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**Datasheet for the decision
of 19 June 2015**

Case Number: T 1871/13 - 3.5.02

Application Number: 11164133.8

Publication Number: 2365636

IPC: H03M13/05, H03M13/11

Language of the proceedings: EN

Title of invention:

Structured LDPC design with vector row grouping

Applicant:

Motorola Mobility LLC

Relevant legal provisions:

EPC Art. 84

Keyword:

Claims - clarity (no)
Double-patenting (yes)

Decisions cited:

G 0001/06



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

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Case Number: T 1871/13 - 3.5.02

**D E C I S I O N
of Technical Board of Appeal 3.5.02
of 19 June 2015**

Appellant: Motorola Mobility LLC
(Applicant) 600 North US Highway 45
Libertyville, IL 60048 (US)

Representative: Openshaw, Paul Malcolm
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 28 March 2013 refusing European patent application No. 11164133.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman M. Ruggiu
Members: R. Lord
R. Cramer

Summary of Facts and Submissions

- I. This is an appeal of the applicant against the decision of the examining division to refuse European patent application No. 11 164 133.8. The reason given for the refusal was that the subject-matter of claim 1 lacked novelty (Article 54 EPC).
- II. In a communication accompanying a summons to oral proceedings dated 20 March 2015 the board informed the appellant *inter alia* that the objections raised in the communication of 11 November 2013 in appeal case T 1880/12 (concerning the earlier European patent application number 05 778 539.6, of which the present application is a divisional application) applied correspondingly to the present case, and that if those objections were overcome, then the resultant claims would, seen in combination with the claims of the patent granted on the basis of that earlier application, contravene the established prohibition of double-patenting.

The appellant did not reply in substance to the communication of 20 March 2015.

Oral proceedings before the board took place on 19 June 2015, at which, as indicated in the letter dated 31 March 2014 (which was actually sent and received on 31 March 2015), the appellant was not represented.

The appellant requested in writing that the decision under appeal be set aside and further implicitly requested that a patent be granted on the basis of the application documents as originally filed.

III. Claim 1 according to the appellant's sole request reads as follows:

"A method for operating a transmitter that generates parity-check bits $\mathbf{p}=(p_0, \dots, p_{m-1})$ based on a current symbol set $\mathbf{s}=(s_0, \dots, s_{k-1})$, the method comprising the steps of:

receiving the current symbol set $\mathbf{s}=(s_0, \dots, s_{k-1})$;
using a matrix \mathbf{H} to determine the parity-check bits; and
transmitting the parity-check bits along with the current symbol set;

wherein \mathbf{H} is an expansion of a base matrix \mathbf{H}_b via a model matrix \mathbf{H}_{bm} , wherein \mathbf{H}_b comprises m_b rows, a section \mathbf{H}_{b1} and a section \mathbf{H}_{b2} , and \mathbf{H}_{b2} comprises column \mathbf{h}_b having weight $w_h \geq 3$ and \mathbf{H}'_{b2} having a dual-diagonal structure with matrix elements at row i , column j equal to 1 for $i=j$, 1 for $i=j+1$, and 0 elsewhere;
wherein 1's of \mathbf{h}_b and \mathbf{H}_{b1} are arranged such that one or more groups of the rows of \mathbf{H}_{bm} can be formed so that rows of \mathbf{H}_{bm} within each group do not intersect; and
wherein the rows of base matrix \mathbf{H}_b can be permuted such that every two consecutive rows do not intersect."

IV. The appellant essentially argued as follows:

The terminology "not intersecting" used in the application was a common mathematical terminology, and had moreover been defined additionally in the specification, e.g. at page 3, lines 32 to 34 of the application as originally filed.

Reasons for the Decision

1. The appeal is admissible.
2. The board considers that the expression "do not intersect", used in claim 1 with respect to the rows of the model matrix in the last two definitions of that claim, is not clear. The board agrees with the appellant that terms such as "non-intersecting" and "do not intersect", which are used as equivalents in the application, are indeed common mathematical terminology. However, the board also understands that in the context of matrices, they can have a variety of possible meanings, not only that defined at page 3, lines 32 to 34 of the application as originally filed. Since it is clear from the description of the present application that only that specific meaning is applicable in the context of the claimed invention, the claim does not clearly define that invention, and thus does not meet the requirements of Article 84 EPC.
3. For the sake of completeness, the board notes also that if this objection were overcome in a manner similar to that adopted in the case of the earlier application referred to in section II above, then the subject-matter of the resultant claim 1 would be identical to that of claim 2 of the patent granted on the basis of that earlier application (European patent number 1 829 222 B1). Such a claim would therefore contravene the established prohibition of double-patenting (see for instance the decision of the Enlarged Board of Appeal G 0001/06, published in OJ 2008, 307, paragraph 13.4 of the reasons).
4. Therefore the appellant's sole request is not allowable, so that the appeal has to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



U. Bultmann

M. Ruggiu

Decision electronically authenticated