



## **Order**

**of the Court of First Instance of the Unified Patent Court, Mannheim**

**Local Division**

**issued on 27 June 2024**

**concerning EP 2 568 724**

### Guiding principles:

1. According to Rule 13(1)(n) VerfO, in the case of technically complex subject-matter of the proceedings, statements on the interpretation of features of the asserted patent claim that are not readily understandable by themselves must already be made in the statement of claim (here: Location of reference signals for determining the uplink channel quality in an available transmission bandwidth to avoid interference with control channels in the context of LTE standardisation).
2. In the defence to an action for revocation, the patent proprietor must base its argumentation on specific features of the patent claim.
3. Rule 30.2 of the Rules of Procedure is a strict rule of preclusion which allows subsequent applications to amend the patent only with the permission of the court. Corresponding applications must be substantiated in detail. When assessing whether a new amendment is permitted, it will be important to consider whether the new amendment would have been necessary at an earlier point in time in response to the invalidity plaintiff's arguments and whether the late request for amendment causes delays in the proceedings.
4. The need for legal protection of a counterclaim seeking a FRAND licence rate determination and a declaratory judgement

### Keywords:

Interpretation of the patent claim, content of the application, defence to the revocation counterclaim, subsequent applications to amend the patent

Plaintiff:

**Panasonic Holdings Corporation** - 1006, Oaza Kadoma, Kadoma-shi - 571-8501 - Osaka - JP  
represented by Christopher Weber

defendant:

**1)**

**ORPE Germany GmbH** - Graf-Adolf-Platz 15 - 40213 - Düsseldorf - DE  
represented by Andreas Kramer

**2)**

**Guangdong OPPO Mobile Telecommunications Corp Ltd** - NO.18 Haibin Road, Wusha,  
Chang'an Town, Guangdong Province - 523860 - Dongguan - CN  
represented by Andreas Kramer

STREITPATENT:

EUROPEAN PATENT NO. EP 2 568 724

ADJUDICATING BODY/CHAMBER:

Mannheim local division JUDGES:

This Order was issued by the Chairman and judge-rapporteur Dr Tochtermann.

LANGUAGE OF THE PROCEEDINGS: German

SUBJECT MATTER: Notes on the procedure - technology and FRAND counterclaim

At the current stage of the proceedings, the following information and questions have been sent to the parties in order to structure the further proceedings:

I. On the interpretation of the patent in suit and the infringement claim

1. Reference is made to Rule 13(1)(n) RP. Accordingly, the complaint must state the reasons why the facts alleged constitute an infringement of the patent claims, including legal arguments and, where appropriate, explanations of the proposed interpretation of the patent claim [emphasis added by the court]. The Rules of Procedure of the UPC intend an early management of the proceedings by the judge-rapporteur, which is why the factual and contentious material must be prepared at an early stage in order to enable a proper proactive management of the proceedings. Explanations on the interpretation of the asserted claim are particularly necessary in the case of features whose content or scope cannot be easily deduced (Tilmann/Plassmann/Steininger Rule 13 VerfO para. 26). The present case is such a case, since the asserted patent claims do not deal with simple technology, but the field of mobile radio technology and there the solution of certain problems in the conflict area of the transmission of control signals on the one hand and channel quality estimation parameters in the context of the LTE standard. In this case, a preparation in the statement of claim seems appropriate. However, the plaintiff limits itself in the statement of claim to describing the technical environment, the technical problem and then only quotes the claim subdivided into features without interpreting it. Rather, the interpretation only takes place in the Reply after the defendants have attempted to reconstruct the plaintiff's underlying interpretation from the specific infringement allegation on the basis of the asserted infringement allegation.

The legal issues arising from this (such as the need for further documents that delay the proceedings and/or notice under Rule 9 of the Rules of Procedure with subsequent decision by default under Rule 355 of the Rules of Procedure or no sanction, as a mere mandatory provision?)

2. According to the preliminary understanding of the submission made so far, the parties seem to agree on the technical context of the patent in suit. In essence, according to the court's understanding of the parties' submissions, the patent-in-suit proposes a solution for use in the LTE standard. The parties agree in describing the specific problem in that the patent in suit deals with the uplink signal traffic from a radio communication device to the network in a radio cell, in particular highlighting the use case that such a device is not located in the core of the radio cell, but in its peripheral area. To estimate the channel quality in the uplink, it is previously known to transmit certain reference signals which

then enable this estimation on the network side. In addition, the time offset between the base station and the mobile station can be estimated on the basis of these reference signals. According to the preliminary understanding of the court, the teaching according to the patent in suit could focus on the estimation of the channel quality, but possibly not deal with the question of the time offset. In the situation described, in which a mobile station is located at the edge of the cell, the transmission of broadband reference signals may be more difficult according to the knowledge gained in the prior art. For this reason, the patent in suit describes the transmission of narrowband reference signals in a plurality of time slots using so-called frequency hopping. In this case - this is described by common consent as previously known - a certain frequency range is available for the transmission of signals in LTE. On the one hand, control signals are sent, on the other hand, the actual user data is transmitted. In order to estimate the quality of the user data transmission, it was already known in the prior art to transmit the reference signals - logically enough - in the spectrum intended for the user data. In addition, the control signals must be transmitted in the available frequency range. This can therefore lead to conflicts between control signals on the one hand and user data and the reference signals on the other. On the one hand, the control and reference signals can overlap, resulting in unwanted interference that disrupts both the transmission of the control signals and the transmission of the reference signals. Secondly, if certain frequency ranges were not authorised for the transmission of reference signals in order to avoid such interference, a frequency range could arise whose quality would no longer be covered by sufficient reference signals. As a result, the estimation of the uplink channel quality would deteriorate. The patent in suit explains this conflict with reference to Figures 2-4, according to which it was known in the prior art, in order to avoid such overlaps, either to limit the frequency range in which reference signals can be transmitted, as it were, to a single frequency range.

"as a precaution" to a frequency range that is so narrow that an overlap with the control channels is ruled out. Conversely, this predetermined limitation can be omitted and instead, in the event of an imminent overlap, the transmission of the reference signals causing the overlap can be prevented - with the consequence that this again results in broader frequency ranges in which no reference signals serving to estimate the quality are present. As the court understands it, the teaching of the patent in suit is concerned with solving this problem.

3. There appears to be a dispute between the parties as to how the frequency range in which reference signals are transmitted is to be defined. According to the defendant's interpretation, this range is to be determined (exclusively) by subtracting the PUCCH channels used to transmit control signals from the available total signal bandwidth of the system under consideration. It should be clear to the person skilled in the art that the areas available for the PUCCHs are located at the two ends of the system bandwidth. It will be discussed to what extent this is a matter of course for the LTE expert.

knowledge, which may also not require an express disclosure because it is read along, as it were. This could be supported by the fact that all figures of the patent in suit make such a localisation and claim 1 states that control channels are assigned to both ends of the system bandwidth. In addition, D3a, Figure 1, also shows that the control channels are located at the ends of the system bandwidth. According to the defendant's submission, D1 in Chapter 7 (*- it may be desirable to exclude the edge-RBs used for UL control signalling from the sounding blocks, thus resulting in FDMA between sounding signals and control data signals*) and D9 Chapter 6.4.3, p. 36 could behave accordingly. This could also be technically clear to the person skilled in the art because - especially on the control channels that are essential for the smooth running of radio communication - the interference conflict can be kept to a minimum by locating them "at the edges" than with an Order in the middle of the system bandwidth. While a loss of user data might be more acceptable, faulty control could have more far-reaching consequences.

Explanations may be necessary.

4. Furthermore, there appears to be a dispute as to whether the frequency range over which the reference signals are to be distributed is determined solely by subtracting the width of the PUCCHs or whether other frequency ranges which are not required by the PUCCHs can also be excluded. In any case, the patent in suit does not appear to address any scenarios in which, in addition to the control channels and the transmission bandwidth in between, further signalling resources are allocated in the system bandwidth which are neither control signals nor can be assigned to the useful signals of the SRS bandwidth (including the SRS signals themselves). Rather, all embodiments are probably based on the fact that the SRS transmission bandwidth is obtained by subtracting the PUCCH transmission bandwidth from the system bandwidth (cf. sections 0027 relating to embodiment 1 to which all further embodiments refer back, such as [0034: different from embodiment 1 only in SRS allocation determination section in the base station; correspondingly [0045], [0054], [0061]). Furthermore, a direct causal relationship between the transmission bandwidth and the width of the PUCCHs could be described in section [0007]. Such an understanding (direct influence of the changing width of the PUCCHs on the transmission bandwidth to be covered by the reference signals) could also be suggested by the descriptions of all embodiments (see [0027], [0043], [0058], [0066]).

In this regard, it can be discussed whether there may nevertheless be scenarios (previously) known to the skilled person. On the other hand, it could be insufficient to argue without further specification and, for example, a concrete example case, that the same could be configured on the base station or network side or to claim without further explanation that certain configurations in the LTE standard would only be chosen if a large transmission range was required for the PUCCHs (cf. Reply Technology para. 75).

5. Furthermore, there is a dispute between the parties as to what the patent in suit understands by a uniform distribution in a frequency band of the transmission bandwidth in accordance with the variation of the transmission bandwidth ("uniformly dispersed in a frequency band of the transmission bandwidth in accordance with the variation of the transmission bandwidth").

a) Here, the patent in suit could be concerned with the uniform distribution of the reference signals in order to achieve the best possible estimation over the entire transmission bandwidth for the useful signals. In the figures, which are intended to illustrate the prior art, it is mentioned in each case that there are undesirable wide areas of missing coverage with reference signals. In the discussion of non-patent document 1, the SRS transmission bandwidth is invariably determined by the maximum width of the PUCCHs - irrespective of whether this maximum load is actually required on the PUCCHs. As a result, poorer quality estimation is criticised. Based on Figure 3A and B, the solution is then criticised as disadvantageous if the SRS transmission bandwidth is based on the minimum PUCCH load. As interference could now occur, SRS signals are omitted in response to avoid this conflict, which in turn results in poor channel quality coverage as wider areas of the transmission spectrum are not covered. With reference to the first embodiment example, it is then explained that the bandwidth not covered by reference signals is divided into a number of narrower bands without coverage ([0032]). The background could be that the quality estimation by several small coverage gaps is still sufficient because the probability of a relevant quality change over many small uncovered frequency gaps is lower than if fewer but wider coverage gaps remain. This could need to be addressed.

The most uniform possible distribution as a function of the change in the SRS transmission bandwidth - caused by the changed width of the PUCCHs - appears to underlie the patent in suit in all embodiments as an indissoluble relationship.

b) As far as the change in frequency resources corresponding to the change in the transmission bandwidth (of the user data as a whole and possibly not only of the reference signal per se) is concerned, it is currently probably open what exactly the applicant wants to claim when it submits that the base station has certain values for CSRS "would select" (Reply para. 75) or "could select" a configuration (Reply para. 80 and analogue Reply para. 83). As far as can be seen, no evidence from the standard is cited for an actual corresponding selection. A clarification seems appropriate.

6. The considerations under 4. could lead to the relevant question as to the validity of the teaching of the patent in suit: Is it necessary - and only then infringing - if in the LTE standard in all possible and

The interpretation of the claim could already be decisive in this respect, since the solution according to the patent in suit is applied in all configurations relevant in practice (in the sense of an absolute validity claim of the teaching) or is it sufficient if the conflict addressed by the patent in suit applies in a sufficient number of configurations, whereas there are remaining configurations in which the conflicts known from the prior art can still occur. The interpretation of the claim could already be decisive here, which could, if necessary, necessarily locate the transmission range for the reference signals between the PUCCHs. A more in-depth discussion appears to be advisable.

II. On the attacks on the body of law:

1. For the unauthorised extension, the same reasoning with regard to priority and D4/4a, see the notes in I.3 and I.4 above.

2. To the D1:

With regard to feature 1.1, see the notes above in I.3. and for an understanding of the transmission bandwidth, see I.4. Does the last two paragraphs of Chapter 3 lead the skilled person away from frequency hopping or not?

With regard to features 1.2 and 1.3, the defendants appear to assume that the skilled person infers the presence of the assignment unit and the transmitting unit from the context - reads them along, as it were. This could be debatable

Feature 1.3.1 could be analysed in more detail.

This also applies to feature 1.3.2, in particular to the question of whether the feature (invariability of the bandwidth) is sufficiently clearly and directly disclosed to the skilled person as belonging to the invention or whether he is led away from it by chapter 5.

In the case of feature 1.3.3, the reference of D1 to D1a is to be discussed (uniform disclosure content?). In addition, it should be discussed whether the disclosure content for the skilled person actually gives rise to the defendants' own illustration (KE para. 181 and 199), which is not present in the document.

The plaintiff's statements in the defence to the counterclaim are not clearly identifiable in relation to the individual characteristics - this must be made up for. It is

insufficient to deal with the defendant's arguments without a clear reference to the features of the asserted claim, without making it clear why a specific feature of the claim is not covered by the prior art disclosure.

Insofar as the plaintiff refers to the channel with the designation BPICH of D1a, its function at the beginning of the transmission processes shown in the figures remains unclear over time, since no technical-functional explanations are provided. Is it a channel that is only used during the establishment of the channel, in which no real user data is transmitted anyway, but merely pilot signals, so that the conflict focussed on by the patent in suit cannot arise there?

3. To the D2

The document could primarily deal with the time offset. The time offset and its estimation could be addressed in sections [0001 and 0005] of the patent-in-suit as discrete technical issues. This should be discussed.

With regard to feature 1.3.1, reference should be made to the comments on the interpretation of the transmission bandwidth. It also appears worth discussing to what extent the restriction of the reference signals to sub-bands in D2 chapter 3.1 anticipates the teaching of the patent in suit in a manner prejudicial to novelty with regard to a Doppler problem addressed earlier in the document. It could also be questionable to what extent the scenario addressed by the patent in suit (localisation of transmission signals and reference signals between the control channels) becomes apparent when dividing the bandwidth.

4. At present, there appear to be no grounds for commenting on D3 - the statements in the statement of defence on feature 1.3.3, which are based on a reverse conclusion that novelty is detrimental, could be discussed.

5. Application to amend the patent

Reference is made to Rule 30.2 RP. According to Tilmann/Plassmann, UPCA, Rule 30 RP, para. 47, the rule is to be characterised as a strict rule of preclusion. According to the standard, the aim is to prevent the patent proprietor from depriving the opponent of the opportunity to react at an early stage by successively filing various amendments and the court from dealing with the applications in an appropriate manner. In this respect, the question of whether a new amendment should be allowed must take into account whether the new amendment would have been necessary at an earlier stage in response to the arguments already submitted by the invalidity plaintiff and whether the late request for amendment



delays in the proceedings. In particular, the patent proprietor must provide detailed reasons as to why the later amendment is necessary (see also Central Chamber Paris, Order of 27 February 2024, UPC\_CFI\_255/2023, GRUR-RS 2024, 4923). The applicant's unqualified reservation to respond with further amendments in due course therefore raises concerns and any new amendments will have to be measured against the above requirements.

### III. The FRAND counterclaim

1. The defendants shall clarify have to clarify on what the current version of the proposal is aimed at:

On the one hand, it is stated in para. 9 that the defendants would attempt to obtain a FRAND licence with the counterclaim, which is why it is requested that the FRAND licence rate be fixed (para. 11). In addition, the rate that the defendants "should pay" to the plaintiff should be determined and other "relevant terms" of a FRAND agreement should be determined (para. 31). According to their submission, the defendants undertook to acquire a FRAND licence, to pay the FRAND rate set by the Unified Patent Court for the EP territory and to extend this payment obligation to the USA and Japan (para. 33, 56).

On the other hand, the current applications may not sufficiently demonstrate a serious intention to conclude a contract at the licence rates determined by the court. Therefore, there could be a lack of need for legal protection for the applications filed to date. The applications to date are probably neither aimed at performance nor at formation (in the sense of a binding and enforceable obligation or substantive formation in the sense of a determination of performance by the court), but merely at a declaration. The relationship between applications for performance and organisation and applications for declaratory judgement will have to be discussed.

First, it seeks a declaration that Oppo is entitled to a licence for Panasonic's standard-essential patents for the 3G and 4G standards on fair, reasonable and non-discriminatory (FRAND) terms, and second, a declaration that the FRAND licence rate is a specific amount or range set out in the application. Also against the background of the further applications to oblige the defendants to pay the FRAND fee "subject to the existence of a FRAND licence agreement", there may be doubts as to whether the defendants intend to conclude a binding FRAND licence agreement on the terms determined by the court. This needs to be clarified. A merely requested determination without a declaration of the unconditional contractual commitment to the conditions determined under

Mental Reservation to actually conclude such a contract could lack the need for legal protection. In this respect, it should also be taken into account that the defendants themselves are of the legal opinion that they can derive a direct claim for performance from the ETSI FRAND declaration (see FRAND counterclaim para. 54).

The alternative claims are also all directed towards a mere declaratory judgement or the obligation of the opposing party to submit an offer, without it having become sufficiently clear to date whether the defendants will actually accept the offer.

2. The further application "to explain what the essential conditions of such a FRAND licence are, including at least the rate Oppo has to pay for the use of these patents in the territory of the EPC contracting states (the EP territory)" also raises concerns. It should not be the court's task to provide comprehensive legal advice, especially since multiple arrangements are conceivable when drafting the contract, all of which could be FRAND-compliant.  
The same applies to the plaintiff's auxiliary request "to declare which licence justifies the defendant's infringing acts of use of EP 2 568 724 and which licence rate per 3G/4G (multi-mode) device is fair, reasonable and non-discriminatory (FRAND)".
3. It is to be discussed what consequences would arise for the counterclaim for FRAND rate setting if the patent in suit (assuming - this does not represent a preliminary legal opinion of the court) were invalid or not infringed. Should the action be brought as a counterclaim subject to a condition? What is the connection to the other proceedings asserted before the local division which concern other patents and in which no such counterclaim has been filed?
4. Finally, it must be discussed whether there is still a need for legal protection for the counterclaim for FRAND rate-setting if the court should assume that the defendant is unwilling to take a licence for other reasons. In this respect, too, it is clarified that the raising of this question does not imply a preliminary legal opinion on the part of the court.
5. The plaintiff's auxiliary request to "determine that a licence justifying the defendant's infringing acts of use of EP 2 568 724 is a worldwide licence to the plaintiff's 3G and 4G (multi-mode) portfolio and that a royalty rate for such a licence of USD X per 3G/4G (multi-mode) device is fair, reasonable and non-discriminatory" also appears to be in need of discussion. There may already be doubts as to the admissibility of such an application, which is made as an alternative application in the event that the admissibility of the defendant's counterclaim for determination of a FRAND licence is affirmed.

6. Insofar as the plaintiff also requests, in the alternative, that the defendant be ordered to pay a certain licence fee in the event that the counterclaim is upheld, it may be necessary to clarify the relationship between this application and application no. VI. of the statement of claim for a declaration of liability for damages.

**ORDER:**

There is an opportunity to comment within the current deadlines in the written procedure.

**NAMES AND SIGNATURES**

Issued in Mannheim on 27 June 2024

**Peter Michael** Digitally signed by Peter  
Michael Dr.

**Dr.** Daughter date:  
**Daughter** 2024.06.27  
17:50:08 +02'00'

Dr Tochtermann

Chairman and judge-rapporteur