UPC CFI, Local Division Lisbon, 15 October 2024, Ericsson v Asustek

Inductor layout for reduced VCO coupling



PATENT LAW – PROCEDURAL LAW

Application for provisional measures dismissed (<u>Article 62 UPCA, R. 211 RoP</u>)

The allegation that no acts of infringement at all were committed is irrelevant in the assessment of territorial competence (<u>Article 33(1)(a) UPCA)</u>

• <u>because it does not challenge the territorial</u> <u>connection to the Local or Regional Division. It</u> <u>should be considered as a defence based on the</u> <u>merits.</u>

• Art. 33(1)(a) UPCA applies regardless of whether the defendant is an infringer or an intermediary

Art. 33(1)(a) UPCA establishes competence regarding the place where the actual or threatened infringement has occurred or may occur. It is an objective link which refers to the place of the infringement and not to the quality of the accused entity – as infringer or intermediary. Thus, it applies regardless of whether the defendant is an infringer or an intermediary. There is no legal basis for taking different views of the infringer and the intermediary in terms of competence.

Temporal urgency (<u>R. 211(4) RoP</u>): The burden of proving urgency and due diligence in initiating proceedings is not satisfied

• <u>if the Applicant fails to provide the Court with the exact date when it became aware of the infringement, particularly when the Court has no other factual or objective temporal indication beyond the date the infringement commenced.</u>

An auxiliary request to amend a patent claim in provisional measures

• <u>is incompatible with the nature of such</u> proceedings (Article 62 UPCA, R. 211. RoP)

The legal framework of the UPCA and the RoP for provisional measures does not expressly allow for such a possibility, in contrast to **R. 30 RoP**, which applies to actions on the merits. Furthermore, an analogous application of **R. 30 RoP** is not admissible. An auxiliary request to amend a patent claim in provisional measures

is incompatible with the nature of such proceedings which are: summary proceedings; not on the merits; likelihood of the judgement on validity and infringement; urgency. Additionally, these proceedings require the lodging of a main case in which the outcome may differ. Therefore, the provisional nature of such action is inconsistent with the contemplated request.

Requirements for preliminary injunctions (<u>**R. 211</u></u> <u>RoP**</u>) are cumulative</u>

• <u>The cumulative nature of the previously</u> mentioned requirements allows the Court not to address all the requirements if one is not satisfied. [...] In such cases, the Court may exercise discretion in assessing the other requirements presented by the parties.

Owning the domain www.asus.com is infringing (Article 25(a) UPCA)

• <u>as it is evident that through this domain and its</u> <u>sub-domains</u>, <u>products</u> <u>containing</u> <u>the</u> <u>accused</u> <u>Modules are offered and sold</u>.

Offering entails marketing, promoting, advertising, and providing the client with the product to be sold and making it available to the relevant public. If the product is available to the public and perceived as such, it is undoubtably being offered (LD Düsseldorf, 18 October 2023, UPC CFI 177/2023). Any person searching online for ASUS products will clearly perceive from the Defendant's website that ASUS products, including the allegedly infringing products, are available – offered – and will associate this offer with AsusTek, considering it merely another sales channel owned by AsusTek.

Source: Unified Patent Court

UPC Court of First Instance,

Local Division Lisbon, 15 October 2024 (Lopes, Granata, Rinkinen, Pascacio) UPC_CFI_317/2024 ACT_35572/2024 ORDER of the Court of First Instance of the Unified Patent Court

Local Division in Lisbon delivered on 15 October 2024

concerning <u>EP 2 819 131</u>

HEADNOTES

1. When challenging the competence of the local division where the case was lodged according to <u>Art.</u> <u>33(1)(a) UPCA</u> (place of the actual or threatened infringement), the defendant must provide arguments against the territorial connection with the UPC Contracting Member State where that local/regional division is located. The argument provided by the defendant that such division has no competence because no acts of infringement were committed is irrelevant to the issue of territorial competence, as it is a defence based on the merits.

2. <u>Art. 33(1)(a) UPCA</u> establishes an objective link which refers to the place of the infringement and not to the quality of the accused entity - as infringer or

intermediary. In that regard, <u>Art. 33(1)(a) UPCA</u> is applicable to intermediaries according to <u>Art. 62</u> <u>UPCA</u>. Thus, it applies regardless of whether the defendant is an infringer or an intermediary. There is no legal basis for taking different views of the infringer and the intermediary in terms of competence.

3. In provisional measures, the court must be able to objectively conclude from the application that there is urgency and therefore a need to anticipate the protection of the applicant's rights. It is the applicant who must convince the court, in light of the particular facts of the case, that it has not delayed proceedings unnecessarily. To that extent, the applicant must provide the court with the information of the moment when it became aware of the infringement. When the applicant is silent about that date and the court has no way of ascertaining it, the court may solely rely on the date of the alleged infringement, for the assessment of unreasonable delay.

4. The requirements for granting preliminary injunctions – validity of the patent, actual or imminent infringement, urgency and balance of interests – are cumulative, allowing the court not to address them all, if one is not satisfied. However, when that assessment is not possible at an early stage of the proceedings in order to hear the parties accordingly, the court may exercise discretion in assessing the other requirements presented by the parties.

5. Merely owning an internet domain or subdomains constitutes infringement according to <u>Art. 25(a) UPCA</u> if through that domain infringing products are offered and/or sold.

KEYWORDS:

Competence; urgency; unreasonable delay; preliminary measures; cumulative requirements; offer.

APPLICANT:

TELEFONAKTIEBOLAGET LM ERICSSON

21 Torshamnsgatan, Kista, 164 83 Stockholm, Sweden. represented by Mr. Wim Maas Mr. Eelco Bergsma Mr. Manuel Durães Rocha

DEFENDANTS:

1. ASUSTEK COMPUTER INC

15, Lide Road, Beitou Dist., Taipei City 112019, Taiwan.

2. ARVATO NETHERLANDS B.V.

Brem 1, 6598 MH Heijen, The Netherlands

3. DIGITAL RIVER IRELAND LTD.

Ground Floor, Two Dockland Central, Guild Street, North Dock, Dublin 1, Ireland

all represented by Mr. Alex Wilson Mr. Ari Laakkonen Mr. Adam Rimmer Ms. Sara Nazaré Ms. Joana Piriquito Santos

PATENT AT ISSUE:

EUROPEAN PATENT NO EP 2 819 131 B1 PANEL ISSUING THE ORDER:

Presiding judge and Judge-rapporteur: Rute Lopes Legally qualified judge: Sam Granata Legally qualified judge: Petri Rinkinen Technically qualified judge: Johannes Mesa Pascasio LANGUAGE OF THE PROCEEDINGS: English ORAL PROCEEDINGS:

12 September 2024

SUBJECT-MATTER OF THE PROCEEDINGS

Application for a preliminary injunction and other provisional measures based on $\underline{\mathbf{R}. 206.1}$ and $\underline{211.1}$ of the Rules of Procedure (hereinafter "RoP").

PROCEDURAL HISTORY

On 14 June 2024, Applicant TELEFONAKTIEBOLAGET LM ERICSSON (hereinafter "Ericsson" or "Applicant") lodged an Application for provisional measures (hereinafter "Application") against Defendants ASUSTEK COMPUTER INC (hereinafter "AsusTek") ARVATO NETHERLANDS B.V. (hereinafter "Arvato") and DIGITAL RIVER IRELAND LTD (hereinafter "Digital River") at the Lisbon Local Division of the Unified Patent Court (hereinafter "UPC") based on an alleged infringement of EP 2 819 131 B1 (hereinafter "EP131" or "the Patent").

2 Ericson asserted that the Defendants infringe its EP131 rights with regard to the selling of laptops and notebooks that contain either the Intel Wi-Fi 6E AX211 Module (hereinafter "AX211" or "Modules") or the Intel Wi-Fi 6 AX201 Module (hereinafter "AX201" or "Modules"). 3 The Defendants were given the opportunity to object to the Application. On 31 July 2024, the Defendants lodged an objection arguing lack of international jurisdiction of the UPC and lack of competence of the Lisbon Local Division. They also denied infringement and further asserted that the Patent is invalid. They finally argued unreasonable delay on Ericsson's part on lodging the Application and consequently lack of urgency.

4 The Applicant was given the opportunity to reply to the Objection, and Defendants were given the opportunity to lodge a rejoinder.

5 A Technically Qualified Judge was appointed upon the Defendants' request.

6 On 12 September 2024 an oral hearing took place in Lisbon.

ORDER SOUGHT BY THE PARTIES

7 Following a request for leave to amend the claims lodged by the Applicant and granted by the Court on 23 August 2024, the Applicant requests that the Court:

(a) grant a preliminary injunction for direct infringement of the Patent by prohibiting the Defendants AsusTek and Digital River Ireland, individually and jointly, from infringing the Patent in any way, with immediate effect after service of the order to be rendered in this matter, in particular by offering and/or selling infringing products (such as laptops and notebooks) that contain either the Intel Wi-Fi 6E AX211 Module ("AX211") or the Intel Wi-Fi 6 AX201 Module ("AX201"), hereafter referred to as the "Infringing Products" (<u>Articles 62 (1)</u> and <u>25(a)</u> of the Agreement on a Unified Patent Court hereinafter "UPCA");

Or, at the discretion of the Court, in the alternative,

grant a preliminary injunction for infringement of the Patent by prohibiting AsusTek and Digital River Ireland, individually and jointly, from infringing the Patent with immediate effect after service of the order to be rendered in this matter, by offering and/or selling infringing products (such as laptops and notebooks) that contain either the Intel Wi-Fi 6E AX211 Module ("AX211") or the Intel Wi-Fi 6 AX201 Module ("AX201"), hereafter referred to as the "Infringing Products" (<u>Articles 62(1)</u> and <u>25(a) UPCA</u>);

(b) prohibit Arvato, with immediate effect after service of the order to be rendered in this matter, to render storing, shipping and/or repairing services to AsusTek and/or Digital River Ireland in relation to ASUS branded products that contain the AX201 and AX211 modules (<u>Article 62(1) UPCA</u>);

(c) order the Defendants AsusTek and Digital River Ireland to provide counsel for Ericsson, within four (4) weeks after service of the order rendered in this matter, with a written statement, substantiated with appropriate documentation of:

(i) the origin and distribution channels of the Infringing Products including the full names and addresses of the legal entities that are involved in the manufacture of and trade in these systems;

(ii) the quantities marketed and sold, as well as the price obtained for the Infringing Products in the Contracting Member States in which the Patent is in force and the total turnover and net profit made in selling the Infringing Products; and

(iii) the identity of any third party involved in the sale, marketing and / or distribution of the Infringing Products in the Contracting Member States in which the Patent is in force (including the full names and addresses of the legal entities that are involved) (Article 62(1) and 67 UPCA; and Rule 211 RoP);

(d) order the Defendants to deliver up to a bailiff appointed by Ericsson, at their own expense or, alternatively, order the seizure of any Infringing Products in stock and / or otherwise held, owned or in the direct or indirect possession of the Defendants in the Contracting Member States in which the Patent is in force, within one (1) week after service of the order to be rendered in this matter, and to provide counsel for Ericsson with proper evidence of the full and timely compliance with this order within ten (10) days after the delivery up to the bailiff or seizure (<u>Article 62(3)</u> <u>UPCA; Rule 211(1) RoP</u>);

(e) order the Defendants to comply with the orders under (a) – (d) above, subject to a recurring penalty payment of up to EUR 250,000.00 or another amount as the Court may order, for each violation of, or noncompliance with, the order(s), plus up to EUR 100,000.00 for each day, or part of a day counting as an entire day, that the violation or non-compliance continues, or another amount as determined by this Court in the proper administration of justice (<u>Article</u> <u>62(2) UPCA</u>; <u>Rule 354(3) RoP</u>);

(f) append an order for the enforcement to its decision, while declaring that the order is immediately enforceable (<u>Article 82(1) UPCA</u>);

(g) order the Defendants to jointly and severally bear reasonable and proportionate legal costs and other expenses incurred by Ericsson in these proceedings and order, insofar that such costs are to be determined in separate proceedings for the 5 determination of such costs, that the Defendants pay to Ericsson by means of an interim award of costs the sum of EUR 11,000.00 or another amount as the Court may order (<u>Article 69</u> <u>UPCA</u>; <u>Rules 118(5)</u>, <u>150(2)</u>, and <u>211(1)(d) RoP</u>).

8 The Defendants request that the Court dismiss the Application in its entirety and that Defendants be awarded the costs of the proceedings. In the event that the Court considers the Application for a preliminary injunction to be admissible, that the Court allow the Defendants to continue the alleged infringing acts against the provision of a guarantee, the amount of which is left to the discretion of the Court, but which should not exceed EUR 100,000.00 (<u>Art. 62(1) UPCA</u>). In the alternative to the guarantee, that the Court limit the scope of the injunction.

9 Should the Court consider the Applicant's request for information pursuant <u>Art. 67 UPCA</u> to be admissible, that the request for the total turnover made in selling infringing products and the net profit made in selling infringing products be deemed irrelevant to the Applicant's case for provisional measures.

FACTS

10 In its order, the Court takes into account the facts listed below, considering that they have been accepted by the parties in their written submissions and/or result from the evidence (annexes) presented by the parties with such written submissions.

The Patent

11 Ericsson is the proprietor of European Patent number EP 2 819 131 B1.

12 The invention relates to voltage-controlled oscillators (or VCOs). Voltage-controlled oscillators are circuits that generate a periodic signal, the frequency of which is determined by electrical voltage, that are used in what is known as "transceivers" (i.e. a contraction of "transmitter" and "receiver" – they can both transmit and receive information).

13 The title of the Patent reads: "Inductor layout for reduced VCO coupling" and it contains the following claims (only the relevant claims are mentioned):

1. A semiconductor die having formed thereon: a first inductor (200, 1000, 1300) comprising an inductor coil (202) and terminals (204a, 204b; 1310a, 1310b), wherein the first inductor (200, 1000, 1300) is substantially symmetric about a symmetry axis, wherein the inductor coil (202) has a first loop (206a; 1004) and a second loop (206b; 1008) arranged such that current in the first loop (206a; 1004; 1002) travels in a direction that is opposite to current in the second loop (206b; 1008) such that electromagnetic field components emanating at a certain distance from the first loop (206a; 1004) and the second loop (206b; 1008) also have opposite directions and tend to counteract each other; characterized in that the terminals (204a, 204b; 1310a, 1310b) are connected to the second loop (206b, 1008).

Claim 1 (subdivided for better referencing):

• 1.1A. A semiconductor die having formed thereon:

• 1.1B. a first inductor (200, 1000, 1300) comprising an inductor coil (202) and terminals (204a, 204b; 1310a, 1310b),

• 1.2. wherein the first inductor (200, 1000, 1300) is substantially symmetric about a symmetry axis,

• 1.3. wherein the inductor coil (202) has a first loop (206a; 1004) and a second loop (206b; 1008)

• 1.4. arranged such that current in the first loop (206a; 1004; 1002) travels in a direction that is opposite to current in the second loop (206b; 1008) such that electromagnetic field components emanating at a certain distance from the first loop (206a; 1004) and the second loop (206b; 1008) also have opposite directions and tend to counteract each other;

• 1.5. characterized in that the terminals (204a, 204b; 1310a, 1310b) are connected to the second loop (206b, 1008).

2. The semiconductor die according to claim 1, wherein the terminals (204a, 204b; 131 0a, 131 0b) are positioned at a side of the second loop (206b, 1008) that is opposite to the first loop (2006a, 1004).

3. The semiconductor die according to claim 1 or 2, wherein the terminals (204a, 204b; 1310a, 1310b) are positioned such as to minimize the far field emanating from the inductor.

4. The semiconductor die according to claim 1, 2, or 3, wherein the terminals (204a, 204b) are positioned closely.

5. The semiconductor die according to any preceding claim, wherein the inductor coil (202) has more than one turn.

6. The semiconductor die according to any preceding claim, wherein the inductor coil (202) is in the form of an eight-shaped structure.

(...)

9. The semiconductor die according to any of the claims 1-8, comprising an inductor arrangement, the inductor arrangement comprising the first inductor and a second inductor.

(...)

14 Figures 2 and 13 of the Patent are as follows:



15 The Patent was applied for on 15 February 2005 and was granted on 14 August 2019. No EPO opposition was filed. It claims priority to three different US prior applications (US 549611 P of 3 March 2004, US 565328 P of 26 April 2004 and US 919130 of 16 August 2004) and it is a divisional from Patent number EP 1 721 324. 16 The Patent is in force in the following UPC Contracting Member Statesthat have ratified the UPCA: Austria, Belgium, Germany, Denmark, France, Italy, The Netherlands, Portugal, and Sweden.

17 The description of the patent contains inter alia the following:

[0003] A number of techniques exist for reducing the mutual EM coupling between the VCOs due to the inductors. One technique involves reduction of EM coupling by careful design of the inductors to provide maximum isolation of the inductors. Another technique calls for frequency separation by operating the two VCOs at different even harmonics of the desired frequency. Still another technique involves frequency separation by using a regenerative VCO concept. The frequency

separation methods exploit the filtering properties of the resonator to reduce interference. However, these solutions require additional circuitry (dividers, mixers, etc.) that may increase current consumption, making them less attractive than other mutual EM coupling reduction alternatives.

[0005] An inductor design for reducing mutual EM coupling between VCO resonators and a method of implementing the same on a single semiconductor chip. A method and system involve using inductors that are substantially symmetrical about their horizontal and/or their vertical axes and providing current to the inductors in a way so that the resulting magnetic field components tend to cancel each other by virtue of the symmetry. In addition, two such inductors may be placed near each other and oriented in a way so that the induced current in the second inductor due to the magnetic field originating from first inductor is significantly reduced. The inductors may be 8-shaped, four-leaf clover-shaped, singleturn, multi-turn, rotated relative to one another, and/or vertically offset relative to one another.

[0006] In general, in one aspect, an inductor having a reduced far field comprises a first loop having a shape that is substantially symmetrical about a first predefined axis, and a second loop having a size and shape substantially identical to a size and shape of the first loop. The second loop is arranged such that a magnetic field emanating therefrom tends to cancel a magnetic field emanating from the first loop.

[0007] In general, in another aspect, a method of reducing mutual electromagnetic coupling between two inductors on a semiconductor die comprises the step of forming a first inductor on the semiconductor die having a shape that is substantially symmetrical about a first predefined axis, the shape causing the first inductor to have a reduced far field, at least in some directions. The method further comprises the step of forming a second inductor on the semiconductor die at a predetermined distance from the first inductor, wherein a mutual electromagnetic coupling between the first inductor and the second inductor is reduced as a result of the first inductor having a reduced far field.

[0011] As mentioned above, various embodiments of the invention provide an inductor design and method of implementing the same where mutual EM coupling is reduced. The inductor design and method serve to reduce the EM field at a certain distance from the inductor (i.e., the far field), at least in some directions, by using inductor shapes that are substantially symmetrical. As used herein, the term "symmetrical" refers to symmetry relative to at least one axis. This reduced far field may then be used to reduce the mutual coupling between two inductors. The inductor design and method may also be used to reduce the coupling between an inductor and another on-chip or external structure (e.g., an external power amplifier). This helps reduces the sensitivity of the VCO to interfering signals from other than a second on-chip VCO.

[0016] FIGURE 2 shows an example of an inductor 200. The inductor 200 has an inductor coil 202 and terminals 204a and 204b, and has been designed so that it is substantially symmetrical about a horizontal axis X. In the present example, the inductor coil 202 is in the form of a single-turn 8-shaped structure with an upper loop 206a and a lower loop 206b. By virtue of the figure-8 shape, current in the upper loop 206a travels in a direction (e.g., counterclockwise, see arrows) 5 that is opposite to current in the lower loop 206b (e.g., clockwise). As a result, the EM field components emanating at a certain distance from the two substantially symmetrical loops 206a and 206b also have opposite directions and tend to counteract each other. The directions of the EM field components are indicated by conventional notation in the middle of each loop 206a and 206b. Consequently, the inductor 200 has been found to have a significantly reduced far field at a certain distance from the inductor coil 202. Thus, by making the two loops 206a and 206b substantially symmetrical, cancellation of a significant amount of far field on either side of the horizontal symmetry axis X may be achieved. It should be noted, however, that perfect symmetry between the two loops 206a and 206b may be difficult to achieve given the presence of the terminals 204a and 204b.

[0017] In addition, the positioning of the terminals 204a and 204b may help minimize the far field. For example, positioning the two terminals 204a and 204b as close to each other as possible helps make the field contributions from the two parts of the inductor 200 identical. It is also desirable to minimize the additional loop external to the inductor 200 created by the connections to the varactors and switches. This extra loop may compromise the symmetry of the inductor itself to some extent and may reduce the canceling effect. In theory, it should be possible to modify the geometry of the inductor (e.g., make the upper loop slightly larger) to compensate for this effect. The symmetry of the inductor 200 with respect to a center vertical axis is also important for minimizing the generation of commonmode signal components.

[0039] In applications where higher inductance values are needed, it is possible to use inductor coils with more than one turn, since single turn designs tend to take up too much chip area. An example of a two-turn 8-shaped inductor 1300 is shown in FIGURE 13. As can be seen, the two-turn 8-shaped inductor 1300 is essentially similar to the 8-shaped inductor 200 of FIGURE 2, except that the two outer loops 1302 and 1304 of the inductor 1300 each turn into an inner loop 1306 and 1308, respectively. The terminals 1310a and 1310b of the inductor 1300 are then connected to the lower inner loop 1308. Such a two-turn inductor 1300 may provide a higher inductance value without taking up too much chip area, while also reducing the Q-factor. In the embodiment shown here, the Q-factor may be reduced from approximately 15 to 12.5 at 4 GHz.

[0040] Although a two-turn 8-shaped inductor has been shown, other configurations may also be used, such as a two-turn four-leaf clover shaped inductor, provided that near symmetry can be maintained given the crossing of the inner and outer loops and positioning requirements of the terminals. Other symmetrical shapes besides those described thus far may also show the same or even better coupling reduction if a satisfactory balance between parameters such as Q factor, coil size, and coupling coefficient can be reached.

Technical background of the invention

18 A conductor in electrical science is a material or object that allows electric current to pass through and has a low resistance. A turn is a conductor that forms a loop and a coil has one or more turns, as shown in the pictures below.



19 The electric current moving through a conductor generates a magnetic field. In a ring-shaped or circular conductor this leads to a magnetic field with a direction as shown in the picture below.



20 When several coils are placed next to each other, the magnetic fields can interact, which is sometimes explicitly the intention, as in the case of transformers, where energy is transmitted from one coil to the other

via electromagnetic induction. This interaction is called inductive or magnetic coupling. Besides the above mentioned desired magnetic coupling in the case of transformers, there is also the case of undesired magnetic coupling in which a magnetic field unintendedly interacts with other parts (e.g. inductors) on the die. Such magnetic coupling leads to undesirable results, e.g. on a semiconductor die, because the fields can "interfere" with other parts on the die. It may cause spurious receiver responses and unwanted frequencies in the transmit spectrum.

21 Several solutions have been proposed to address these disadvantages, as discussed in paragraph [0003] of the Patent. For example, the inductors (consisting of coils and terminals for the current) were designed in such a way that they were isolated as much as possible from other inductors, to avoid interaction. Another solution is the use of voltage-controlled oscillators with different frequencies, resulting in less interference. However, each of the solutions described requires additional circuits that increase power consumption, which is not desirable.

22 Another solution is disclosed in prior art publication **WO 2004/012213 A1**. This application discloses a design with coils in the shape of spirals, where the current travels in the first turn (or loop) in the shape of a spiral in a direction that is opposite to the current in a second turn in the shape of a spiral. As a result of such a topology, magnetic fields with an opposite direction are created. Outside of these coils these fields at least partially cancel each other as it were so that there is less interaction with the adjacent components.

The parties, market situation and allegedly infringing acts

23 Ericsson is a corporation existing under the laws of the Kingdom of Sweden and a supplier of telecom networks and a global telecommunication technology supplier. Ericsson holds a patent portfolio containing standard essential patents relating to what is known as the 4G (also referred to as Long Term evolution or LTE) and 5G (also referred to as New Radio or NR) standards. In addition, Ericsson is the proprietor of patents that relate to technology implemented in various devices, particularly in mobile devices.

24 Defendant AsusTek is the holding company of the ASUS group of companies established in 1989 and domiciled in Taiwan. It is a multinational company known for its motherboards and personal computers, monitors, graphics cards, routers, and other technology solutions, with a patent portfolio of its own.

25 AsusTek is the domain name holder of www.asus.com and sub-domains www.estore.asus.com. Through these domains it is possible for any person located in any of the relevant UPC Contracting Member States (including Portugal) to buy ASUS products. AsusTek is mentioned in the copyright notice visible on www.asus.com and the local European ASUS webpages (such as www.asus.com/pt) in the lower left corner.

26 When placing an order on the local webpage of the respective UPC Contracting Member State, the ASUS Terms of Use (the "Terms of Use") apply. AsusTek's

name is mentioned as the provider of products and services. Additionally, AsusTek's contact information is mentioned at the end of these Terms of Use. This applies to the following local ASUS webpages relating to the following relevant UPC Contracting Member States: Denmark, France, Germany, Belgium, Italy, Netherlands, Portugal and Sweden. Both the "Terms of Use" and the "Privacy Policy" are drafted in the local languages. Furthermore, the personal data collected by AsusTek is thus used for marketing Services. AsusTek is the owner of the User Manuals of the Products and is the provider of the simplified EU Declaration of Conformity for CE-marking that is included in the User Manual and attached to the ASUS products.

27 Arvato is incorporated in the Netherlands and is a shipping/storage company. It engages in customer care outsourcing, supply chain management, logistics and distribution. Arvato acts as a logistics partner to fulfil the business-to-consumer market for ASUS-branded products and a large number of other products in the EU, including Portugal.

28 Arvato stores ASUS products in the Netherlands, and ships those products from the Netherlands via a thirdparty shipping company to consumers.

29 Arvato also provides after sales service for netbooks and notebooks for EMEA for Asus-branded products and has implemented a "central repair solution" as part of its central After Sales facility in Herzebrock (Germany), that handled over 1,000,000 repair and service events per year.

30 Digital River Ireland is incorporated in the Republic of Ireland and provides internet commerce and marketing consulting services. Digital River Ireland acts as an authorized "re-seller" in respect of ASUS-branded products sold to consumers on the website www.asus.com, at least for Portugal and the Netherlands.

31 Modules AX201 and AX211 were launched by Intel, a well-known chip manufacturer. AX201 is part of the Intel® Wi-Fi 6 Series, launched in Q2, 2019 and certified for Wi-Fi 6 (802.11ax) and AX211 is part of the Intel® Wi-Fi 6E (Gig+) Series, launched in Q3, 2021. After their launch by Intel, certain ASUS products have incorporated the AX201 or AX211 since 2019 and 2021 respectively.

32 On 5 May 2024, the Applicant made in Portugal a test purchase of the ASUS ROG Zephyrus containing the AX211 Module via www.asus.com/pt. On 10 June 2024 and 22 July 2024, the Applicant made further test purchases. The test purchases made on 22 July 2024 relate to two different ASUS ExpertBooks that contain either the AX211 or the AX201.

33 The ASUS product TUF GAMING Z490-PLUS (WIFI) contains the AX201 Module and it is displayed on the Portuguese ASUS website. 34 The use of the accused Modules in various laptops and/or notebooks on European markets since September 2019, for AX201, and October 2021, for AX211, has been publicized at least in the following websites:

https://www.notebookcheck.net https://kelaptop.com/de https://www.comparez-malin.fr https://kelaptop.com/fr https://www.amazon.com https://www.asus.com https://www.anandtech.com

35 The ASUS ROG Zephyrus (ASUS ROG Zephyrus G16 (2024) GU605MI-74A47CB1) containing the AX211 was introduced by ASUS in early 2024, and it was bought by the Applicant's representatives in Portugal. It was imported into Portugal and sold in Portugal by Digital River Ireland.

36 On 12 October 2023, the Applicant brought proceedings against Lenovo Group Ltd in the US International Trade Commission (hereinafter "ITC") based on US patent <u>US 7151430</u> (the US counterpart to EP131) in respect of exactly the same chips (AX201 and AX211).

37 Since 2018, Ericsson and Asustek have been negotiating towards a global cross-license for patents essential to 4G, 5G and HEVC standards.

GROUNDS FOR THE ORDER

1. Jurisdiction and Competence

38 Competence and jurisdiction are procedural prerequisites that must be established before the Court can decide on the claims and possible counterclaims.

39 In assessing jurisdiction and competence, the Court addresses first international jurisdiction (Art. 31 UPCA), then competence of the Court on the subjectmatter (Art. 32 UPCA) and finally territorial competence (Art. 33(1) UPCA) of the Local Division. Territorial competence of the divisions of the Court follows two main criteria: the domicile of the Defendant and the place of the infringement. These criteria provide elements of territorial connection with the UPC Contracting Member State where the local/regional division is located. When the territorial connection element is met, the respective local division has competence to hear the case (Court of Appeal (hereinafter "CoA"), September 2024. 3 UPC CoA 188/2024).

40 Parties do not dispute the international jurisdiction of the UPC (as stated by the Defendants in Par. 80, 91, 95 of the rejoinder), and the Court has no reason to consider otherwise. <u>Art. 31 UPCA</u> establishes the international jurisdiction of the UPC in accordance with Regulation (EU) No 1215/2012 as amended by EU Regulation 542/2014, (hereinafter "BR"). According to <u>Art. 4(1)</u>, 7(2), 71, 71a and 71b BR and 32(1)(c) and 83(2) UPCA, the UPC has jurisdiction to hear cases regarding European patents that have not been opted out from the jurisdiction of the UPC. Parties also do not dispute that the UPC is competent to hear provisional measures as stated in <u>Art. 32(1)(c) UPCA</u>.

41 The Court disagrees with the Defendants regarding lack of competence of the Lisbon Local Division pursuing Art. 33(1)(a) UPCA.

42 The Applicant has lodged the case in the Lisbon Local Division arguing that the Defendants offer and sell – or, in the case of Arvato, help as an intermediary to offer or sell – the accused products in Portugal. The Defendants argue that the Lisbon Local Division has no

competence to hear the case regarding AsusTek and Digital River because the allegedly infringing products are not capable of realising all the elements of the claims of EP131, and regarding Arvato because Art. 33(1)(a) **UPCA** is expressly limited to infringement and does not mention or relate to intermediaries. The Defendants do not challenge or dispute the territorial connection element to this Local Division. However, it is by challenging the territorial connection that such defence is to be assessed. The allegation that no acts of infringement at all were committed is irrelevant in the assessment of territorial competence (cf. Par. 18, CoA 3 September 2024, UPC CoA 188/2024), because it does not challenge the territorial connection to Portugal. It should be considered as a defence based on the merits. 43 Furthermore, the Defendants are also wrong regarding the argument that Art. 33(1)(a) UPCA is not applicable to intermediaries. According to Art. 62 and 63 UPCA and to Recital 23 and Art. 9(1)(a), of the **Directive** 2004/48 (hereinafter "Enforcement Directive"), intermediaries are entities whose services are used by the alleged infringer (Art. 62 UPCA) or by a third party to infringe a patent (Art. 63 UPCA) and Art. 33(1)(a) UPCA establishes competence regarding the place where the actual or threatened infringement has occurred or may occur. It is an objective link which refers to the place of the infringement and not to the quality of the accused entity – as infringer or intermediary. Thus, it applies regardless of whether the defendant is an infringer or an intermediary. There is no legal basis for taking different views of the infringer and the intermediary in terms of competence. To that extent, Art. 33(1)(a) UPCA is met regarding Arvato as an intermediary because the territorial criterion of infringement in Portugal is met according to the Application's accusation of infringement. In addition, the solution provided by the Defendants, that the action against the intermediary would have to be lodged in a different division, would lead to a result not intended by the legal framework of the UPCA and the principles thereof. The principles of efficiency, economy of means and legal certainty (need for harmonization; avoidance of the risk of irreconcilable decisions and dispersal of proceedings within the UPC) that govern the UPC are contrary to the option provided by the Defendants and that solution could therefore not be accepted.

2. Provisional Measures

44 Regarding preliminary injunctions, the Applicant may be required by the Court to provide reasonable evidence to satisfy the Court with a sufficient degree of certainty that the Applicant is entitled to initiate proceedings under <u>Art. 47 UPCA</u>, that the patent is valid and that its rights are being infringed, or that such infringement is imminent (**R. 211.2 RoP**). Additionally, the granting of a preliminary injunction requires that urgency and balance of interests are considered (**R.** <u>209(1)(b)</u>, <u>211(2) and (3) RoP</u>). These requirements are cumulative.

45 As the CoA of the UPC has pointed out (<u>CoA, 26</u> <u>February 2024, UPC_CoA_335/2023</u>), achieving such a sufficient degree of certainty requires that the Court considers it at least more likely than not that the Applicant is entitled to initiate proceedings and that the patent is valid and infringed.

46 It is the Applicant who bears the burden of presenting and proving the facts that establish the entitlement to initiate proceedings and the infringement or imminent infringement of the patent. Additionally, the Applicant must provide evidence regarding other circumstances allegedly supporting the request, whereas the burden of proving that the patent is not valid in respect of inter partes preliminary injunctions lies with the Defendant.

47 Although the aforementioned allocation of the burden of presentation and proof in preliminary injunction proceedings is in line with the allocation of the burden of presentation and proof in proceedings on the merits, the Court notes that preliminary proceedings are summary proceedings requiring a prima facie analysis of the facts. Furthermore, the cumulative nature of the previously mentioned requirements allows the Court not to address all the requirements if one is not satisfied. However, the Court recognizes that such an assessment is not always possible at an early stage of the proceedings in order to hear the parties accordingly. In such cases, the Court may exercise discretion in assessing the other requirements presented by the parties.

2.1. Urgency

48 Although not expressly stated in the UPCA, the requirement of "urgency" finds its legal basis in the specific and exceptional nature of provisional measures proceedings, which imply accelerated proceedings and a prima facie assessment of the claims with impact on the rights of defence. Provisional measures proceedings differ from ordinary proceedings and should be initiated in exceptional circumstances. Indeed, the exceptional nature of provisional measures proceedings require the Court, when considering granting provisional measures, to be convinced of the urgency involved, balancing this against the impact on the rights of defence. The assessment of the requirement of "urgency" and also of the degree of "urgency" which is deemed to be sufficient, is fact driven, and the legal framework underlying the applicant's alleged infringed right, for which the applicant requires protection, must also be considered. The Enforcement Directive and the UPCA, being inter alia the underlying legal framework for the UPC, establish the prevention of irreparable harm to the holder of an intellectual property right and the immediate cessation of infringement of a patent or prevention of imminent infringement as fundamental factors in granting provisional measures, allowing the Court to exercise its discretion in order to achieve protection to the right holder (cf. Recital 22 and Art. 9(4) of the Enforcement Directive, Art. 60(5) and (8), 62(1) and (5) UPCA), and accordingly R. 209.2(b) **RoP**). Therefore, the condition of "urgency" is related to the need for early and prompt protection of the applicant's right to avoid further damage resulting from delays in resolving the case on its merits.

49 The Court must be able to objectively conclude that urgency exists and that there is a consequent need to

grant measures to protect the Applicant's right. The applicant is expected to be diligent in seeking a remedy against the alleged infringer, having gathered all necessary evidence, from the moment the infringement began or from the time the Applicant became aware of said infringement.

50 If the Applicant has been negligent in seeking provisional measures in a timely manner, the Court may take this lack of diligence into consideration when assessing the measures requested in the preliminary injunction proceedings. An unreasonable delay in initiating the proceedings, taking into consideration the factual circumstances, could lead to a finding that the temporal urgency required for the ordering of provisional measures is lacking. This would be the case if the Applicant has acted negligently or hesitated in requesting provisional measures after gathering all the necessary elements for a promising legal action - from an objective standpoint, it must be concluded that the Applicant was not genuinely interested in promptly enforcing its rights. In such circumstances, it would be inappropriate for the Court to grant the requested provisional legal protection (cf. LD Munich, 19 UPC CFI 2023, 2/2023 September (ACT 459746/2023); LD Düsseldorf, 9 April 2024, **UPC CFI 452/2024** (ACT_589655/2023); LD Düsseldorf, 30 April 2024, UPC CFI 463/2023 (ACT 590953/2023); LD Hamburg, 3 June 2024, UPC CFI 151/2024 (ACT_16267/2024); LD The Hague, 31 July 2024, UPC CFI 195/2024 (ACT 23163/2024)).

51 The Defendants argue that the Applicant has failed to present essential facts demonstrating that it has acted diligently. The Defendants further contend that the Applicant must have been aware of the accused Modules at an earlier date than the test purchase date, for the following reasons: (i) the alleged infringement began in 2019 regarding AX201, and 2021 regarding AX211 when the Modules were incorporated into ASUS products sold on European markets, and such use was publicized on several internet sites (as defined above), yet the Applicant did not react, despite the prominent position ASUS products have in EU; (ii) the Applicant has lodged an action against Lenovo - ITC proceedings in USA - concerning the accused Modules, in October 2023, and hence has actively observed the markets. The Defendants finally argue that Ericsson and AsusTek have been engaged in SEP licensing negotiations since 2018, and it would therefore be reasonable to expect Ericsson to pay special attention to ASUS products on the European market, specifically the modules in question as they have been subject to other infringement procedures.

52 The Court finds these arguments compelling and relevant. In fact, the Court believes that the launch of the Modules could hardly have gone unnoticed to the Applicant, and that the Applicant has failed to provide evidence to refute this claim. In addition, the Court takes into consideration that it is impossible or at least very difficult for the Defendants to find out and prove the exact date when the Applicant became aware of the alleged infringement. This knowledge is internal to the Applicant and difficult to assess from the outside, unless the Applicant discloses it in some manner.

53 Nevertheless, it is the Applicant who must convince the Court that there is an urgent necessity for ordering provisional measures to protect its right on a prima facie basis (cf. LD Munich, 19 September 2023, UPC CFI 2/2023 (ACT_459746/2023)). Accordingly, it is the Applicant who must convince the Court that, considering the particular facts of the case, it has not delayed proceedings unnecessarily. In this instance, the Court acknowledges that the Applicant was silent regarding the exact date when it became aware that ASUS products incorporated the accused Modules. The Applicant relied solely on the date of the test purchase (5 May, 2024), not even arguing that date as being the one when it became aware of the Modules. At the oral hearing the Applicant's representative, additionally, informed the Court that the representatives had received a message from the Applicant on 15 April 2024 instructing them to investigate the ASUS products. The Court further agrees with the Defendants that it is reasonably unlikely that the date of the test purchase, or even the date the representative was contacted, was the date when the Applicant first became aware that the purchased products contained the Modules. Consequently, the Court finds that the Applicant has failed to indicate to the Court the date on which it first became aware of the alleged infringement. Such date marks the point in time from which any unreasonable delay must be evaluated (cf. CoA, order of 25 September 2024, UPC CoA 182/2024), even for the purpose of assessing the Applicant's need to carry out the necessary tasks to provide evidence of the infringement and to prepare the case (cf. LD Düsseldorf, order of 9/4/2024, UPC CFI 452/2023). 54 In its reply to the issue of lack of urgency, the Applicant cited the decisions of the Local Divisions of The Hague and Düsseldorf and the underlying principles <u>April</u> thereof (LD Düsseldorf 30 2024, ACT 590953/2023, UPC CFI 463/2023 and LD The 2024, ACT 23163/2024, 31 July Hague, UPC CFI 195/2024). However, contrary to the Applicant's argument, the underlying principles of those decisions are not applicable in the present case, because the facts are not identical. In both cases, the Court was provided with more information regarding the date when the Applicants became aware of the relevant facts in order to start investigating the infringement. In contrast, in this case no specific date of awareness was put forward by the Applicant, as previously explained. The burden of proving urgency and due diligence in initiating proceedings is not satisfied if the Applicant fails to provide the Court with the exact date when it became aware of the infringement, particularly when the Court has no other factual or objective temporal indication beyond the date the infringement commenced.

55 Given the silence of the Applicant, the Court can only rely on the date of the alleged infringement, 2019, for AX201, and 2021, for AX211, to assess urgency and diligence in initiating proceedings. Or, at the best, the date of the Lenovo proceedings, October 2023. Either is by itself insufficient to conclude that these preliminary injunction proceedings, lodged in June 2024, were filed within a reasonable time to guarantee the granting of the requested protection for the Applicant: without unreasonable delay.

56 In this regard, the Court finds that the Applicant has failed to provide sufficient temporal elements enabling the Court to assess its diligence in initiating proceedings. Consequently, the Application for provisional measures must be dismissed in relation to all Defendants.

2.2. The Patent – Validity and Infringement

57 Although the Court's finding on the issue of urgency is sufficient to dismiss the request for provisional measures, as previously explained, the Court has decided to further address the issues of validity and infringement.

58 The patent must be interpreted from the point of view of the person skilled in the art (hereinafter "PSA"), for both validity (<u>Art. 56</u> and <u>83</u> of the European Patent Convention (hereinafter "EPC")) and infringement purposes (<u>Protocol on the interpretation of Art. 69</u> <u>EPC</u>), also taking into consideration common general knowledge of a PSA at the priority date.

59 The Court considers that although the parties appear to hold different views on the qualifications of the PSA, their positions are not fundamentally opposed. In this regard, the Court finds that the PSA would possess a master's degree in telecommunications engineering and would have experience in designing RF circuits on semiconductor substrates.

60 Regarding common general knowledge, the Court accepts the Defendants' position that the skilled person would have been aware of the following information at the earliest priority date of EP131:

a. It was commonplace for wireless transceivers to be implemented on a semiconductor die.

b. It was commonplace for VCOs and inductors to be implemented on a semiconductor die.

c. Techniques for addressing electromagnetic coupling included optimizing the layout of conductors to manage the interaction of electromagnetic fields.

d. Semiconductor dies operate at high frequencies and so electromagnetic coupling must be taken into account in laying out passive components on them.

e. The electromagnetic characteristics of inductors and antennas functioning as inductors in near-field communication devices.

f. The shape and arrangement of a conducting loop carrying an alternating current will dictate the regularity of the shape of the magnetic field generated by it.

2.2.1. Validity

61 The Court considers that the Patent is prima facie more likely to be valid than not.

62 The Defendants contest the validity of EP131 on the following grounds:

a. Inadmissible added subject-matter (<u>Art. 65(2)</u>
<u>UPCA</u> & Art. <u>138(1)(c) EPC</u>);
b. Lack of novelty;

c. Lack of inventive step.

2.2.1.1. Added Matter

63 The arguments concerning added matter are, on a prima facie basis, considered to be an amendment that does not broaden the scope of protection of the application as originally filed, and specifically does not constitute an impermissible intermediate generalization. The Court finds that the new formulation, including the wording of the patent claims, does not fall within the scope of <u>Art. 123(2) EPC</u>, as the amended patent claims are directly and unambiguously derived from the entirety of the application as filed.

64 The Defendants argue that there is no basis in the application as originally filed on 15 February 2005 to support that the inductor in claim 1 "is substantially symmetric about a symmetry axis".

65 The Court considers symmetry to be the central element of EP131 and that symmetry is not required to be achieved perfectly. The description defines the structure as "substantially symmetric" (Par. [0011]) and makes use of this concept throughout the description. In accordance with <u>Art. 69(1) EPC</u>, the formulation "is substantially symmetric about a symmetry axis" in claim 1 is well-founded and sufficient. This also applies to the second loop, which must have a size and shape substantially identical to the first loop, as it is the only embodiment provided.

66 The Defendants also assert that there is no basis for claiming the specific current flow and electromagnetic field effects for the inductor, as claim 1 does not disclose the specific features of figure 2. Instead, they contend that the features therein are too general.

67 Upon reviewing claim 1 in conjunction with the description and figures, it is clear that no new features have been added. It is not necessary to annotate every figure to illustrate the current flow in order to explain how electromagnetic field effects work. As the electromagnetic field effects have been explained using the embodiment in figure 2, it can be reasonably assumed that a PSA would also understand this effect in the other embodiments, as the current flow is unambiguous.

68 The Defendants further state that there is no basis for claiming that "the terminals are connected to the second loop" for the inductor mentioned in claim 1.

69 The Patent application filed on 15 February 2005 did not originally contain the words "connected to the second loop" though all embodiments comprised this feature. In response to the state of the art (Einzinger, see below) the claim was amended on 9 June 2015 (cf. EPO Register and Exhibit ASU-22) to include this wording. The wording "connected to the second loop" merely clarifies that boundary by stating the obvious.

70 Finally, the Defendants argue that there is no basis for the claim that the inductor in claim 1 includes "a semiconductor die having formed thereon".

71 The Patent application filed on 15 February 2005 already disclosed the feature in its first sentence of the Summary of the Invention: "An inductor design for reducing mutual EM coupling between VCO resonators and a method of implementing the same on a single semiconductor chip". A chip is considered to be the same as a die. Furthermore, this also includes a single inductor on a die.

2.2.1.2. Novelty

72 The Court prima facie considers the Patent to be novel over <u>WO 2004/012213 A1</u> (hereinafter "Einzinger"), which the Defendants have presented as the sole piece of prior art allegedly destroying the novelty of the Patent.

73 Einzinger pertains to a planar inductance, in particular for monolithic RF oscillators with planar spiral windings (feature 1.1A). Monolithic in this instance refers to a single-piece circuit construction built up on a semiconductor die. Einzinger demonstrates an inductor coil (e.g. Fig. 3) and terminals which are considered to be at the lower end of each supply line (4, 5) in accordance with the Defendant's definition (feature 1.1B).



74 However, Einzinger does not maintain symmetry, as one supply line (5, yellow) merges into a horizontal conductor (red) which can be understood as part of the upper (first) loop, while the other supply line (4, yellow) merges into a horizontal conductor (green), which forms part of the lower (second) loop. This is a disruption of which clearly differs from EP131. symmetry Furthermore, Einzinger makes use of two spiral windings, represented in red and green, which are not symmetrical in principle: there is no symmetry axis, either horizontal or vertical. These spiral windings require a back path connecting both ends of the spirals (11 and 12, dashed blue), which is an additional break in symmetry. Therefore, feature 1.2 of independent patent claim 1 is not fulfilled by Einzinger.

75 As one supply line (5, yellow-red) enters the upper (first) loop while the other supply line (4, yellow-green) exits the lower (second) loop, the terminals are not connected to the second loop. Therefore, feature 1.5 of independent patent claim 1 is not present in Einzinger.

76 In light of these considerations regarding the symmetry and structural differences of the inductor in Einzinger, this document does not, prima facie, destroy the novelty of EP131.

2.2.1.3. Inventive Step

77 The Court prima facie considers the Patent to be inventive in view of the arguments of the Defendants.
78 The Defendants have presented document <u>US</u>
<u>2003/0063034 A1</u> (hereinafter "Taniguchi") as a

realistic starting point for the assessment of inventive step. They argue that the invention is obvious over Taniguchi.

79 Taniguchi describes an antenna that effectively makes use of the near field in order to transmit and receive signals. Such an antenna is large in size (measured in meters compared to the fractions of a millimetre for an inductor on a computer chip) in comparison with an inductor in EP131. A PSA tasked with implementing an inductor with especially low radiation in the far field on a semiconductor die would not consider rescaling an antenna which, moreover, in principle has the function of providing an emanating field. Taniguchi therefore pertains to state of the art operating in a different technical field and is for that reason not considered a suitable starting point for the evaluation of inventiveness. For that reason alone, EP131 is considered inventive over Taniguchi.

2.2.1.4. Auxiliary Request

80 One final note pertains to the exemplary auxiliary request made by the Applicant. Had the Court found the Patent to be invalid, such a request would be inadmissible in preliminary injunction proceedings. The legal framework of the UPCA and the RoP for provisional measures does not expressly allow for such a possibility, in contrast to **R. 30 RoP**, which applies to actions on the merits. Furthermore, an analogous application of <u>**R. 30 RoP**</u> is not admissible. An auxiliary request to amend a patent claim in provisional measures is incompatible with the nature of such proceedings which are: summary proceedings; not on the merits; likelihood of the judgement on validity and infringement; urgency. Additionally, these proceedings require the lodging of a main case in which the outcome may differ. Therefore, the provisional nature of such action is inconsistent with the contemplated request.

2.2.2. Infringement

2.2.2.1 Images and simulations

81 The Defendants dispute the use of annexes B5 and B7 of the Application as evidence provided by the Applicant concerning the Intel Wi-Fi 6E AX211 and Intel Wi-Fi 6 AX201 Modules. They base their objection on two arguments:

• The images in annexes B5 and B7 partly originate from products of an ASUS competitor, having been taken from the ITC Lenovo proceedings filed in October 2023 in the United States. Furthermore, annexes B5 and B7 are patchwork reports.

• The images alone do not provide sufficient evidence of the functionality of the accused Modules. Inter alia, they lack cross-sectional images of the preparatory steps and do not include information on how they were prepared.

82 The Defendants accuse the Applicant of lacking transparency by not disclosing at the outset of the proceedings that the images in question were from Modules incorporated in computers belonging to a competitor of Asus. The Court considers that this omission was in fact misleading, as the Applicant must provide in its Application the facts and evidence relied on to support the Application (R. 206.2(d) and 211.2

RoP) and as such could potentially be considered a misrepresentation under Art. 48 (6) UPCA and R. 284 **RoP**. However, the Court notes that at no point do the Defendants dispute the fact that the images are from the Intel Wi-Fi 6E AX211 and Intel Wi-Fi 6 AX201 Modules, nor do they deny having incorporated such Modules into ASUS products. Furthermore, the Defendants do not dispute that the AX211 and AX201 Modules lack relevant technical differences. In that regard, merely challenging the means of evidence, but not refuting the facts supported by this evidence, is not enough for the Court to dismiss such evidence, particularly where the Court finds that the evidence provided by the Applicant in Annexes B5 and B7 of the Application is sufficient to demonstrate that the images provided are from the AX211 and AX201 Modules which are used in certain ASUS products.

83 Regarding the Defendants' argument that there was also inconsistency in the designations of the AX211 Modules as these have been labelled AX211D2W and AX211NGW in different products, the Court finds this irrelevant. The Applicant did not dispute the labelling differences and instead confirmed that these designations likely pertain to the form factors of the modules but that both carry the same Intel chip containing the disputed inductor.

84 The Defendants second argument is that the images of AX201 and AX211 Modules do not provide evidence of the structure of the accused Modules. The Defendants argue in particular that the two-dimensional images alone do not provide sufficient information about the threedimensionalstructure of the elements in the AX211 and the AX201 Modules. They argue that this deficiency could have been avoided by providing additional information, such as cross-sectional images. The Court, however, finds that the images contain sufficient information to identify an inductor in 2D projection and that for the provisional measures procedure this information is deemed sufficient.

85 Neither the Applicant nor the Defendants provided evidence on the functionality of the Modules. No simulations were carried out to prove the arguments on the function in favour of the Patent or the Modules, respectively. The Court agrees with the Applicant's position that the functional result of the current flow on the electromagnetic field can be inferred by the PSA from the layout of the inductor (see also Par. 24 of Professor van Roermund's Statement, Applicant's Annex E8). Since the remaining features of claim 1 are structural, the Court also agrees that simulations are not necessary for a prima facie assessment in provisional measures application.

2.2.2.2. Technical infringement

86 Once again, based on a prima facie analysis, the Court findsit more likely than not that the Patent is being infringed.

87 For the purpose of infringement, the Court follows the principles of interpretation in accordance with <u>Art.</u> 69 EPC and the <u>Protocol</u> on its interpretation as also stated by the Court of Appeal in its <u>decision of 26</u> February 2024, UPC CoA 335/2023.

88 The inductor of the AX201 and AX211 Modules is formed on a semiconductor die (feature 1.1A), as evidenced by the fact that the images taken from a semiconductor die (the Defendants accept this feature). The inductor comprises an inductor coil and terminals (feature 1.1B) on the left side. Although the Applicant and Defendants provided different definitions of "terminals", a direct comparison of the Patent's figure 2 and the Modules demonstrates that both definitions ultimately lead to the same conclusion: the terminals are connected to the (second) loop (feature 1.5).

The parties disagree on how to interpret 89 "substantially symmetric" in feature 1.2 of claim 1, with respect to the Modules. Paragraph [0016] of EP131 states that "substantial" symmetry refers to the fact that the terminals prevent the loops from being perfectly symmetrical. Paragraph [0040] states that "near" symmetry can be maintained given the crossing of the inner and outer loop(s) and positioning requirements of the terminals. During the oral hearing, both parties agreed that the terms "near symmetry" and "substantially symmetrical" in EP131 have the same meaning. It is therefore clear that in the Patent, symmetry is not perfectly achieved in a first inductor with an 8-figure due to the presence of the terminals nor, additionally, in a first inductor with an 8-figure with more than one turn due to the presence of the crossing of the inner and outer loops. Thus, symmetry is only "substantial" or "near" with respect to these features.

90 The Court therefore *prima facie* finds that the Modules are substantially symmetric in twodimensional projection, as the raised cross-over sections in the Modules do not affect the symmetry in two dimensions. 91 The Defendants' argument that the accused products lack symmetry also due to the irregular electrical path layouts and the direction of the current flow is not consistent with the Patent. The symmetry referred to in the Patent does not relate to the current flow or the electric circuit.

92 The inductor coil has a first loop (red) and a second loop (green) (feature 1.3), which further contains an additional winding or turn which, however, is not relevant for the assessment of infringement. The Court does not agree with the Defendant's position that the loops are shaped by the tracks or by the raised crossing section. Instead, the Court follows the Applicant's argumentation of the loops as indicated in red and green in the figure.



93 The loops are arranged so that the current in the first loop (red) travels in a direction that is opposite to the current in the second loop (green) causing the electromagnetic field components emanating at a certain distance from the first loop and the second loop to also have opposite directions and to tend to counteract each other (feature 1.4). The loops are considered to be formed by the currents rather than the conductor paths, except for the cross-over regions indicated by the rectangles: As in EP131, the crossing sections disrupt this picture, hence forming "near" symmetry.

94 Regarding the accused Modules, the Court is prima facie convinced that the electromagnetic fields generated by the current in both loops also tend to counteract each other. This effect is slightly affected by the central cross-over sections, probably not more than what is already considered in the Patent (Par. [0040]).

2.2.2.3. Acts of infringement

95 AsusTek and Digital River are considered infringers based on the presented facts. They both offer and /or sell the infringing products.

96 According to <u>Art. 25(a) UPCA</u>, a patent confers on its proprietor the right to prevent any third party from making, offering, placing on the market or using a product which is the subject-matter of the patent, or importing or storing the product for those purposes.

97 AsusTek's argument that it merely owns the domain www.asus.com and therefore is not infringing is not accepted as it is evident that through this domain and its sub-domains, products containing the accused Modules are offered and sold. Offering entails marketing, promoting, advertising, and providing the client with the product to be sold and making it available to the relevant public. If the product is available to the public and perceived as such, it is undoubtably being offered (LD Düsseldorf, 18 October 2023, UPC CFI 177/2023). Any person searching online for ASUS products will clearly perceive from the Defendant's website that ASUS products, including the allegedly infringing products, are available – offered – and will associate this offer with AsusTek, considering it merely another sales channel owned by AsusTek.

98 For the purposes of <u>Art 25(a) UPCA</u> it is irrelevant whether the public is able to determine, on the basis of the information provided on the website, whether the products in question fall within the claims of the Patent.

Therefore, the Defendant's arguments based on this point are not accepted.

99 Arvato is also considered an intermediary. An intermediary serves as a link, or part of the chain, between the infringer and the public. Arvato stores Asus products for the purpose of their sale, i.e. placing them on the market. Arvato's services are at least indirectly used by AsusTek and Digital River in the sale of these products within the UPC CMS. In that context, on a prima facie basis, the facts suggest that the Arvato's services are being used for the infringement of EP 131 by AsusTeK and Digital River, in accordance with <u>Art. 63 UPCA</u> (and also in line with <u>Art. 11 of the Enforcement Directive</u>).

Costs and Value of the case

100 The unsuccessful party is obliged to bear the costs of the proceedings in accordance with <u>Art. 69(1) UPCA</u>, in this case, the Applicant.

101 The Applicant estimated the value of the case at EUR 1.000,000.00 As the Defendants did not dispute this value, the Court has no reason to consider otherwise. **ORDER**

The Court:

(a) dismisses the application for provisional measures;
(b) orders the Applicant to bear reasonable and proportionate legal costs and other expenses incurred by Defendants in these proceedings, up to the applicable ceiling (<u>Art. 69(1) UPCA</u>; <u>R. 118.5</u> and <u>R. 150.2 RoP</u>);
(c) sets the value of the dispute at EUR 1,000,000.00.

INFORMATION ABOUT APPEAL

This Order may be appealed in accordance with <u>Art. 73</u> <u>UPCA</u> and <u>R. 220.1 RoP</u> and <u>224.1(b) RoP</u> within 15 calendar days of the notification of this order Rute Lopes, President And Judge Rapporteur Petri Rinkinen, Legally Qualified Judge Samuel Granata, Legally Qualified Judge Johannes Mesa Pascasio, Technically Qualified Judge Maria da Luz Pedro Delgado, Registry Clerk **ORDER DETAILS** UPC number: UPC CFI 317/2024

ACT 35572/2024

Application for provisional measures
