

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 9 April 2019**

Case Number: T 1358/15 - 3.5.03

Application Number: 10766785.9

Publication Number: 2424319

IPC: H04W72/04, H04B7/04, H04J1/00,
H04J11/00, H04L27/01

Language of the proceedings: EN

Title of invention:

WIRELESS COMMUNICATION SYSTEM, COMMUNICATION APPARATUS,
COMMUNICATION METHOD AND COMMUNICATION PROGRAM

Applicant:

Sharp Kabushiki Kaisha

Headword:

Wireless communication system/SHARP

Relevant legal provisions:

EPC Art. 84
RPBA Art. 13(1)

Keyword:

Claims - clarity (no)
Late-filed auxiliary request - admitted (no)



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1358/15 - 3.5.03

D E C I S I O N
of Technical Board of Appeal 3.5.03
of 9 April 2019

Appellant: Sharp Kabushiki Kaisha
(Applicant) 22-22, Nagaike-cho
Abeno-ku
Osaka-shi, Osaka 545-8522 (JP)

Representative: Treeby, Philip David William
Maucher Jenkins
26 Caxton Street
London SW1H 0RJ (GB)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 24 February
2015 refusing European patent application No.
10766785.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman F. van der Voort
Members: K. Schenkel
C. Josefsson

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 10766785.9 with publication No. EP 2 424 319 A1.

The refusal was based on the ground that the subject-matter of claims 1, 2, and 4 to 8 of a main request and claims 1 to 7 of two auxiliary requests was not new having regard to the disclosure of document D5 (see below).

II. The decision made reference to, *inter alia*, the following document:

D5: "UCI piggybacking on PUSCH in case of transmit power limitation"; LG ELECTRONICS;
3GPP TSG RAN WG1 #56bis; RI-091205;
March 2009.

III. With its statement of grounds of appeal, the appellant filed claims of a main request and first and second auxiliary requests.

IV. In a communication following a summons to oral proceedings, the board gave its preliminary opinion that claims 1, 2 and 4 to 8 of each request were not clear. Furthermore, objections under Article 123(2) EPC (added subject-matter) and Articles 52(1) and 56 EPC (inventive step) were raised.

V. In response to the board's communication, the appellant submitted by letter dated 3 April 2019 a third auxiliary request together with arguments in support of this request.

VI. Oral proceedings were held on 9 April 2019.

At the oral proceedings, the appellant withdrew the main request and the first and second auxiliary requests and filed a further auxiliary request.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the third auxiliary request filed by letter dated 3 April 2019 or, in the alternative, on the basis of the new auxiliary request filed during the oral proceedings, referred to in this decision as the fourth auxiliary request.

After due deliberation, the chairman announced the board's decision at the end of the oral proceedings.

VII. Claim 1 of the third auxiliary request reads as follows:

"A mobile station device (A1 to A3) configured to wirelessly communicate with a base station device (B1) by using a plurality of component carriers including a first component carrier and a second component carrier, the mobile station device (A1 to A3) comprising:

 a reception processor (a13) configured to receive a physical downlink control channel that indicates assignments of a plurality of physical uplink shared channels on the plurality of component carriers, and
 a transmission processor (a14, a34, a44, and a54) configured to

 allocate uplink control information to a selected one of the plurality of physical uplink shared channels in a subframe,

 multiplex the uplink control information and a transport block,

transmit the uplink control information together with the transport block by using the selected one of the plurality of physical uplink shared channels in the subframe, and

transmit the transport block without the uplink control information by using the plurality of the physical uplink shared channels excluding the selected one of the plurality of physical uplink shared channels in the subframe,

wherein the uplink control information includes information pieces of positive acknowledgement, ACK/negative acknowledgement, NACK, in response to transport blocks received on a plurality of physical downlink shared channels, channel quality information indicator, precoding matrix indicator and/or rank indicator,

the mobile station device being characterized in that the mobile station device is configured to select a first physical uplink shared channel on the first component carrier in the subframe, as the selected one of the plurality of physical uplink shared channels, if the mobile station device is transmitting the first physical uplink shared channel on the first component carrier and a second physical uplink shared channel on the second component carrier in the subframe, the first physical uplink shared channel and the second physical uplink shared channel being included in the plurality of physical uplink shared channels in the subframe, and

the first component carrier is indicated by the base station device, wherein

the mobile station device is configured to select the second physical uplink shared channel on the second component carrier with a minimum component carrier number in the subframe, as the selected one of the plurality of physical uplink shared channels, if the mobile station device is not transmitting the first

physical uplink shared channel on the first component carrier, but is transmitting one or more physical uplink shared channels excluding the first physical uplink shared channel on the plurality of component carriers in the subframe,

the plurality of component carriers are numbered respectively, and

the second physical uplink shared channel on the second component carrier with the minimum component carrier number is to be allocated with the uplink control information."

- VIII. Claim 1 of the fourth auxiliary request differs from claim 1 of the third auxiliary request only in that the last paragraph ("the second physical uplink shared channel ...") has been deleted.

Reasons for the Decision

1. *Third auxiliary request - clarity (Article 84 EPC)*

- 1.1 The application relates to the wireless communication between a mobile station device and a base station by using multiple uplink carrier components, also referred to as component carriers (see paragraph [0004]), to each of which a physical uplink shared channel (PUSCH) is allocated (paragraph [0027]). Uplink control information is allocated to a selected PUSCH in a subframe and is transmitted by using the selected PUSCH in the subframe (paragraph [0034]).

The mobile station device of claim 1 is configured to use for the uplink communication a plurality of component carriers to which a plurality of PUSCHs is assigned (first and second paragraphs). The mobile station device further includes a transmission

processor which is configured to use at least two of the plurality of PUSCHs for transmitting information in a subframe, namely a selected one of the plurality of PUSCHs for the uplink control information together with a transport block and at least one other PUSCH of the plurality of PUSCHs for the transport block without the uplink control information (sixth and seventh paragraphs).

- 1.2 Claim 1 further includes a first if-clause, namely that "the mobile station device is configured to select a first physical uplink shared channel on the first component carrier in the subframe, as the selected one of the plurality of physical uplink shared channels, if the mobile station device is transmitting the first physical uplink shared channel on the first component carrier and a second physical uplink shared channel on the second component carrier in the subframe, the first physical uplink shared channel and the second physical uplink shared channel being included in the plurality of physical uplink shared channels in the subframe" (underlining by the board).

The condition in the aforementioned if-clause is thus met when the mobile station device is transmitting two of the plurality of PUSCHs on first and second component carriers in the subframe, respectively. However, as the claim seeks protection for a device rather than a method, this condition implies, in terms of constructional features of the mobile station device, merely that the device is configured to transmit two of the plurality of PUSCHs on first and second component carriers in the subframe, which is already part of the claim. This is because also during operation, the mobile station device is already configured to transmit using at least two PUSCHs, which

may be labelled first and second, of the plurality of PUSCHs for transmitting the transport block with and without the uplink control information, respectively (see point 1.1 above and claim 1, sixth and seventh paragraphs).

It is therefore unclear what further limitation, if any, of the subject-matter of claim 1 is introduced by the above-cited if-clause.

- 1.3 Furthermore, claim 1 includes a second if-clause, namely that "the mobile station device is configured to select the second physical uplink shared channel on the second component carrier with a minimum component carrier number in the subframe, as the selected one of the plurality of physical uplink shared channels, if the mobile station device is not transmitting the first physical uplink shared channel on the first component carrier, but is transmitting one or more physical uplink shared channels excluding the first physical uplink shared channel on the plurality of component carriers in the subframe" (underlining by the board).

If the condition according to this second if-clause is met, the mobile station device is not transmitting the first PUSCH on the first component carrier. In other words, the conditions of the first and second if-clauses are mutually exclusive. It is not clear how the second if-clause, in particular the condition of not-transmitting the first PUSCH on the first component carrier limits the constructional features of the claimed device, it being noted that the device is configured to transmit using a first PUSCH for transmitting the transport block with the uplink control information (see point 1.2 above).

It is therefore unclear what further limitation, if any, of the subject-matter of claim 1 is introduced by this second if-clause.

1.4 For the above reasons, claim 1 of the third auxiliary request is not clear and, consequently, does not comply with Article 84 EPC.

1.5 The third auxiliary request is therefore not allowable.

2. *Fourth auxiliary request - admissibility (Article 13(1) RPBA)*

2.1 The fourth auxiliary request was filed during the oral proceedings. In accordance with Article 13(1) RPBA, any amendment to a party's case after it has filed its grounds of appeal may be admitted and considered at the board's discretion. In accordance with the case law, a well-established criterion for determining whether or not to admit such a request is whether or not it is, *prima facie*, allowable.

2.2 As admitted by the appellant, the deletion of the last feature of claim 1 (see point VIII above) was not an attempt to overcome the clarity objection in respect of the first if-clause (see point 1.2 above). Indeed, that objection appears to apply to claim 1 of the fourth auxiliary request for the same reasons. Claim 1 of the fourth auxiliary request therefore lacks, *prima facie*, clarity (Article 84 EPC) and, hence, is *prima facie* not allowable.

2.3 As claim 1 of the fourth auxiliary request is *prima facie* not allowable, the request was not admitted into the appeal proceedings.

3. *Conclusion*

As there is no allowable request, it follows that the appeal is to be dismissed

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



C. Rodríguez Rodríguez

F. van der Voort

Decision electronically authenticated