Datasheet for the decision
of 7 May 2013

Case Number: T 1186/12 - 3.5.03
Application Number: 07009968.4
Publication Number: 1814237
IPC: H04B 1/707, H04W 52/50
Language of the proceedings: EN

Title of invention:
Device and method for communication between base station and subscriber unit in CDMA communication system

Applicant:
InterDigital Technology Corporation

Headword:
Short codes II/INTERDIGITAL

Relevant legal provisions:
EPC Art. 123(2)
EPC R. 99(2)

Keyword:
"Admissibility of appeal - yes"
"Added subject-matter - no (after amendment)"
Case Number: T 1186/12 - 3.5.03

DECISION
of the Technical Board of Appeal 3.5.03
of 7 May 2013

Appellant: InterDigital Technology Corporation
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Decision under appeal: Decision of the examining division of the European Patent Office posted 6 December 2011 refusing European patent application No. 07009968.4 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: F. van der Voort
Members: B. Noll
R. Moufang
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application no. 07009968.4 (publication number EP 1814237 A2) which was filed as a divisional application relating to earlier European patent application no. 04010946.4, itself a divisional application of European patent application no. 00111007.1, which is a divisional application of European patent application no. 97930175.1.

II. The reason given for the refusal was that the application did not contain claims (Article 97(2) and 78(1)(a) EPC) because the set of claims as filed during the oral proceedings by way of replacement had not been admitted by the examining division into the examination proceedings. More specifically, the following reasons were given in the impugned decision:

"2 In the following an explanation why the request was not admitted under Rule 116(1) EPC is given.

The new request has been presented during the oral proceedings and is thus a late filed new fact. According to Rule 116(1) EPC it is under discretion of the examining division to admit such request. The examining division usually admits such late filed request only if, prima facie it overcomes most of the preceding objections, is not re-introducing prior objections, and does not lead to new objections. However, with regard to the new request it is considered that these conditions for admissibility are not fulfilled, because prima
facie some objections to Articles 123(2) and 84 which had been raised within the minutes of the telephone interview have still to be raised in a correspondent manner, other objections have to be re-raised and new objections have to be raised as well.

2.1 The paragraphs [41]-[49] merely indicate an unambiguous basis for continuously searching for a short code repeatedly transmitted by the subscriber unit while increasing transmission power and short code having a much shorter period than a conventional spreading code and once the power increase has achieved the minimum short code power level for reception the short code and the proper (or correct) phase of the short code is detected, the subscriber unit ceases increasing transmission power and transmitting the short code.

However, the claim does not contain the underlined features. It merely claims very general:

A method in a base station ... comprising:

... continuously searching for any short code transmitted in any manner (e.g. once or randomly without any power increase) by the subscriber unit

detecting the short code when the minimum short code power level has been achieved at the correct phase for detection.

Therefore prima facie Article 123(2) EPC is infringed.
2.2 Moreover, without any power increase the expression "the minimum short power level been achieved" has no clear antecedent and the relative expression minimum power level" is unclear (Article 84 EPC) and could even be misinterpreted as any start power level as in col. 10, l. 5-8.

2.3 Moreover, as mentioned in prior communications the expression "short code" is an unclear relative term (Article 84 EPC). This issue had already been discussed within the procedure and partly overcome, but here the clarification objection has to re-introduced again. Clarification could be "short code having a much shorter period than a conventional spreading code".

2.4 With regard to Article 123(2) EPC prima facie correspondent objections as for power increase of the short code transmission concern also the power increase of the access code transmission. Moreover there is only originally disclosed the access code being a spreading code.

2.5 The new introduced features the different expressions "correct phase of short code" and "proper phase of access code" lead to an uncertain scope and thereby to new objections (Article 84 EPC).

2.6 The introduced features "searching for a proper phase of an access code, ..., detecting the proper phase of an access code" are generalized in a manner which extends beyond the original disclosure of the application, because an
embodiment of a base station is claimed, where the base station performs a short code search and detection in combination with any access code search and detection (Article 123(2) EPC).

In paragraphs [41] to [49] which are directed to figures 6A-6B there is only unambiguously disclosed a searching and detection of the access code with two specific relations between the phases of the access - and short code. In particular,

(i) the start of the short code and the start of the access code are synchronized and

(ii) the phase of the access code is an integer multiple of N chips from the phase of the short code, where N is the length of the short code, see paragraph [45].

With such relations between both codes the base station is merely required to search the access code every N chips, where N is the length of the short code, whereby the base station quickly detects the access code.

The claim clearly extracts from paragraphs [41]-[49] and figures 6a-6b the steps 150, 152, 162, 164, but combines them with any kind of searching for the access code. However, figure 6a and related paragraphs of the description merely unambiguously disclose to combine those steps 150, 152, 162, 164 with a specific access code search, namely those of step 170.
2.7 To sum up the new request is not admissible, since the late filed request prima facie still not overcomes a lot of the preceding objections and leads to new objections with regard to Articles 123(2) and 84 EPC.

2.8 The applicant wanted to maintain this request as the only request. However, as pointed out the request is not admissible with regard to Rule 116(1) EPC. Thus the application, since is lacking of an admitted set of claims, is not fulfilling the requirement of Article 78 (1) (c) EPC.

Therefore the application is refused under Article 97(2) EPC."

III. In the notice of appeal the appellant requested that the impugned decision be set aside. Furthermore, a request for oral proceedings was made.

IV. With the statement of grounds the appellant filed a new set of claims. The appellant requested that a patent be granted on the basis of this new set of claims.

V. In a communication accompanying the summons to oral proceedings the board drew the appellant's attention to issues which might be discussed in the oral proceedings, concerning, inter alia, the admissibility of the appeal and the question of whether or not the claims met the requirements of Articles 76, 84 and 123(2) EPC.

VI. With a letter dated 5 April 2013 the appellant filed, by way of replacement, a new set of claims and submitted supporting arguments.
VII. Oral proceedings were held on 7 May 2013. In the course of the oral proceedings the appellant replaced the claims on file with claims of a new sole request.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 and 2 of the new sole request filed at the oral proceedings.

At the end of the oral proceedings, after deliberation, the board's decision was announced.

VIII. Claim 1 as filed with the statement of grounds of appeal read as follows:

"A system comprising:

a subscriber unit for controlling transmission power during establishment of a channel in a code division multiple access communication system by utilizing the transmission of a short code, which has a much shorter period than a conventional spreading code and carries no data, during initial power ramp up to limit power overshoot and interference and allow quick synchronization with a base station, the subscriber unit comprising:

means for transmitting the short code to a base station at a transmission power level that is lower than a power level required for detection by the base station;

means for quickly increasing said transmission power and repeatedly transmitting the short code until the short code is detected by the base station;
means for periodically and dynamically selecting and updating the short code during the ramp up of transmission power of the short code; and
means for ceasing increasing the transmission power of the short code upon receipt of an indication from the base station; and
the base station comprising:
means for detecting the short code and sending the indication to the subscriber unit to cease increasing transmission power."

Claims 1 and 2 as filed during the oral proceedings before the board read as follows:

"A system comprising:
a subscriber unit (16) for controlling transmission power during establishment of a channel in a code division multiple access communication system (10) by utilizing the transmission of a short code, which has a much shorter period than a conventional spreading code, during initial power ramp up to limit power overshoot and interference and allow quick synchronization with a base station (14),
the subscriber unit comprising:
means (90;158) for transmitting the short code to a base station (14) at a transmission power level that is lower than a power level required for detection by the base station;
means (160) for quickly increasing said transmission power and repeatedly transmitting the short code until the short code is detected by the base station; and
the base station comprising:
means (62) for transmitting the indication to the subscriber unit to cease increasing transmission power once the short code has been detected."; and

"A method performed by a system for controlling transmission power of a subscriber unit (16) during establishment of a channel in a code division multiple access communication system (10) by utilizing the transmission of a short code, which has a much shorter period than a conventional spreading code, during initial power ramp up to limit power overshoot and interference and allow quick synchronization with a base station (14), the method comprising:

transmitting (158) the short code by the subscriber unit to a base station at a transmission power level that is lower than a power level required for detection by the base station;

quickly increasing (160) said transmission power and repeatedly transmitting the short code; and

transmitting an indication by the base station to the subscriber unit to cease increasing transmission power once the short code has been detected."

**Reasons for the Decision**

1. **Admissibility of the appeal**

1.1 Rule 99(2) EPC requires that in the statement of grounds of appeal the appellant indicate the reasons for setting aside the decision impugned, or the extent to which it is to be amended, and the facts and evidence on which the appeal is based. The statement must set out clearly and concisely the reasons why it
is requested that the decision under appeal be reversed, Article 12(2) RPBA. Further, it is established case law that claims filed with the statement of grounds of appeal may suffice for an appeal to be admissible in this respect, even if the statement of grounds of appeal does not explicitly set out why the decision under appeal is alleged to be incorrect, provided that the claims clearly overcome the objections on which the refusal was based and thereby deprive the contested decision of its basis.

1.2 The board notes that in the statement of grounds of appeal the appellant did not directly contest the correctness of the decision under appeal. Rather, the appellant argued that the claims as filed with the statement of grounds of appeal complied with, inter alia, the requirements of Articles 84 and 123(2) EPC (cf. points 3 and 4 of the statement of grounds of appeal) and, hence, implicitly argued that thereby the objections identified in points 2.1 to 2.6 of the impugned decision were overcome.

1.3 In the board's view, in the present case, claim 1 as filed with the statement of grounds of appeal (see point VIII supra) clearly overcomes the objections as raised by the examining division in points 2.1 to 2.6 (see point II supra) of the decision under appeal. The reasons are as follows:

- the objections in points 2.1, 2.4 and 2.6 of the reasons of the impugned decision have ceased to apply since claim 1 as filed with the statement of grounds is no longer based on paragraphs [0041] to [0049] of the
description but on paragraph [0014] (reference is made to the application as published), see point 2.1 infra;

- the objections of lack of clarity raised in points 2.2, 2.3 and 2.5 of the impugned decision do no longer apply to the wording of claim 1 as filed with the statement of grounds of appeal, since the expressions in question have each been replaced.

Consequently, claim 1 as filed with the statement of grounds of appeal has deprived the contested decision of its basis in that the underlying reasons which led the examining division to refuse to admit the claims into the examination proceedings were clearly overcome by the amendment.

1.4 Since the remaining requirements concerning the admissibility of an appeal (cf. Rule 101(1) EPC) are also met, the appeal is admissible.

2. Amendments (Articles 84 and 123(2) EPC)

2.1 Claim 1 is based on the description, paragraph [0014], in particular column 3, line 46 to column 4 line 2 (cf. the application as published). Claim 2 relates to a method, the steps of which correspond to the system features of claim 1.

2.2 Therefore, claims 1 and 2 comply with the requirement of Article 123(2) EPC.

3. Since none of the objections in points 2.1 to 2.6 of the impugned decision apply to present claims 1 and 2
(for the same reasons as set out above in point 1.3), the decision under appeal is to be set aside.

4. In view of the above and in view of the fact that the impugned decision is silent on the requirements concerning novelty and inventive step - the examining division informed the applicant during a telephone consultation on 18 October 2011 that examination of novelty and inventive step would be deferred - the board considers it appropriate to remit the case to the department of first instance for further prosecution on the basis of the present set of claims, Article 111(1) EPC. For the purposes of further prosecution, the board notes that it may also be necessary to examine whether or not the claims comply with the requirements of Article 84 EPC.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution on the basis of claims 1 and 2 of the new sole request as filed during the oral proceedings.

The Registrar: The Chairman:

G. Rauh F. van der Voort