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**Datasheet for the decision
of 1 February 2017**

Case Number: T 0680/13 - 3.5.03

Application Number: 07025057.6

Publication Number: 2073598

IPC: H04W88/06, G06F13/40

Language of the proceedings: EN

Title of invention:

Technique for providing network access to different entities

Applicant:

Telefonaktiebolaget LM Ericsson (publ)

Headword:

Wireless network access/ERICSSON

Relevant legal provisions:

EPC Art. 56, 84, 111(1)

Keyword:

Claims - clarity (yes)
Inventive step - (yes)



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Case Number: T 0680/13 - 3.5.03

D E C I S I O N
of Technical Board of Appeal 3.5.03
of 1 February 2017

Appellant: Telefonaktiebolaget LM Ericsson (publ)
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 23 October 2012 refusing European patent application No. 07025057.6 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman F. van der Voort
Members: B. Noll
S. Fernández de Córdoba

Summary of Facts and Submissions

- I. This appeal is against the decision of the examining division refusing European patent application No. 07025057.6 (publication number EP 2 073 598 A1).
- II. The refusal was based on the ground that claim 1 of a main request lacked clarity (Article 84 EPC; cf. reasons for the decision, points 9.1, 9.3 and, in conjunction with Rule 46(2) (i) EPC, point 9.5). Three reasons were given. Some or all of these reasons applied *mutatis mutandis* to claims 1 of auxiliary requests 1 to 6 (points 12 to 17, 21 and 23 of the reasons).
- III. In an *obiter dictum*, the examining division added that if claim 1 of the main request were clarified, its subject-matter would lack inventive step (point 10 of the reasons) having regard to the following documents:

D2: US 2007/0173283 A1; and

D5: WO 2006/108174 A2.
- IV. With the statement of grounds of appeal the appellant filed sets of claims of a main request and three auxiliary requests. Oral proceedings were conditionally requested.
- V. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request or, in the alternative, on the basis of the claims of one of the auxiliary requests.

In a telephone call between the rapporteur and the appellant's representative on 1 February 2017, the appellant declared that the request for oral proceedings was not maintained if the board were to decide to set the decision aside and to remit the case to the department of first instance for further prosecution.

VI. Claim 1 of the main request reads as follows:

"An apparatus (100) for providing network access, the apparatus (100) comprising:

- a first platform module (104) adapted to support network access via a first Radio Access Technology, or RAT, and comprising a first data interface (112);
- a second platform module (106) co-located with the first platform module (104) in the apparatus (100) and adapted to support network access via at least one second RAT;
- a first application (120) residing on the apparatus (100) and deployed within the second platform module (106) or on an application platform module coupled to the second platform module (106);
- a second data interface (164) adapted to be coupled to the second platform module (106);

characterized by

- a third data interface (160') adapted to be coupled to an external device (102), wherein the device (102) is external with respect to the apparatus (100) and comprises a second application (142); and
- a switching hub (116) comprising the second data interface (164) and third data interface (160), the switching hub (116) having at least a first switching state and a second switching state and realizing a first switching mechanism (170, 172) adapted to

selectively couple the first data interface (112) to at least one of

- i. the second data interface (164) in the first switching state to provide network access, via the first RAT, over a first data path and via the second platform module (106), to the first application (120) residing on the apparatus (100) and
- ii. the third data interface (160') in the second switching state to provide network access, via the first RAT, over a second data path to the second application (142) residing on the external device (102)."

In view of the board's decision (see below), the claims of the auxiliary requests need not be reproduced here.

Reasons for the Decision

1. *Claim 1 of the main request - clarity (Article 84 EPC)*
 - 1.1 The clarity objections raised in the impugned decision have been overcome for the following reasons:
 - 1.2 The feature in claim 1 relating to the first application residing on the apparatus specifies that the first application is deployed within the second platform module or on an application platform module coupled to the second platform module. This feature is based on paragraph [0044] of the description as filed (reference is made to the application as published) and removes an ambiguity as regards the location of the first application, which in the view of the examining division gave rise to a lack of clarity.

- 1.3 The features relating to the switching hub following the second indent in the characterising portion of claim 1 specifies that the hub has first and second switching states which are further defined in points i and ii, respectively, of the claim. This amendment overcomes the objection of the examining division against claim 1 of the main request underlying the impugned decision, i.e. the claim could be understood as embracing an apparatus in which the switching mechanism only coupled the first interface to the second interface.
- 1.4 Present claim 1 includes reference sign "160'" for the third data interface. This modification overcomes the objection raised at point 9.5 of the impugned decision.
- 1.5 The objections on which the refusal of the application was based have therefore been overcome.
- 1.6 The board is satisfied that claim 1 meets the requirements of Article 84 EPC.
2. *Claim 1 of the main request - inventive step (Article 56 EPC)*
 - 2.1 In the present case, the board considers it appropriate to address the inventive step objection raised *obiter dictum* in the impugned decision.
 - 2.2 D2 (cf. the abstract) relates to a multiple radio access technology apparatus for providing a user with access to different radio access networks. D2 is in the same technical field as the application and a suitable starting point for assessing inventive step. Figs 6 to 10 show embodiments relevant to the subject-matter of present claim 1. More specifically, D2 discloses an

apparatus (terminal equipment 600'' and communication device 605'', see also Fig. 10) comprising a first platform module (UMTS unit 705) adapted to support network access via a first RAT and comprising a first data interface (cf. Fig. 10). The apparatus further comprises a second platform module (WiMAX 710) collocated with the first platform on the apparatus and adapted to support network access via a second RAT (IEEE 802.16). The apparatus further includes a first application which is deployed on the terminal equipment 600'' (any of the "FILE DL FTP", WEB BROWSING HTTP" and "E-MAIL" applications indicated in the topmost block in terminal equipment block 600'' in Fig. 10). Terminal equipment 600'' is therefore an application platform module coupled to the second platform module within the meaning of claim 1. D2 further discloses a second data interface which is adapted to be coupled to the second platform module and which includes the link between blocks 710 and 800B in Fig. 10. A mobility middleware core module 800B (cf. paragraph [0078]) constitutes a switching hub within the wording of claim 1 and includes the second data interface (link between mobility middleware core module and block 710). Having regard to its function of determining which radio is to be activated and used for data transfer (cf. paragraph [0070]), the mobile middleware core module implicitly has first and second switching states, in which it selectively couples the first application residing on the apparatus to the first or the second platform modules via the first or second interface, respectively.

2.3 Accordingly, the apparatus of claim 1 differs from the above apparatus disclosed in D2 by the following features:

- the apparatus comprises a third data interface adapted to be coupled to an external device, wherein said device is external to the apparatus and comprises a second application; and
- the switching hub also comprises the third data interface and is adapted to selectively couple the first data interface to at least one of:
 - i. the second data interface in the first switching state to provide network access, via the first RAT, over a first data path and, via the second platform module, to the first application residing on the apparatus; and
 - ii. the third data interface in the second switching state to provide network access, via the first RAT, over a second data path to the second application residing on the external device.

2.4 The technical problem to be solved may therefore be formulated as further increasing the flexibility and versatility of the apparatus disclosed in D2.

2.5 Starting out from D2, the skilled person would firstly have to modify the apparatus of D2 in order to provide applications not only on a single application platform module but by distributing them, putting a second application on an external device adapted to be coupled to the third data interface. The skilled person would further have to modify the switching hub of the known apparatus and implement the switching mechanism as specified by features i and ii above. There is, however, no hint in D2 which would lead the skilled person, when faced with the above technical problem, to provide any application other than on the application platform module, which in D2 is constituted by terminal

equipment 600''. In this respect, the board notes that D2 teaches a clear separation of application and radio network access, i.e. by providing applications solely in the terminal equipment 600'' (see Fig. 8) and providing radio network access by the communication device 605''.

- 2.6 The board further notes that document D5 discloses a USB hub (119, see Fig. 3) for dual-role peripheral devices communicating over a Universal Serial Bus either as a master or a slave. A dual-role device may be a USB printer which communicates as a host with a USB camera to print pictures from the camera, or as a slave with a computer (cf. page 1, lines 27 to 35).

Even if the skilled person were to consider D5 and were to apply the teaching of D5 to D2, he would not arrive at the claimed subject-matter. The skilled person would firstly have to modify the apparatus disclosed in D2 so that applications are distributed, by putting a second application on an external device adapted to be coupled to the third data interface. The skilled person would also have to recognise that the configuration obtained requires switched connections between interfaces analogous to switching of connections for accessing a dual mode device, and would have to configure the switching of connections as set out in claim 1. However, D5 contains no suggestion whatsoever of these considerations, which would thus be based on hindsight. Consequently, the skilled person starting out from D2 and further considering D5 would not arrive at the apparatus as claimed in claim 1 without the exercise of inventive skill.

- 2.7 In point 10 of the reasons of the impugned decision, the examining division expressed the view that the

terminal equipment 600'' in Fig. 8 in D2 could be considered to be a second platform module adapted to support network access via a second RAT. In the view of the examining division, D2 disclosed that the terminal equipment could be a laptop and it was implicit that a laptop included WLAN access. It further stated that the terminal equipment corresponded to a wireless transmission/reception unit WTRU as mentioned in paragraph [0021] of D2, which could be a cellular telephone. In the view of the examining division, a cellular telephone implicitly included radio access technology for a cellular network.

2.8 The board does not share the examining division's view, since there is no hint in D2 that the terminal equipment 600'' in Fig. 8 includes a further wireless access separate from the wireless communication device 605''. Further, the examining division's assumption of a further, hypothetical or implicit, wireless communication device within the terminal equipment 600'' would raise new issues as to whether routing of application data is to be implemented either via the communication device 605'' or via the hypothetical or implicit communication device. However, the skilled reader would appreciate from Fig. 10 of D2 that any wireless data traffic between terminal equipment 600'' and any wireless network was routed via the wireless communication device 605''. Therefore, the understanding of the examining division that the terminal equipment 600'' would comprise an additional wireless access communication device actually goes against the teaching of D2.

2.9 The apparatus of claim 1 therefore involves an inventive step (Article 56 EPC) having regard to D2 in combination with D5.

3. *Remittal (Article 111(1) EPC)*

Since the objections on which the refusal of the application were based have been overcome and the *obiter dictum* inventive-step objection is not considered convincing, the board considers it appropriate to remit the case for further prosecution on the basis of the main request.

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:



G. Rauh

F. van der Voort

Decision electronically authenticated