.1. As already explained, CC 4 does not disclose or even suggest the specific shift of the static focal spot within the tube.

dd) Starting from CC 6 combined with CC 17 (JP2008159317A)

237 Claim 1 further involves an inventive step over CC 6 combined with CC 17.

238 Firstly, it is pointed out that para. [0005] of CC 17 refers to another prior art document, namely US 5,550,889, which, however, is not cited by the Defendants. Secondly, para. [0005] relates to solving a problem that is described in preceding paras. [0003] and [0004], which address the technical problem of compensating for focal spot shifts as a result of a heating of an anode and a respective expansion thereof, which leads to drifting of the focal spot within the x-ray tube.

239 Thus, the problem described in CC 17 is different from the problem at hand. Accordingly, it is highly questionable if the skilled person would be prompted to consult the solution of CC 17.

240 However, even if the skilled person consulted CC 17, he would still not have been able to arrive at the claimed invention. Para. [0005] of CC 17 (and US 5,550,889) discusses a technique to counteract the movement of the focal spot within x-ray tube itself, which includes detecting the amount of movement (the drift) and then adjusting a deflection coil to move the focal point in the opposite direction to compensate. Therefore, para. [0005] of CC 17 is teaching a corrective feedback system to counteract slow, unwanted thermal drift, but not a system to proactively compensate for the rapid, deliberate scanning motion of the entire tube assembly to prevent motion blur.

ee) Starting from CC 7 (JP 20071655236 A) combined with CGK

241 Contrary to the Defendants view, the combination of CC 7 and CGK (as presented e.g. in CC 4) does not preclude the inventive step.

242 CC 7 is not a promising starting point in an inventive step analysis. A skilled person seeking to solve a problem in breast tomosynthesis would not select CC 7 as a promising starting point for two reasons: it relates to a different technical field, and it addresses a different technical problem.

243 Claim 1 of the patent in suit is explicitly directed to a breast tomosynthesis system, which inherently requires acquiring images from multiple angles along an arc to reconstruct a 3D volume. CC 7, in contrast, describes a system for “industrial or medical X-ray fluoroscopy” (para. [0001]), which is fundamentally different from tomography.

244 Further, the problem addressed by the patent in suit is the reduction of motion blur caused by the movement of the x-ray tube during an exposure in a tomosynthesis scan (see paras

[0005] and [0021]). CC 7 addresses a completely different problem, namely, how to increase the allowable x-ray tube current/load (see paras [0009] and [0056]) of CC 7: by deflecting the electron beam to distribute heat over a larger area of the anode target (see para. [0025] of CC 7). The skilled person, focused on improving image clarity in tomography, would not be motivated to consult a document concerned with increasing power handling in a linear fluoroscopy system.

245 Moreover, CC 7 teaches away from the requirements of 3D tomography. The fundamental principle of 3D tomography is the acquisition of projection images from a series of different angles, which requires the x-ray source to physically move relative to the object. CC 7 teaches the exact opposite goal: In contrast, the entire purpose of the external moving mechanism in CC 7 is to ensure that the effective x-ray source remains completely stationary in space (cf. paras. [0036] and [0038] of CC 7). A system designed to keep the x-ray source stationary is fundamentally incompatible with and contradictory to the requirements of 3D tomography. For a skilled person looking to develop a tomosynthesis machine, CC 7 does not merely fail to provide a solution. It actively teaches away from what is required, making it an unsuitable and illogical choice of prior art to solve the problem at hand.

246 Finally, the technical solution in CC 7 is the reverse of the claimed invention: According to the patent in suit, the x-ray tube moves externally (along an arc), which leads to the focal spot moving. The underlying logic is to provide internal motion that solves a problem created by external motion, whereas in CC 7 the focal spot moves internally to manage heat. Thus, the logic of CC 7 is that external motion solves a problem created by internal motion.

247 The skilled person would not simply apply the teaching of CC 7. To arrive at the invention, he would have to recognize this inverted logic and have the profound insight to reverse it. He would need to realize that the compensatory mechanism of CC 7 (internal deflection) could be repurposed to become the primary solution for an entirely different problem (external tube motion) in a system with contradictory goals.

248 Thus, the path from CC 7 to the invention claimed in the patent in suit is obstructed by a series of significant hurdles. The skilled person would not have been motivated to start from CC 7 due to its different technical field and problem. Furthermore, CC 7 teaches away from the core requirements of tomography by insisting on a stationary effective focal spot. Finally, and most critically, arriving at the claimed invention would require inverting the entire problem-solution logic of CC 7. This series of conceptual leaps goes far beyond the routine work of the skilled person.

249 Apart from that, the Defendants have basically argued that it would be obvious to modify the system of CC 7 into a tomography system. However, such a “problem” cannot be done without a pointer to the solution and hindsight.

b) Method claim 7

250 The considerations with regard to claim 1 also apply to method claim 7 since the latter mirrors the features of claim 1. Therefore, also claim 7 is based on an inventive step.

VI. Claimant's auxiliary requests / amendments

251 As the patent in suit as granted is valid, it is not necessary to comment on the auxiliary requests / amendments. Thus, it can also be left open whether the Defendants' Rejoinder to the Reply to the Defence to the Application to amend the patent dated on 24 September 2025 (but for the first time filed on 3 March 2026) has – in connection with the transition from the old" to the new" CMS – been filed in the correct manner.

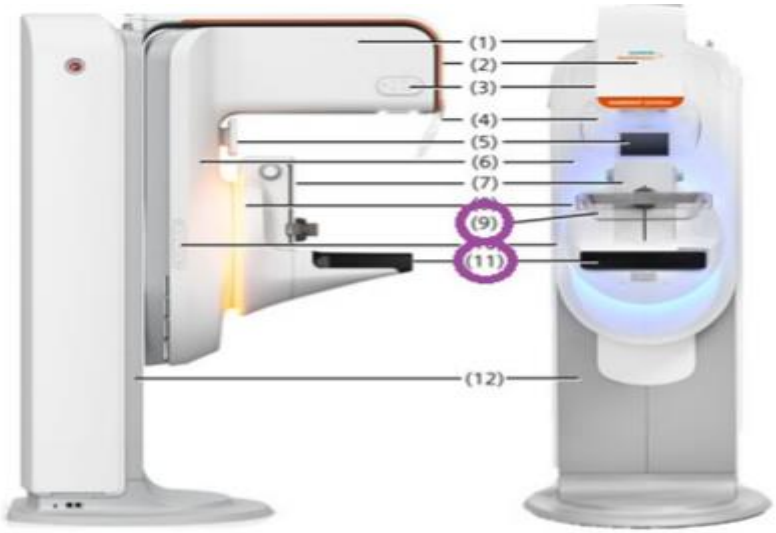
D. Infringement (Art. 25 UPCA)

I. Claim 1

252 The attacked embodiment fulfils all features of the main claim 1. This applies also to the following features of which the implementation in the attacked embodiment has been disputed by the Defendants.

*Feature 1.3*

253 As already explained above, feature 1.3 does not stipulate that the required compression paddles are different from the combination of a single horizontal compression paddle and the surface or cover of the detector. In other words, the surface or cover of the detector can be the lower one of the compression paddles. Thus, the attacked embodiment fulfils feature 1.3, as it is able to achieve the necessary compression of the breast by the said combination (cf. picture below: compression plate (9) and object table (11), highlighting in purple added by the Claimant):




MAMMOMAT B.brilliant stand

(1) Collision protection on both sides
(2) Stationary headrest
(3) Control panel on the tube housing on both sides
(4) Face shield
(5) Stand display
(6) Swivel arm
(7) Compression unit
(9) Compression plate
(11) Object table

*Feature 2.2.3*

254 Taking into account that - as pointed out in the claim construction - the "focusing cup" does not need to be shaped as a right circular cylinder, but any depression in an electrode that at least partially surrounds the filament in the x-ray tube's cathode is sufficient, the attacked embodiment comprises a focusing cup in the sense of feature 2.2.3.

255 It is undisputed […] are arranged in […]. As far as the Defendants exclusively point […] as being the focusing element, this approach fails since the skilled person realizes that the […] that can be considered cup-shaped. This is illustrated by the following picture (originated from Defendants' SoD (para. 92), highlighting added by the Defendants) which is displayed in reduced form: […]

*Feature 2.2.3.1*

256 Since feature 2.2.3.1 even in the light of para [0012] cannot be interpreted in the way that the electrode must be charged independently and that it would exclude that the voltages/electrical potentials applied are the same (cf. above under claim construction), its infringement by the attacked embodiment is not in doubt with regard to the following situation stated by the Defendants: […]

*Feature 2.2.4.2*

257 Insofar the Defendants argue that there […], this allegation is not decisive for the question whether feature 2.2.4.2 is fulfilled or not. As already explained it is not required by claim 1 that the respective components operate in a specifical manner with a synergetic effect in order to define the static focal spot. Contrary to the Defendants' view, feature 2.2.4.2 does not stipulate […] between the said components. Since the cathode, the anode and the port undisputedly interact in some way in defining the static focal spot, the requirements of feature 2.2.4.2 are met.

*Feature 2.2.5*.

258 As explained in more detail in the section on the interpretation of the patent in suit, it is not necessary that the controller is located "within" the x-ray tube. As explained above "comprises" in this context must be interpreted that a device that controls the movement of the static focal spot inside the x-ray tube according to feature 4 (and fulfils feature 2.2.5.1) is considered such controller regardless of its position in relation to the x-ray tube.

259 It is not disputed by the Defendants […], the controller still falls within the feature 2.2.5 of the claim 1 and hence feature 2.2.5 is incorporated in the attacked embodiment.

*Feature 2.2.5.1*

260 The controller of the attacked embodiment is also coupled to at least one of the anode, the cathode and focusing cup in accordance with feature 2.2.5.1. Unsuccessfully, the Defendants deny realization of feature 2.2.5.1 […]

261 As outlined above, feature 2.2.5.1 shall not be interpreted in a manner that a direct (physical) coupling of the physical means of the controller to at least one of the anode, cathode and focusing cup is required. Rather, the following applies in this respect: The controller also comprises the underlying controlling mechanism of the overall tomosynthesis system. Against this background, any direct or indirect connection allowing communication between […] and at least one of the anode, cathode and focusing cup is sufficient for realizing feature 2.2.5.1.

262 Since it is undisputed that the attacked embodiment comprises […] with all components of the system, […]

*Feature 4.1*

263 Finally, the attacked embodiment also incorporates feature 4.1.

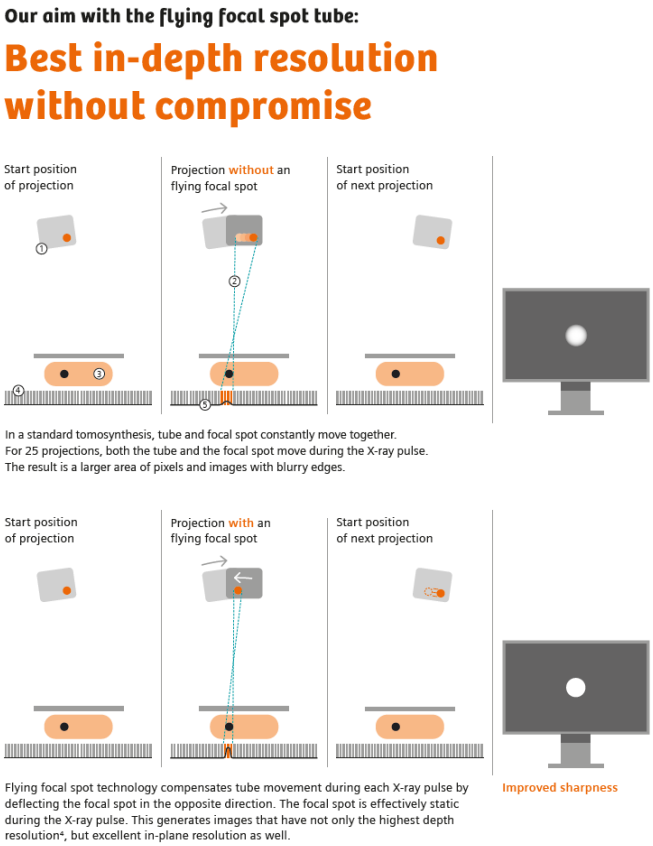
264 Generally, a claimant bears the burden of substantiation and proof for an alleged infringement. In the present case, the Claimant has not done any measurements of its own but relies rightfully on the advertising material of the Defendants, publicly available information and additionally on data provided by the Defendants in SoD.

265 According to the case law of the UPC Court of Appeal, the concept of "offering" within the meaning of Article 25(a) UPCA must be interpreted autonomously and understood in an economic sense. An "offering" does not have to constitute a legally binding contractual offer. It is sufficient that an item is presented in such a way that a third party could make an offer to acquire it, for example by concluding a contract of sale, lease, or hire (UPC CoA, Decision of 3 October 2025, UPC_CoA_534/2024, Philipps v. Belkin, para 205; Decision of 17 February 2026, UPC_CoA_302/2025, Rematec v. Europe Forestry, paras. 98 - 100).

266 Applying those principles, the Defendants offered the contested embodiment by advertising it. It has to be noted that the Defendants' own material (see inter alia VB 09, page 9) states and illustrates as follows:

> *"In principle, the x-ray tube with a flying focal spot utilizes an electron beam that's accurately deflected by an electromagnetic field. During an x-ray pulse, the focal spot on the anode plate is linearly moved in the opposite direction compared to the tube movement. The focal spot is thus stationary when observed from the outside (Fig. 4). After each x-ray pulse, the focal spot is deflected back to its starting position on the anode. The result, similar to FFDM, is that the effective focal spot size in tomosynthesis is 0.3 according to IEC 60336 [12]."*

267 Similar information is provided by the following figure (cf. page 13 of the English brochure (Exhibit VB08)):




268 Considering that the Defendants themselves are marketing the attacked embodiment by emphasizing that it "utilizes an electron beam that's accurately deflected by an electromagnetic field", that it has a focal spot "that is thus stationary when observed from outside" and is "effectively static during the X-ray pulse", they unconvincingly try to make up an argument based on alleged minimal deviations of the focal spot which are irrelevant for the realization of feature 4.1.

269 As explained in detail in the context of claim construction, claim 1 does not require an exact maintenance of the position of the effective focal spot during an exposure period. Ultimately, it can be left open whether the Defendants' statements and/or measurements are fully correct. Even in this case it would have to be noted that feature 4.1 does not require an exact compensation of the movement of the x-ray tube by moving the focal spot in the opposite direction. It only claims that the movement is compensated to an extent that the effective focal spot "appears" to be "relatively" fixed in space from the perspective of the breast and/or the detector. A mere […] does not prevent the realisation of feature 4.1.

270 Thus, the Defendants' measurements provided inter alia in the SoD are not sufficient to convincingly deny the realization of feature 4.1. Against this background, it is not decisive that those measurements moreover might appear to be imprecise and lack relevant details which might affect the measurement results. Regardless of these questions, the Court may find that the patent in suit has been infringed based solely on the Defendant's advertising materials / brochures and their respective submissions. The Defendants' measurements

cannot refute the fact that during one exposure the effective focal spot remains sufficiently stationary and so as to appear to be fixed in space.

271 The attacked embodiment undisputedly utilises means for counter the movement of the x-ray tube during exposure. As far as the attacked embodiment might have imperfections, this circumstance is irrelevant since feature 4.1 does not require the effective focal spot to be (perfectly) fixed in space. By arguing that "the deflection of the focal spot on the anode ... in the attacked embodiment is not fully precise...", the Defendants themselves admit that the deflection is at least "generally synchronised" within the meaning of feature 4.1. The same applies to their arguments presented in mn. 99 of the RtRSoD, where the Defendants contend that "in the attacked embodiment, there is no perfect compensation for the motion of the x-ray tube as required by feature 4.1" and that "over the duration of one exposure period, there is 'over-correction' and 'under-correction' compared to an ideal correction where the focal spot always remains at the exact same position". The Defendants ignore that, at least, the focal spot oscillates around the ideal fixed position, so that the position of the focal spot is generally synchronised with the movement of the x-ray tube.

272 The Defendants argue unsuccessfully that the significant improvement over an x-ray tube without any correction of the focal spot would not be in accordance with the patent in suit but reached by combination of several approaches. In this regard, reference should once again be made to their own promotional material, in which the effect in question is specifically attributed with the fact that during an X-ray pulse, the focal spot on the anode plate is linearly moved in the opposite direction compared to the tube movement. Apart from that, the Defendants have not demonstrated the specific extent to which other measurement-related measures allegedly contribute to the effect in question. Presuming in favour of the Defendants that the alleged effective focal spot is nearly […] than the accumulated focal spot on the anode if the static focal spot was absolutely fixed (cf. RtRSoD, mn. 106), such a technical result represents an improvement of […] compared with the cited prior art (see paragraph [0018] of the patent in suit with regard to Fig. 2 (which illustrates an effective focal spot of a prior art tomosynthesis system): increase of the effective focal spot width from 0.3 mm to 1.5mm during an exposure period, which is a fivefold increase).

273 Even if – assuming, for the sake of argument, in favour of the Defendants – the attacked embodiment, which in any event incorporates the claimed structural features in a literal sense, were not to fully achieve the technical objectives of the patent as intended by the technical teaching of the patent in suit, it would still constitute an inferior embodiment which likewise gives rise to an infringement of the patent in suit.

## II. Claim 7

274 Due to the amendment of the requests, as mentioned above, it is not necessary to find about an indirect infringement of the independent claim 7, since the attacked embodiment directly infringes the independent claim 1.

E. No private prior use right

275 The infringement of the patent in suit is not precluded due to an allegedly private prior use right according to Article 28 UPCA in conjunction with Section 12 GPA.

276 As the Defendants have rightly acknowledged, such private prior use right – even if existing – would only apply to the German territory but not to other UPC Member States, inter alia not to France and not to the Netherlands (cf. Local Division Düsseldorf, decision of July 2024, UPC_CFI_7/2023; Local Division Munich, decision of 10 October 2025, UPC_CFI_114/2024).

277 Pursuant to Sec. 12 (1), first sentence GPA, the patent shall not have effect against a person who, at the time of filing the application, had already put the invention into use in Germany or had taken the necessary steps to do so. If the patent owner is entitled to a right of priority, the earlier application shall take precedence over the application referred to in 12 (1) GPA (Sec. 12 (2), first sentence GPA.

278 According to the German Case Law, having exercised the possession of the invention at the time of priority, requires that acts of use have been carried out in accordance with Sec. 9 and/or 10 GPA. Said acts of use must "translate the seriousness of an intention to use the invention commercially into reality" (Higher Regional Court (hereinafter: "HRC") Dusseldorf, judgement of October 26th, 2006 - I-2 U 109/03). If such acts of use have not yet taken place by the priority date, it is – subsidiarily – sufficient if the defendant has at least taken arrangements before the priority date to commence use as soon as possible (HRC Dusseldorf, judgment of 14 March 2018 - I-15 U 49/16 - Schutzverkleidung für funktechnische Anlagen). This may only be assumed if the defendant has taken the firm and final decision to use the invention commercially and has initiated such preparatory acts which prepare the immediate implementation of this decision. The overall circumstances before the priority date have to indicate to an unbiased observer that the commencement of use is imminent. Acts which prepare a still uncertain future use and which are only intended to clarify whether the invention made can and/or should be used commercially in Germany, i.e. which serve to first form the intention to use the invention commercially in Germany, are not sufficient (Federal Court of Justice (hereinafter: "FCJ"), judgement of 28 May 1968 - X ZR 42/66 - Europareise; HRC Dusseldorf, judgment of 14 March 2018 - I-15 U 49/16 - Schutzverkleidung für funktechnische Anlage).

279 It can remain open if the Defendants credibly demonstrated possession of the invention before the priority date of the patent in suit. At least, they did not convincingly plead any circumstances to demonstrate that they had already made a firm and final decision to use a system within the meaning of the patent claim before the priority date.

280 The patent in suit validly claims the priority of US 117453 P dated 24 November 2008 (see in detail below regarding the counterclaim for revocation).

281 The Defendants themselves do not argue actual acts of use of the invention prior to the priority date. However, they also fail to show that they had the firm and final intent to commercialize a system in accordance with claim 1 of the patent in suit by 24 November 2008. The Defendants did not submit any details to establish that prior to the aforementioned priority date of the patent in suit a final management decision had been

made to commercialize a system using the teaching of the patent in suit. They did not elaborate on any such business decision and did not submit any evidence.

282 Insofar as the Claimant asserts that – quite to the contrary – even after the priority date of the patent in suit a decision was taken not to follow up with commercializing the alleged prior use but to pursue a different solution, this can be left open. At the very least, no sufficient accompanying or subsequent act of use or preparatory acts for immediate use can be inferred from the Defendants' arguments.

283 The Defendants only provide the invention notification dated 17 October 2008, i.e. only approximately one month before the priority date of the patent in suit. This alone indicates that at the priority date, no decision to commercialize a respective product could have been made. Above all, the testing and development phase began at earliest around the time of the priority date.

284 Defendants' allegation that they "decided to put the invention into practice and continuously undertook steps to develop a corresponding product", has been contested by the Claimant. Nevertheless, the Defendants have not provided any evidence in this specific regard.

285 The next alleged evidence for arrangements of commercialization provided by the Defendants – an internal innovation project allegedly refining the technology – took allegedly place on 15 August 2013, i.e. four and a half years after the priority date of the patent in suit. As far as the Defendants allege that within these 4.5 years between the invention notification and the internal project "further simulations and tests to productize a magnetic deflection according to the invention notification" have been made in 2011/2012, this is also contested by the Claimant. The same applies to allegedly arrangements of commercialization dating back to 6 August 2015, i.e. another 2 years after the first evidence and 6.5 years after the invention notification. As far as the evidence is related to a project "W1D" for development of a product only, the Claimant has contested that this project "W1D" was based on the original invention disclosure.

286 Above all, the Defendants themselves have admitted that in 2016 a decision has been made "to reduce the scope of the project W1D" resulting in non-commercialization of a product implementing the alleged prior invention and instead, another project called "Inspire" has been initiated but did not result in a product. The Claimant has contested that the project "Inspire" is based on the original invention disclosure. The Defendants have merely submitted that the project did not result in a product, however, "many of the concepts developed there – including flying focal spot – were incorporated into the subsequent projects, from which the attacked embodiment emerged". This not a substantiated account of the processes from which one could infer a continuous development, in which every project built systematically upon its predecessors. Further, to be noted is that even according to Defendants own submissions, in 2016 they were still in the development phase of a product implementing the alleged prior invention.

287 The aforementioned project "Inspire" was then followed by project "Jackal" in 2017 which afterwards was followed by project "Tigress" in 2018 which allegedly led to the attacked embodiment - for the first time introduced to the market in fall 2023. In summary, 15 years

after the alleged prior possession of the invention and the priority date of the patent in suit, the introducing to the market has allegedly taken place. Additionally, the Claimant has contested that all aforementioned projects were based on each other and on the original invention disclosure.

288 In their RtRSoD, the Defendants have merely asserted the following: In the present technical field, the development and approval of a final product usually would take several years. This would be evidenced by the alleged fact that Claimant itself is still not marketing a product according to the patent in suit which claims a priority of 24 November 2008 and was filed on 23 November 2009. Therefore, the rather long time which it took the Defendants to complete the development of the attacked embodiment would not exclude that they had taken the decision and necessary steps to put the invention into practice already before the priority date. However, at least, the Defendants fail to present any evidence that their said projects were based on each other and particularly on the original invention disclosure.

289 Against this background, the Defendants have in total failed to show that they had the firm and final intent to commercialize a system in accordance with claim 1 of the patent in suit by its priority date 24 November 2008. Thus, it can be left open if such prior use right would extend to the attacked embodiment and if any private prior use right would extend to the Defendants, in particular to Defendants 2 to 4.

F. No Positive use right

290 The Defendants cannot successfully rely on an alleged positive use right, neither based on DE 10 2009 009 052 (DE '052), nor based on EP 2 262 428 (EP '428 = WO 2009/12238 A1 respectively (Exhibit CC 10)).

291 Under German law such a positive use right for the benefit of a patent holder has been discussed with regard to Sec. 9 (1) GPA which states in English translation:

> *"The patent has the effect that only the patent owner is entitled to use the patented invention in accordance with applicable law."*

292 Insofar the Claimant argues that Art. 25 UPCA fails to provide a corresponding right to use for the patent owner, because it explicitly only stipulates a right for the patent owner to prohibit the use of the patent by others, there is no need to resolve this legal issue in the present case. In any event, the said objection raised by the Defendants is unfounded for the following reasons:

293 It is rightfully undisputed that DE '052 has an earlier priority date compared to the patent in suit which validly claims its priority date 24 November 2008 (see in detail below regarding counterclaim for revocation). For that reason alone, Defendants cannot successfully base a positive use right on DE '052.

294 Regarding EP '428 the following must be noted: In any case, the earlier right only entitles the Defendant to make use of the patent strictly and exclusively within its teaching. Any additional features of the earlier patent may not be used (UPC_CoA_182/2024, order of 25

September 2024, Mammut v. Ortovox, para. 217; decision of FCJ, judgment of 12 February 2009 - Xa ZR 116/07, GRUR 2009, 655 - Trägerplatte): EP ‘428 does not disclose a “focusing cup” (cf. in detail below respectively WO ‘328 = Exhibit CC 10 of the counterclaim for revocation). As far as the Defendants argue that a positive use right is only excluded in view of additional features which are disclosed by the younger patent for the first time, this is not in accordance with the above cited case law.

## G. Infringing activities of the Defendants

295 It can be left open whether it may be irrelevant that Defendant 2 allegedly has terminated its operational business and does no longer manufacture and/or market the attacked embodiment. Regardless of this issue, a risk of repetition of manufacturing the attacked embodiments regarding the Defendant 2 arises from the previous manufacturing. Apart from that, the comments set out below regarding Defendants 1, 3 and 4 apply mutatis mutandis to Defendant 2.

296 As regards Defendants 1, 3 and 4, it is irrelevant to the decision that until 1 October 2023, Defendant 1 did not have an operational business and therefore was not involved in the manufacture and marketing of the attacked embodiment, and that Defendants 3 and 4 are not involved in the manufacture of the attacked embodiments. In this respect, reference is made to the explanations on the legal consequences (see below).

## H. Legal consequences

### I. Injunction (= Request I.1 and 2.)

297 The injunction is based on Art. 25(a) UPCA in conjunction with Art. 63(1) UPCA.

298 Where the proprietor files an infringement action and the Court finds that an intellectual property right has been infringed or is threatened to be infringed, it shall issue an order prohibiting the continuation of the infringement unless there are special reasons for not doing so. In consequence, a permanent injunction is to be considered as a rule, while the refusal to grant an injunction an exception. Following these principles, there is no reason to refrain from an injunction in the case at hand. The disproportionality defence is not convincing.

#### 1. Lack of a Claimant’s competitive product

299 It is not decisive whether or not the Claimant has already marketed a product according to the patent in suit. A patentee can also use its patent as a protective tool against competition without making use of the patented technology by itself, for example in order to prevent competitors from using other technologies also invented by the patentee.

2. No independent development of the attacked embodiment

300 As far as the Defendants allege that they have developed the attacked embodiment in parallel of the patent in suit, they rely unsuccessfully on the notice of invention and the DE ‘052.

301 Firstly, as already mentioned (cf. above regarding the alleged “private prior use right”), the development of the attacked embodiment was conducted over a very long period of time after the publication of the DE ‘052.

302 Secondly, the Defendants were fully aware of the patent in suit (already published in 2011) during the development phase of the attacked embodiment, which was not completed until 2023.

3. Patients’ interests

303 According to the case law of the Court of Appeal of the UPC (Decision of 25 November 2025, UPC_CoA_457/2024; UPC_CoA_458/2024; UPC_CoA_464/2024 – Meril v. Edwards Lifescience) the following applies for interests of third parties:

304 Art. 63(1) UPCA implements Art. 11 of the Enforcement Directive. In accordance with Article 17(2) of the Charter of Fundamental Rights of the European Union (“The Charter”) and the right to effective judicial protection guaranteed by Article 47 of the Charter, the Enforcement Directive provides for a range of legal remedies aimed at ensuring a high level of protection for intellectual property rights in the internal market. This need for a high level of protection for intellectual property rights means that, in principle, the proprietor may not be deprived of the right to have recourse to legal proceedings to ensure effective enforcement of his exclusive rights, and that, in principle, the user of those rights, if he is not the proprietor, is required to obtain a licence prior to any use (CJEU, judgement of 16 July 2015, Huawei – ZTE, C-170/13, ECLI:EU:C:2015:477, paragraphs 57 and 58). Accordingly, where the proprietor files an infringement action and the Court finds that an intellectual property right has been infringed or is threatened to be infringed, it shall issue an order prohibiting the continuation of the infringement unless there are special reasons for not doing so.

305 A special reason for denying an injunction may apply if, in the circumstances of the particular case, granting an injunction does not comply with the general obligations of Art. 3 of the Enforcement Directive, in particular the obligation that the remedies shall be proportionate. In addition, the Court must ensure that the application of its power under Art. 63(1) UPCA is not in conflict with fundamental rights protected by the European Union legal order or with other general principles of EU law, such as the principle of proportionality (CJEU, judgement of 29 January 2008, Promusicae, C-275/06, ECLI:EU:C:2008:54, paragraph 68; judgement of 27 March 2014, UPC Telekabel Wien, C-314/12, ECLI:EU:C:2014:192, paragraph 46; judgement of 16 July 2015, Coty Germany, C-580/13, ECLI:EU:2015:485, paragraph 34).

306 When considering the proportionality of injunctive relief and corrective measures, the Court may take into account not only the interests of the parties to the litigation but also the interests of third parties, such as patients. The interests of the patients justify an exception to the right to injunctive relief and corrective measures if it is established that the infringing embodiment is the sole available treatment method or represents an improvement upon the available treatment methods, resulting in a notable enhancement of patient care.

307 In the case at hand no such facts that could justify an exception in the patients' best interest can be identified:

308 Regardless of the disputed marketing of Claimant's 3D tomosynthesis system under the Hologic 3Dimensions™ system, the Claimant has named various other comparable 3D tomosynthesis systems on the market (inter alia: MAMMOMAT Revelation by Defendants themselves; AMULET Innovality by Fujifilm Corporation; Planmed Clarity 3D by Planmed). These systems offer unique features and capabilities, allowing customers to choose the solution that best fits their needs in terms of diagnostic accuracy, convenience, scan duration, cost, and radiation exposure.

309 As far as the Defendants allege that neither the Claimant nor any other company currently offers a product according to the patent in suit which provides comparable image precision to the attacked embodiment, their explanations have remained vague. Even if the attacked embodiment may provide advantages (convenient, faster and safer examinations; compression mechanisms that reduce the typical examination pain and make mammography more comfortable for patients; possibility of reducing the radiation dose without affecting the image quality; significant reduction of overall examination time), the alleged facts do not establish an exception to the general rule of enforcement of a valid patent. The alleged improvement does not create a situation comparable to the above-mentioned Meril v. Edwards case of the Court of Appeal.

4. No need to distinguish between different types of use

310 The injunction may cover any patent infringement without a necessity to distinguish between the various types of use within the meaning of Art. 25(a) UPCA (cf. UPC LD Düsseldorf, decision of 10 December 2025, UPC_CFI_316/2024 and UPC_CFI_547/2024, M-A-S v. Altech).

311 As already explained in detail under "infringement", the Defendants made use of claim 1 of the patent in suit at least through "offering" the attacked embodiment. Furthermore, they were unable to demonstrate substantially that no patent infringement actually occurred despite certain statements in their advertising.

312 Against this background, there are no objections for ordering Defendant 1 and Defendant 2 to refrain (inter alia) from "making" the attacked embodiment. The same applies, in principle, to Defendants 3 and 4, although they have demonstrated, without Claimants' contradiction, that they did not manufacture the attacked embodiment themselves. However, Defendants 3 and 4 are not entitled to do so either, so a corresponding injunction (including making) does not disadvantage them at all.

II. Declaration of infringement (= Request III)

313 The finding of patent infringement is based on Art. 64(2) UPCA.

III. Information and accounting (= Request IV)

314 The Claimant has a right to information pursuant to Art. 25(a) UPCA in conjunction with Art. 67 UPCA. Furthermore, pursuant to Art. 68(3)(a) and (b) UPCA in conjunction with R. 191.1 and 2 RoP, for the purpose of asserting its legal rights, the Claimant may request all information which it reasonably requires for the purpose of asserting its legal rights and which also enables it to verify the accuracy of the information provided and to obtain evidence for the calculation of its damages (UPC_CFI_7/2023 (LD Düsseldorf), Decision of 3 July 2024, p. 29 – Kaldewei v. Bette; UPC_CFI_16/2024 (LD Düsseldorf), Decision of 14 January 2025, p. 36 – Ortovox v. Mammut; UPC_CFI_210/2023 (LD Mannheim), Decision of 22 November 2024, para. 179 – Panasonic v. Oppo).

315 Within the scope of its right for information and accounting, pursuant to Art. 67 UPCA, the patent proprietor may request supporting documents, namely invoices and delivery notes if invoices are not available. Apart from the interest in the information itself, the patent proprietor has an interest in being able to verify its accuracy, at least on a random basis (UPC_CFI_7/2023 (LD Düsseldorf), Decision of 3 July 2024, p. 29, F. II. b – Kaldewei v.Bette; UPC_CFI_210/2023, Decision of 22 November 2024, para. 179 – Panasonic v. OPPO; UPC_CFI_16/2024 (LD Düsseldorf), Decision of 14 January 2025, E. III., p. 36 – Ortovox v. Mammut).

316 The Claimant has the liberty to request the information in electronic form. Providing the information this way is in line with commercial practice and enables the Claimant to process the relevant information effectively.

IV. Recall and removal from distribution channels (= Request V.1.)

317 The request for recall of the infringing products from the channels of commerce is justified under Art. 25(a) UPCA in conjunction with Art. 64(2)(b) and 64(4) UPCA. An order to remove a product from the channels of commerce can in general be justified in accordance with Art. 64(2)(d) and 64(4) UPCA. According to these rules, permanent removal from distribution channels is an independent measure, separate from the recall (cf. LD Düsseldorf, decision of 3 July 2024, UPC_CFI_7/2023 – Bette v. Kaldewei). It accompanies the recall, whereby removal is only to be considered if the infringer has the means, both practical and legal, to do so. Concrete and sufficiently specific measures must therefore be formulated based on this.

1. Recall

a) Channels of commerce

318 According to Art 64(2)(b) and (d) UPCA products must only be recalled and permanently removed from "the channels of commerce". Private end users are not part of the channels of commerce. However, contrary to the Defendants' view, commercial end users belong to "channels of commerce" (LD Düsseldorf, decision of 3 July 2024, UPC__CFI_7/2023 – Bette v. Kaldewei; LD Mannheim, decision of 2 April 2025, UPC_CFI_365/2023 – Fujifilm Corporation v. Kodak). It is irrelevant that commercial end users do not redistribute/circulate a product in the market but merely use it.

319 Against this background, the Defendants' obligation to recall the attacked embodiments also applies/extends to doctors and hospitals, as they generally use these equipments for their business. Furthermore, a recall is not in any case excluded, as far as the attacked embodiments have been supplied to universities as end users: universities are part of the channels of commerce when they receive goods as institutional buyers and keep them in operational use (in labs, research projects or teaching facilities).

b) Proportionality

aa) No individual development of the attacked embodiment / clinical studies

320 Contrary to the Defendants' view, the recall is not disproportionate in the light of the following arguments:

321 With regard to the alleged individual development of the attacked embodiment and the interests of patients, reference is made to the comments concerning the injunctive relief.

322 Insofar the Defendants may have commissioned several clinical studies to research the medical advantages of the attacked embodiment over conventional mammography devices without the Flying Focal Spot technology, this does not raise any doubts about their obligations to recall the attacked embodiment from the distribution channels. In particular, the freedom of scientific research of the universities and scientists conducting the said studies does not prevail over the Claimant's interest as the owner of a patent.

bb) Modification of the attacked embodiment

323 Moreover, the mere fact that attacked embodiments which have already been sold to medical practitioners could be modified so that they would no longer realize claim 1 of the patent in suit does not preclude the claims for recall in the case at hand.

324 The Defendants unsuccessfully allege: Pending regulatory approval (the granting of which would take at least six months from the date of submission, which has not yet taken place) this could be achieved by installing a new control software. The new control software would permanently change the way in which the focal spot in the attacked embodiment is moved.

They could implement a different movement of the focal spot by updating the software of the attacked embodiments which have already been delivered to their customers.

325 According to the case law of the Local Division Düsseldorf, the possibility of a software-based deactivation of a specific function necessary for the realization of the claimed technical teaching can only preclude destruction if it is ensured that the attacked embodiment cannot be restored to a patent-infringing state when such a solution is used (UPC LD Düsseldorf, decision of 14 January 2025, UPC_CFI_16/2024, Ortovox v. Mammut, headnote 2). Applying these principles to the claim for recall from distribution channels, it is decisive whether such a change of the software of the attacked embodiments would be permanent and could not be reversed.

326 The Defendants - who bear the burden of substantiation and proof since they claim an exemption from the general rule (cf. Art. 64 (3) UPCA) - argued that: The control of the movement of their “Flying Focal Spot” is deeply rooted in the basic control software of the attacked embodiment. It is not an option which may be switched on and off through the user interface. Accordingly, there is no way for the customers to change back the mode of operation of the Flying Focal Spot. This would require changing the parameterization of the source code of the control software of the attacked embodiment as such, said code not being public knowledge. Thus, the necessary changes to the software cannot be expected from an average customer of the attacked embodiment.

327 Any such modification or deactivation is only acceptable as a sufficient remedy if it is objectively ensured that the infringing embodiment cannot be easily returned to an infringing state. A purely software-based deactivation or configuration change does not meet this standard if reactivation remains technically possible. In particular, the mere possibility that the Defendants themselves could reverse the modification – for example by issuing a new firmware update, by re-enabling the removed code module, or by providing an administrative tool or patch – renders the proposed solution insufficient. The Court requires objective and reliable safeguards that exclude easy re-activation by the manufacturer, its employees, and support teams. Mere unsubstantiated, technical explanations given during the oral hearing (“file can be read out and deleted”) do not constitute such safeguards. Vague descriptions or undertakings given orally, without contemporaneous technical evidence (e.g. code excerpts, expert affidavits, or audit reports), do not meet the required standard of reliability. Any software-based workaround proposed by the Defendants must therefore be examined against this strict standard. The fact that “Siemens”, as the manufacturer of the medical devices, retains full control over firmware and updates weighs against accepting a reversible software deactivation. The Defendants have failed to demonstrate a sufficiently secure modification.

328 Against this background, the Defendants cannot evade the claim for recall, even taking into account the fact that the challenged embodiments are not low-value, disposable items, but rather high-priced devices which are installed in heavy machinery. For it must be noted, in particular, that the Claimant has virtually no means at its disposal to ensure, through appropriate controls, that no updates are deployed that would restore the patent-infringing state.

2. Removal

329 As the Claimant has not provided any concrete and sufficiently specific measures in their request for removal, this request has to be dismissed.

V. Destruction (= Request V.2.)

330 The order for destruction is based on Art. 25(a) UPCA in conjunction with Art. 64(2)(e) UPCA and Art. 64(4) UPCA.

331 As far as the Defendants refer to the significant value of the attacked embodiments and argue that milder remedies (possible modification in such a way that they are no longer infringing) are available, reference is made to the former explanations regarding the recall claim.

332 While the Claimant has clarified that the requested destruction of "implements for manufacture" of the attacked embodiments exclusively relates to tools which can be solely used for production of attacked embodiments (RSoD, mn. 217), it has not amended its request accordingly. Apart from that, it has not disputed the Defendants' following submissions: The tools which are used for the attacked embodiments can be – and in fact are – used for manufacturing other x-ray imaging products which are unrelated to the patent in suit (cf. SoD, para. 302). Thus, the request is unfounded in this respect.

333 Also unfounded is the request regarding the destruction of advertising materials: Advertising materials are not covered by the destruction remedy in Art. 64(2)(e) UPCA which allows for the destruction of infringing products, as well as materials and equipment principally used in their production. Advertising materials are treated differently: They are mere promotional items depicting or advertising the products, not the products themselves or production tools. Therefore, they are excluded from destruction orders (UPC LD Düsseldorf, decision of 18 March 2026, UPC_CFI_519/2024, Cup&Cino v. Alpina - headnote).

VI. Determination of liability for damages (= Request VI.)

334 The finding of liability for damages is based on Art. 68(1) UPCA. The Claimant has not elaborated further on its included claim for interest. Even if the legal basis for seeking interest may be found in Art. 68(1) and (2) UPCA, as interest is considered part of the damages, this issue is to be addressed in subsequent proceedings concerning the determination of damages.

335 Art. 68 UPCA merely governs the calculation and award of damages against "the infringer" but does not preclude the application of joint and several liability derived from national tort principles (Art. 24 UPCA). In the present case, the Defendants coordinate manufacturing, marketing, offering, and distribution of the infringing products across borders in a manner that constitutes a common design. This establishes joint liability for the infringing acts in the relevant UPC Contracting Member States (Art. 24 UPCA in conjunction with the applicable national law: in Germany paras. 830, 840 BGB (joint commission); in the Netherlands Art.

6:162 comb. with Art. 6:166 DCC (joint tort); in France: Art. 1240 Code Civil (joint and several liability).

VII. Interim award of damages (= Request VII.)

336 Even though R. 119 RoP permits the interim award of damages at a fixed rate, there must be sufficient facts to justify the award. Against this background, the claimant's submission must demonstrate that its claim is based on a plausible estimate of specific facts (UPC_CFI_316/2024, Local Division Düsseldorf, Decision of 10 December 2025, Headnote 3 and para. 308 – M-A-S v. Altech).

337 In the case at hand, the Claimant has not brought forward any facts on which a plausible estimate could be based on.

VIII. Publication of decision (= Request VIII.)

338 Pursuant to Art. 80 UPCA, the Court may order at the request of the Applicant and at the expense of the infringer, appropriate measures for the dissemination of information concerning the Court's decision, including displaying the decision and publishing it in full or in part in public media.

339 From the CoA decision in Meril Edwards (UPC_CoA_464/2024, Decision of 25 November 2025, para. 199 – 200), it can be inferred that the decision should depend on (1) whether the claimant has a legitimate interest in publishing the decision and (2) whether the Defendant's interests outweigh this interest.

340 In the case at hand, the Claimant has demonstrated a legitimate interest. In addition to general considerations, it has pointed out that the Defendants have marketed the attacked embodiment by explicitly referencing to the "Flying focal spot"-Technology which covers in this context the claimed invention of the patent in suit. They have explicitly pointed out that during an x-ray pulse, the focal spot on the anode plate is linearly moved in the opposite direction compared to the tube movement. As outlined above, it is the key technology of the invention. Taking into account that the Defendants themselves have pointed out initiating "*a total of eleven clinical studies … to research the medical advantages of the attacked embodiment over conventional mammography without the Flying Spot technology*" it is obvious that they have widely spread the respective information in the market. On the other hand, the Defendants have not demonstrated that their interests outweigh those of the Claimant.

341 However, if publication is permitted, the current request must be restricted. The current request does not contain any restrictions on the number and type of publications. In the CoA decision already mentioned (UPC_CoA_464/2024, Decision of 25 November 2025, para. 199 – 200, Meril v. Edwards), the CFI allowed the publication "in five public media including industry journals of its choice" which was not challenged by the CoA. Against this background, a corresponding limitation is appropriate in the present case as well (cf. UPC_CFI_351/2024, Local Division Düsseldorf, Decision of 11 February 2026, Canon v. Katun, headnote). Also the sort of media has to be restricted to public media targeting the

medical industry in question as the Defendants did not demonstrate an interest for a publication in daily newspapers or similar publications. The time period of three months for publishing on their own website reflects the average frequency for publications of other media like journals, especially in the scientific sector. In balance of the parties´ interests this time period is appropriate but also sufficient.

## IX. Threat of penalty payments (see Requests II., IV. and V.)

342 The threatened penalty payment of up to EUR 10,000 for each case of violating the injunction and up to EUR 10,000 for each day of delay regarding information, recall, and destruction provides the Court with the necessary flexibility to consider the circumstances of each case, including the behaviour of the infringer when determining an appropriate penalty payment pursuant to Art. 63(2), Art. 82(4) S. 2 UPCA in conjunction with R. 354.4 RoP.

## X. Decision on costs

343 Regarding the infringement action, it is reasonable to require the Claimant to cover 20 % of the reasonable and proportionate costs; the Defendants must pay 80 % of the infringement costs (Art. 69 (2) UPCA). This takes into account the partial defeats suffered by the Claimant, as explained in detail above (see recall and removal from the channels of commerce; destruction; interim award of damages). The Court understands the Claimant's request for a cost decision to mean that the costs are claimed jointly from the Defendants.

344 As Defendants 1, 2, 3 and 4 were unsuccessful with their counterclaim for revocation, they shall bear the costs of the counterclaim.

## XI. Interim award of costs

345 According to the Court of Appeal of the UPC, an interim award of costs (Art. 69(1) UPCA; R. 150.2 RoP) of up to 50 % of the ceiling is generally appropriate (CoA, UPC_CoA_464/2024 et al., Decision of 25 November 2025, Meril v. Edwards, para. 17).

346 Thus, in the case at hand an interim award of costs in the amount of EUR 320,000 in favour of the Claimant (80 % of 50% of the applicable ceiling (EUR 800,000), see below) is appropriate. The same applies to the granted interim award of costs in the amount of EUR 80,000 (20 % of 50% of EUR 800,000) in favour of the Defendants. The further request of the Defendants is dismissed.

## XII. Ceiling

347 Pursuant to Art. 69(1) UPCA, the costs are to be borne up to a maximum amount determined in accordance with the Rules of Procedure and the “Scale of ceilings for recoverable costs” (Administrative Committee, Decision of 24 April 2023). In the oral hearing the parties agreed that the ceiling of recoverable representation costs should be set at EUR 800,000.

XIII. No order for security

348 Pursuant to Art. 82(2) UPCA, R. 118.8 S. 2 RoP, the Court may make any order or measure subject to the lodging of a security to be determined by the Court. As the wording of the above provision makes clear, the Court has discretion when ordering security, whereby the interest of the Claimant in the effective enforcement of its patent must be weighed against the interest in effective enforcement of possible claims for damages in the event of a subsequent reversal of the judgment.

349 Each case must therefore be examined individually. When deciding whether to order security, factors to be taken into account include the financial situation of the claimant, as this may give rise to legitimate and real concerns that a possible claim for damages cannot be enforced and/or executed, or can only be enforced and/or executed at disproportionate expense, if the initial decision is overturned or amended. Whether and to what extent such factors exist must be determined based on the facts and arguments presented by the parties, as with an application for security under R. 158 RoP. If the Local Division makes an order or measure dependent on security, this protects the defendant's position and potential rights. This protection must be weighed against the burden placed on the claimant by the order to provide security. Against this background, it is incumbent on the defendant to present facts and arguments as to why it appears appropriate, in this specific case, to make the order or measure pursuant to R. 118.8 RoP dependent on security as determined by the court. Once the defendant has done so, the claimant must substantiate its challenge to these facts and reasons, especially since it generally has knowledge of and evidence regarding their financial situation. The claimant must also explain why their interest in enforcing its intellectual property right outweighs the need for security, despite the reasons put forward by the defendant (see UPC_CoA_328/2024, Order of 26 August 2024 – Ballino v. Kinexon Sports; UPC_CFI_16/2024 (LD Düsseldorf), Decision of 14 January 2025, p. 40 – Ortovox v. Mammut; UPC_CFI_373/2024 (LD Düsseldorf), Order of 5 August 2024 – SodaStream v. Aarke; UPC_CFI_514/2023 (LD München), Order of 23 April 2024 – Volkswagen v. NST).

350 Based on these principles, the Defendants have not provided any justification for making enforcement in this case dependent on the provision of security.

351 The Defendants' arguments do not substantiate the need to order the provision of security. The Defendants did not contest the Claimant's statement in the reply that, as a global company, the Claimant has sufficient funds to compensate any potential claims for damages. Thus, despite the fact that the Defendants did not substantiate the alleged damages claim of (exorbitant) 4,000,000,000 EUR at all, they did not demonstrate and justify that the Claimant would not be in a position to fulfil Defendants' hypothetical damages claim. This is even more true insofar as the Defendants have stated that a security in an amount of EUR 5,000,000 may be sufficient if the request for destruction would not include manufacturing equipment (as far as not used solely for manufacturing the attacked embodiment).

*DECISION*

A. The Defendants are ordered in the territories of Germany, France, and the Netherlands to cease and desist from

making, offering, placing on the market, using or importing or storing for those purposes within the states mentioned

a breast tomosynthesis system, comprising an x-ray tube, a detector and compression paddles, wherein the x-ray tube is arranged to move during an exposure period comprising: a cathode for providing an electron stream; an anode comprising a target for receiving the electron stream and generating a photon stream in response thereto; a focusing cup which focuses the electron stream on the anode during the exposure period; a port for passing the photon stream out of the x-ray tube, wherein the cathode, anode and port together define a static focal spot of the x-ray tube; and a controller coupled to at least one of the anode, the cathode and focusing cup wherein, in a first operational mode, the x-ray tube moves in a first direction during an exposure period, wherein the controller is arranged, in a first operational mode, to move the static focal spot within the x-ray tube in a second direction, opposite from the first direction and generally synchronized with the directional movement of the x-ray tube, so that a resulting effective focal spot appears to be fixed in space, relative to one of the breast and/or the detector, in one position during the entire duration of the exposure,

in particular, but not limited to, the ”MAMMOMAT B.brilliant” devices as exemplarily shown below:

B. In the event of failure to comply with the order under item A., the Defendants shall make a penalty payment to the Court of up to EUR 10,000.00 for each case of violation.

C. It is declared that the breast tomosynthesis system as specified in item A. infringes the European Patent No. 2 352 431.

D. The Defendants 1 to 4 are ordered, under the forfeiture of a recurring penalty payment of up to EUR 10,000.00 for each day of delay, within a period of two months from the date of service of the judgment subject to Rule 118.8 of the Rules of Procedure, to provide Claimant with information in a complete and orderly list in an electronic form that can be analysed by means of electronic data processing (EDP), broken down by month of a calendar year and by infringing product, as to the extent to which they (the Defendants 1 to 4) have committed the acts referred to in item A. above since 15 August 2018, specifying

I. the origin and distribution channels of the infringing products;

II. the quantities produced, manufactured, delivered, received and/or ordered, as well as the price obtained for the infringing products;

III. the identity of any third person involved in the production and/or distribution of the infringing products;

IV. the individual offers, broken down by the quantities, dates, prices and type designations as well as the names and addresses of the commercial recipients of the offers;

V. the advertising carried out, broken down by advertising medium, its circulation, distribution period and distribution area, in the case of Internet advertising the domain, the access figures and the placement periods; and

VI. the actual costs broken down by individual cost factors and the profit made,

whereby as proof of the information provided the corresponding receipts (i.e., invoices, alternatively delivery notes) are to be submitted in copy with the proviso that data to which the information owed does not relate and with regard to which there is a justified interest in confidentiality on the part of the Defendants may be covered or blacked out.

E. The Defendants 1 to 4 are ordered, under the forfeiture of a recurring penalty payment of up to EUR 10,000.00 EUR for each day of delay, within a period of two months from the date of service of the judgment subject to Rule 118.8 of the Rules of Procedure,

I. to recall the products as specified in item A. above which have been placed on the market in Germany, France and the Netherlands since 15 August 2018, to notify the third parties from whom the products are to be recalled that this Court has found that the respective product infringes the European patent No. EP 2 352 431, with a binding undertaking by Defendants to repay the purchase price already paid, if any, to reimburse the third parties for the costs incurred, to pay the necessary transport, shipping and packaging costs incurred, to

reimburse the customs and storage costs associated with the return of the products, and to take back the products;

II. to destroy the products as specified in item A. above which are in Defendants' direct or indirect possession and/or ownership in Germany, France and the Netherlands (including any products that come into its direct or indirect possession and/or ownership pursuant to item E.I. or otherwise) and to provide Claimant with proof of the destruction, or, at its option, to hand them over to a bailiff to be appointed by the Claimant for the purpose of destruction.

F. It is declared that Defendants 1 to 4 are individually and jointly liable to compensate the Claimant for all damages that incurred and will incur due to the acts specified in item A. above and committed since 15 August 2018.

G. The Claimant is allowed to display the Court's decision and to publish it (including the announcement thereof) in full or in part on its website for three months, and in public media, namely five industry journals of its choice.

H. The infringement action is dismissed in all other aspects.

I. The counterclaim for revocation is dismissed.

J. The costs of the infringement claim shall be borne in the amount of 20 % by the Claimant and in the amount of 80 % by the Defendants. The costs of the counterclaim for revocation shall be borne by the Defendants.

K. An interim award of costs in the amount of EUR 320,000 is granted in favour of the Claimant and in the amount of EUR 80,000 in favour of the Defendants.

L. The value in dispute for the infringement action and the counterclaim for revocation is set at EUR 5,000,000 each.

M. The ceiling of recoverable representation costs is set at EUR 800,000 for the infringement action and the counterclaim for revocation combined.

N. The orders under items A., D., E., F., G., J. and K. shall only be enforceable after the Claimant has informed the Court which part of the orders it intends to enforce and, if necessary, has submitted a certified translation of the orders into the official language of the Contracting Member State in which enforcement is to take place, after the Defendants have been served with the notification and the (respective) certified translation.

Düsseldorf on 10 June 2026

NAMES AND SIGNATURES

| | |
|---|---|
| Presiding Judge Dr Thom | Anna Bérénice Dr. THOM<br>Digital unterschrieben von Anna Bérénice Dr. THOM<br>Datum: 2026.06.09 15:41:55 +02'00' |
| Legally qualified judge Dr Rinken | Ingo Rinken<br>Digital unterschrieben von Ingo Rinken<br>Datum: 2026.06.09 15:22:29 +02'00' |
| Legally qualified judge Rinkinen | Petri Rinkinen<br>Allekirjoittaja Petri Olavi Rinkinen<br>Päivämäärä: 2026.06.10 00:13:54 +03'00' |
| Technically qualified judge Dr Kitchen | STEVEN RICHARD KITCHEN<br>Digitally signed by STEVEN RICHARD KITCHEN<br>Date: 2026.06.09 16:26:32 +02'00' |
| For the sub-registrar | Digitally signed<br>Frank Hermann Moritz<br>2026-06-10 07:36:37 +0200<br>Unified Patent Court<br>Einheitliches Patentgericht<br>Juridiction unifiée du brevet |

*INFORMATION ON APPEAL:*

An appeal against this decision may be brought before the Court of Appeal by any party whose claims have been unsuccessful, in whole or in part, within two months of service of the decision (Art. 73(1) UPCA, R. 220.1 (a) RoP, 224.1 (a) RoP).

*INFORMATION ON ENFORCEMENT* (Art. 82 UPCA, Art. 37(2) UPCS, R. 118.8, 158.2, 354, 355.4 RoP):

An authentic copy of the enforceable order will be issued by the Deputy-Registrar upon request of the enforcing party, R. 69 RegR.

This decision was read in open court on 10 June 2026.
Presiding Judge Dr Thom

Anna Bérénice Dr. THOM

Digital unterschrieben von Anna Bérénice Dr. THOM
Datum: 2026.06.10 09:31:47 +02'00'