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**Datasheet for the decision
of 13 December 2023**

Case Number: T 2080/21 - 3.5.05

Application Number: 17838402.0

Publication Number: 3499826

IPC: H04L27/26

Language of the proceedings: EN

Title of invention:

METHOD AND DEVICE FOR SENDING AND DETECTING SYNCHRONOUS SIGNAL

Applicant:

Datang Mobile Communications Equipment Co., Ltd.

Headword:

Detecting synchronisation in 5G/DATANG

Relevant legal provisions:

RPBA 2020 Art. 12(4)

EPC Art. 56

Keyword:

Amendment to case - amendment within meaning of Art. 12(4) RPBA

2020 - amendment admitted (no)

Inventive step - (no)

Decisions cited:

Catchword:



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Case Number: T 2080/21 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 13 December 2023

Appellant: Datang Mobile Communications Equipment Co., Ltd.
(Applicant) 1/F, Building 1, No. 5 Shangdi East Road
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Beijing 100085 (CN)

Representative: Cabinet Nony
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 10 June 2021
refusing European patent application No.
17838402.0 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair K. Kerber-Zubrzycka
Members: P. Cretaine
P. Tabery

Summary of Facts and Submissions

I. This appeal is against the examining division's decision posted on 10 June 2021 refusing European patent application No. 17838402.0. The application was refused for lack of inventive step (Article 56 EPC) having regard to the disclosure of:

D2: HUAWEI et al.: "Initial access in NR", 3GPP Draft, R2-163923, RAN WG2, Nanjing, China; 22 May 2016

or the disclosure of:

D1: US 2008/205351

II. Notice of appeal was received on 19 August 2021. The statement setting out the grounds of appeal was received on 12 October 2021. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of a new request filed with the statement setting out the grounds of appeal. Oral proceedings were requested as an auxiliary measure.

III. A summons to oral proceedings was issued on 6 February 2023. In a communication pursuant to Article 15(1) RPBA, sent on 16 October 2023, the board announced that it was minded not to admit the new request into the appeal proceedings under the provisions of Article 12(4) RPBA. Additionally, the board expressed the opinion that even if the new request were admitted into the appeal proceedings, the subject-matter of claim 1 would not meet the requirements of Article 56 EPC having regard to the disclosure of D2.

- IV. By letter dated 2 November 2023, the appellant informed the board that it would not be attending the oral proceedings scheduled for 13 November 2023.
- V. With a notification dated 3 November 2023, the board announced that the oral proceedings had been cancelled.
- VI. Claim 1 of the sole request reads as follows:

"A method for detecting a synchronization signal, **characterized in that**, the method comprising:
determining (S21), by a terminal, a numerology for detecting the synchronization signal; and
detecting (S22), by the terminal, the synchronization signal according to the determined numerology;
wherein determining (S21), by the terminal, the numerology for detecting the synchronization signal comprises:
determining, by the terminal, a plurality of numerologies corresponding to a frequency band currently detected by the terminal according to a correspondence relationship between a frequency band and a plurality of numerologies, and determining each of the plurality of numerologies corresponding to the frequency band currently detected by the terminal as the numerology for detecting the synchronization signal;
wherein a quantity of numerologies corresponding to each frequency band is smaller than a quantity of all numerologies defined by a communication system."

The request contains further independent claims directed to a corresponding terminal for detecting a synchronization signal (claim 7), a corresponding

method (claim 4) and a network-side device (claim 10) for transmitting a synchronization signal.

Reasons for the Decision

1. Admission of the request filed with the statement setting out the grounds of appeal

In view of the primary object of the appeal proceedings to review the decision under appeal in a judicial manner, an appellant's appeal case must be directed to the requests on which the decision under appeal was based (Article 12(2) RPBA). Any part of an appellant's appeal case which does not meet this requirement is to be regarded as an amendment, unless the appellant demonstrates that this part was admissibly raised and maintained in the proceedings leading to the decision under appeal.

The appellant's sole request on appeal was filed for the first time with the statement setting out the grounds of appeal. In the case in hand, the contested decision is not based on the request at issue and the appellant did not provide any reasons for submitting this request in the appeal proceedings.

Moreover, the appellant's lines of argument in respect of the inventive step objection underpinning the decision were based mainly on the new features added to the independent claims. Furthermore, in the board's view, the introduction of these new features cannot overcome the inventive step objection (see point 2 below).

For these reasons, the board has decided not to admit the request into the appeal proceedings under the provision of Article 12(4) RPBA.

2. Obiter dictum

The board notes that even if the request were admitted, the subject-matter of claim 1 would not meet the requirements of Article 56 EPC having regard to the disclosure of D2, which was considered the closest prior art in examination.

In that respect, the board agrees with the decision under appeal that the frequency band currently detected by the terminal in claim 1 can be read onto the frequency range shown in Figure 1 of D2 corresponding to numerologies 1 to 3.

Claim 1 has been amended with respect to claim 1 on which the decision under appeal was based by additionally specifying that the quantity of numerologies corresponding to each frequency band is smaller than a quantity of all numerologies defined by a communication system. The appellant has based its lines of argument on the fact that this feature implies that the number of numerologies corresponding to only the frequency band detected by the terminal is smaller than the number of numerologies defined by the communication system, and thus that the number of numerologies for detecting the synchronization can be advantageously reduced.

However, the board holds that this feature is already disclosed in D2, which states in section 2.1 (see the box entitled "Agreement") that the numerologies do not necessarily all apply to the same frequency range.

Therefore, the subject-matter of claim 1 does not meet the requirements of Article 56 EPC having regard to D2.

3. Conclusion

With no admitted request on file, the appeal has to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



B. Brückner

K. Kerber-Zubrzycka

Decision electronically authenticated