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Datasheet for the decision of 5 October 2007

Case Number: T 1194/03 - 3.5.03

Application Number: 98954346.7

Publication Number: 1119945

IPC: H04L 12/28

Language of the proceedings: EN

Title of invention:
Frame control method and apparatus

Applicant:
Nokia Corporation

Opponent:
-

Headword:
Transport frame control/NOKIA

Relevant legal provisions:
EPC Art. 84, 123(2), 111(1)

Keyword:
"Remittal for further prosecution (after amendment)"

Decisions cited:
-

Catchword:
-

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Case Number: T 1194/03 - 3.5.03

D E C I S I O N
of the Technical Board of Appeal 3.5.03
of 5 October 2007

Appellant: Nokia Corporation
Keilalahdentie 4
FI-02150 Espoo (FI)

Representative: Faller, Jürgen
TBK-Patent
Bavariaring 4-6
D-80336 München (DE)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 20 June 2003 refusing European application No. 98954346.7 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: A. S. Clelland
Members: D. H. Rees
R. Moufang

Summary of Facts and Submissions

I. This is an appeal against the decision of the examining division announced in oral proceedings held on 22 May 2003, with written reasons dispatched on 20 June 2003, to refuse patent application number 98 954 346.7, publication number 1 119 945. The reason given for the refusal was that the subject-matter of the independent claims of all the applicant's requests did not involve an inventive step *inter alia* with respect to the disclosure of document

D2: WO 97/16890 A

II. Notice of appeal was filed and the fee paid on 06 August 2003. A statement setting out the grounds of the appeal was submitted on 23 October 2003.

III. After a number of procedural steps including oral proceedings, the appellant submitted the present set of claims and amendments to the description on 02 August 2007. The independent claims read as follows:

"1. A transport frame control method for transmitting data units (TB) via a dedicated channel between a base station subsystem (2) and a radio network controller (3) of a mobile communication system (6), the transport frame control method comprising the steps of:
(a) receiving parameters and deriving connection characteristics for the transmission from the received parameters,
(b) selecting a transport frame type in accordance with the connection characteristics,

(c) receiving data units to be transmitted via the dedicated channel, and
(d) encapsulating said data units (TB) into transport frames according to the selected frame type;
wherein a plurality of said transport frame types each comprise a plurality of formats for transport frames including specific control information fields of the transport frame and their number of bits,
wherein said specific control information fields include a transport format indicator field, the value of which indicates which of said plurality of formats the transport frame has, the number of bits of said transport format indicator field varying among the plurality of transport frame types, and
wherein the value of said transport format indicator field also defines if and how a whole original data unit set is split into different data units to be transported via said dedicated channel."

"8. A transport frame control apparatus for transmitting data units (TB) via a dedicated channel between a base station subsystem (2) and a radio network controller (3) of a mobile communication system (6), the transport frame control apparatus comprising:
(a) receiving means (11) configured to receive parameters and derive connection characteristics for the transmission from the received parameters,
(b) selecting means (13) configured to select a transport frame type in accordance with the connection characteristics,
(c) receiving means (11) configured to receive data units to be transmitted via the dedicated channel, and

(d) frame generating means (12) configured to encapsulate said data units (TB) into transport frames according to the selected frame type;
wherein a plurality of said transport frame types each comprise a plurality of formats for transport frames including specific control information fields of the transport frame and their number of bits,
wherein said specific control information fields include a transport format indicator field, the value of which indicates which of said plurality of formats the transport frame has, the number of bits of said transport format indicator field varying among the plurality of transport frame types, and
wherein the value of said transport format indicator field also defines if and how a whole original data unit set is split into different data units to be transported via said dedicated channel."

IV. In the same submission the appellant requested:

as a main request, that the decision under appeal be set aside and a patent be granted on the basis of

claims 1 to 8 filed with the submission,

description pages
1, 2, 4, 5, 7, 10 and 11 filed with the submission,
3, 6, 8, 9 and 12 as originally filed, and

drawing pages 1 and 2 as originally filed;

as a first auxiliary request, that the decision under appeal be set aside and the case be remitted to the

examining division for further prosecution on the basis of the same documents; and

as a second auxiliary request, oral proceedings in case the board of appeal neither intended to grant the patent nor to remit the case to the examining division.

Reasons for the Decision

1. *Clarity*

1.1 The description of the application identifies the preferred embodiment of the claimed invention as relating to a WCDMA system for UMTS mobile telecommunications systems (page 1 lines 11 to 13), specifically communication of user plane data entities ("transport blocks") between a radio network controller and a base station (page 2 line 36 to page 3 line 1), using ATM with AAL2 as a transport mechanism (page 6 lines 16 and 17). The terms "transport frame", "dedicated channel", "data units", "transport format indicator", etc., are well-defined in the context, as may be recognised from the standards and proposals for UMTS which had been published at the priority date. Moreover the use of a combination of these terms in the claims would, in the board's view, indicate clearly to the person skilled in the art the field of the invention.

1.2 Given that the skilled person would understand that the claimed subject-matter concerns UMTS and related technologies, the board considers that the claims are clear.

1.3 In the course of the procedure the board raised several issues relating to the lack of clarity of the description. The description as a whole is not clearly formulated. However once it is realised that terms are being used as defined in UMTS rather than with their everyday meanings and that knowledge of specific features of UMTS proposals is presumed of the reader (e.g. at page 6 lines 6 to 13), the problems in interpreting the description are reduced. The remaining lack of clarity is not considered by the board to be such that finally the claimed subject-matter is brought into doubt (Article 84 EPC) or that the invention is not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 83 EPC).

2. Disclosure of the claimed subject-matter in the application as filed

2.1 Present independent claim 1 is a combination of the features of originally filed claims 1 to 4 and 7 with a number of clarifications and additions.

2.1.1 "A frame control method" has been replaced by "a transport frame control method", making clear that the term "frame" is being used in the sense in which it is defined in UMTS.

2.1.2 "Data unit" has been replaced by "data units". This is disclosed at page 8 lines 4 to 6 (references here and below are to the application as filed).

2.1.3 Communication between a base station subsystem and a radio network controller is disclosed at page 2 line 36 to page 3 line 1.

2.1.4 That the communication system is "mobile" is disclosed at page 1 lines 11 to 13.

2.1.5 That the parameters are "received" and the connection characteristics derived from them is disclosed at page 8 lines 33 to 35, together with original claim 7.

2.1.6 That the data units are received is disclosed at e.g. page 8 line 26 ("the supplied TBs").

2.1.7 The term "bit number", used in original claims 2 and 3, has been replaced by "number of bits", to make clear that it is the size of fields which is being referred to rather than their position in the frame. That this was the intended meaning is clear from e.g. page 9 lines 23 to 25.

2.1.8 That there are a plurality of frame types each having in turn a plurality of formats for transport frames and that in the transport frames there is a "transport format indicator" field, the size of which varies between frame types, is disclosed at page 10 lines 13 to 36.

2.2 Claim 8 is a corresponding apparatus claim, based on original claim 11 and the same additional sources as for claim 1.

2.3 Dependent claims 2 to 7 correspond to original claims 5 to 10.

2.4 Most of the amendments to the description merely serve the purpose of bringing the description into correspondence with the presently claimed subject-matter. An ambiguous paragraph on page 10 (original lines 7 to 11) has been deleted in response to an objection raised by the board.

3. *Novelty and inventive step*

3.1 In the view of the board none of the requests dealt with by the examining division clearly specified the features of providing different frame types for a single dedicated channel between a base station and a radio network controller, the different frame types being appropriate for different types of connection or service and having different size transport format indicator fields. It is noted that the independent claims of the second auxiliary request before the examining division did specify "a transport format indicator field the bit number of which is determined on the basis of the number of different transport format indicators allowed", but then qualified this with "for said dedicated channel", which was incorrect. To reflect the invention described, this should have specified "for the frame type coding". Moreover these claims did not specify where in the system the transmission took place, i.e. between the base station subsystem and the radio network controller. Thus the examining division was not in a position to explore fully the questions of novelty and inventive step of the subject-matter as presently claimed.

3.2 As a decision on these questions may require a further search of the prior art, *inter alia* to establish what was the state of UMTS proposals at the present priority date, it is appropriate to remit the case for further examination pursuant to Article 111(1) 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 the main request.

The Registrar: The Chairman:

D. Magliano A. S. Clelland