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**Datasheet for the decision  
of 22 March 2013**

**Case Number:** T 1459/10 - 3.5.03

**Application Number:** 05105404.7

**Publication Number:** 1617688

**IPC:** H04Q 7/24, G06F 9/445,  
H04N 7/00

**Language of the proceedings:** EN

**Title of invention:**  
Upgrading programs in a wireless communication system

**Applicant:**  
Samsung Electronics Co., Ltd.

**Headword:**  
Program update/SAMSUNG

**Relevant legal provisions:**  
EPC Art. 56  
EPC R. 115(2)

**Keyword:**  
"Inventive step (main and auxiliary request) - no"



**Case Number:** T 1459/10 - 3.5.03

**D E C I S I O N**  
**of the Technical Board of Appeal 3.5.03**  
**of 22 March 2013**

**Appellant:** Samsung Electronics Co., Ltd.  
(Applicant) 129, Samsung-ro  
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Suwon-si, Gyeonggi-do, 443-742 (KR)

**Representative:** Walaski, Jan Filip  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted 29 March 2010  
refusing European patent application  
No. 05105404.7 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman:** A. S. Clelland  
**Members:** B. Noll  
R. Moufang

## Summary of Facts and Submissions

I. This appeal is against the decision of the examining division to refuse European patent application No. 05105404.7 on the ground that the subject-matter of claims 1 to 25 of a main request, of claims 1 to 24 of a first auxiliary request and of claims 1 to 20 of a second auxiliary request lacked an inventive step (Article 56 EPC). Inter alia, the following documents were cited in the impugned decision:

D3: US 6,289,511 B1

D5: US 2002/0092018 A1

II. The notice of appeal and the statement setting out the grounds of appeal were filed on the same day, together with claim sets of a main request and an auxiliary request. Oral proceedings were conditionally requested.

III. In a communication accompanying a summons to oral proceedings the board gave its preliminary view on the case, inter alia on inventive step (Article 56 EPC).

IV. With a letter filed on 22 February 2013 the appellant submitted arguments in support of inventive step of the requests on file.

In a further letter filed on 21 March 2013 the appellant's representative informed the board that it would not attend the oral proceedings.

V. Oral proceedings before the board were held on 22 March 2013 in absence of the appellant.

The board understands the appellant's request as being that the impugned decision be set aside and a patent granted on the basis of the claims of the main request or, in the alternative, of the auxiliary request, both requests as filed together with the statement of grounds of appeal.

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

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

"A device (200, 500) comprising:

means (240, 540) for downloading upgrade program code from a memory card (200a), the upgrade program code comprising a first upgrade program for updating the device, a second upgrade program for updating another device (300, 600) and a common upgrade program for updating both said device and said other device;

the device being configured to upgrade itself using said first upgrade program and said common upgrade program, downloaded from the memory card using said means for downloading (240, 540), and

the device further comprising transmission means (220, 510) for transmitting said second upgrade program and said common upgrade program, downloaded from the memory card using said means for downloading (240, 540), to the other device (300, 600), wherein the device is one out of a set-top box and a television and said other device is the other one out of a set-top box and a television."

Claim 1 of the auxiliary request adds the following features:

"wherein the set-top box is operable to receive and process audio and video signals from an image source, and the television is operable to reproduce audio and video signals received from the set-top box, wherein the transmission means (220, 510) are wireless transmission means; and the device is configured to transmit the second upgrade program and said common upgrade program following the upgrade to the device."

### **Reasons for the Decision**

1. *Procedural matters*

The appellant was duly summoned to the oral proceedings, but did not attend; the board decided to continue the oral proceedings in the appellant's absence pursuant to Rule 115(2) EPC. The board is satisfied that Article 113(1) EPC has been complied with, since in the communication accompanying the summons to oral proceedings, the board's preliminary view on inventive step in respect of the requests on file was already given, so that the appellant had an opportunity to present its comments on it, and did so.

2. *Claim 1 of the main request - inventive step (Article 56 EPC)*

2.1 Regarding claim 1 of the main request the board considers it expedient to start out from D3 as the most relevant prior art document. D3 relates to hierarchical distribution of upgrade program code among elements in a communication network, which is considered as the

core aspect of the invention. A network element in D3, i.e. element 160 (Figure 2), which corresponds to the device as claimed in claim 1, downloads upgrade code for itself and for another device (network element 170) from a central managing system 110 (cf. column 7, lines 8 to 25). The general structure of the code is outlined in figure 3 and includes a specific part for each network element at a particular hierarchy level (e.g. A and B, see column 7 lines 20 to 25). The board further understands the load scripts 320 in D3 as corresponding to the "common upgrade program" in the terminology of claim 1 since the load script contains "instructions which dictate how the software is to be loaded" (column 6, lines 21 to 24). Since the network element 160 is adapted to upgrade itself and to transmit corresponding upgrade program code to subordinate units, the presence of transmission means in network element 160 in the sense of the wording of claim 1 is implicit. The board's understanding of the disclosure of D3 was not in fact contested by the appellant.

- 2.2 In the letter filed on 22 February 2013 the appellant argued rather that D3 was not suitable for use as the closest prior art since it did not relate to upgrading software at a television receiver or a set-top box. D3 related specifically to obtaining upgraded software from a centralized managing station over a network whereas a television or a set-top box as known before the priority date of the application was not commonly connected to a network. The skilled person would not therefore have considered D3 as providing a promising solution.

2.3 The board does not agree. Upgrading the software of a (stand-alone) television or set-top box is merely a specific example of the general case of a wireless communication system having a program update function, as is indeed apparent from the introduction to the description. The limitation in claim 1 to the claimed device being a television or a set-top box only serves to specify the type of the device which is to be upgraded without implying additional technical features or requirements. Such a limitation does not lead the skilled person to consider exclusively prior art in the field of upgrading software of a television or set-top box since, as noted above, there is no technical relationship between the device being specifically a television or a set-top box and the features in claim 1 relating to the upgrade of software, i.e. the means for downloading upgrade program code, the configuration of the upgrade program having first, second and a common upgrade programs, the configuration of the device to upgrade itself using the first and the common upgrade programs and comprising transmission means for transmitting the second and the common upgrade program to the other device. Therefore, the skilled person would consider D3 as an appropriate starting point for assessing inventive step.

2.4 Accordingly, the device as claimed in claim 1 differs from D3 by the following features:

- (a) the means for downloading upgrade program code from a memory card, and

(b) the device is one of a set-top box and a television and the other device is the other one out of a set-top box and a television.

2.5 In the board's view, feature (a) serves to specify a particular source from which the upgrade program code is downloaded while feature (b) serves to specify the type of devices for which upgrade program code is downloaded. Thus, the objective technical problem to be solved when starting out from D3 is considered by the board as to implement the upgrade procedure known from D3 for a particular set of devices and for a particular source of upgrade program code.

2.6 From D5 it is known to update the software of a set-top box by downloading upgrade program code from a storage device such as a memory stick (cf. paragraphs [0028-0029]). Therefore, the skilled person, starting out from D3 is taught by D5, that the claimed procedure can be carried out on a set-top box by way of a memory stick, and would thus arrive at a device as claimed in claim 1 without the exercise of inventive skill.

2.7 The appellant further argued that the skilled person starting out from D3 would be taught by this document to connect the device to be upgraded to a remote centralized managing station rather than obtain upgrade software from a memory stick. In the invention the use of a memory stick offered the advantage that no separate interface device such as a CD reader (if the software upgrade was available on a CD) or a network interface (if the software were to be upgraded over a communications network), was required to enable access of the set-top box to the upgrade software.



2.8 This argument is not convincing. D3 teaches the skilled person to access the upgrade software by using an existing interface. Whereas in D3 this interface is the network interface of the base station which is to be upgraded, the skilled person would appreciate that in D5 this interface is the media receiving apparatus 2000 in figure 3, which is already present in the set-top box. The skilled person would therefore have no reason to add a separate network interface to a set-top box for access to upgrade software. The argument is contrary to the teaching of both D3 and D5, each of which suggests using an existing interface.

2.9 In conclusion, the main request is not allowable since the subject-matter of claim 1 lacks an inventive step (Article 56 EPC).

3. *Claim 1 of the auxiliary request - inventive step (Article 56 EPC)*

3.1 At point 5 of the communication accompanying the summons to oral proceedings the following preliminary opinion regarding claim 1 of the auxiliary request was given by the board:

"It appears that the penultimate feature of claim 1 merely specifies in explicit words the normal use of a set-top box and a television, which is however implicit in the terms "set-top box" and "television". Therefore, this feature does not add anything in substance to the claimed device.

Regarding the feature of the transmission means being a wireless transmission means, it appears to be undisputed that wireless transmission of information between devices is generally known. The board cannot at present see any synergy in having upgrade program code transmitted via a wireless transmission. Implementing the transmission path as a wireless transmission appears to be a matter of non-inventive choice from known possibilities for the skilled person.

It further appears that the feature of transmitting the second upgrade program and the common upgrade program following the upgrade of the program corresponds to the description of the update procedure at column 7 lines 45 to 64 of D3. Therefore, this feature does not appear to further distinguish the claimed device from D3."

- 3.2 The appellant did not comment on this preliminary opinion. The board does not therefore see any reason to deviate from its preliminary opinion and, hence, maintains its view that the additional features in claim 1 of the auxiliary request do not add to an inventive step. Accordingly, the board concludes that the subject-matter of claim 1 of the auxiliary request lacks an inventive step (Article 56 EPC).
4. There being no allowable request on file, the appeal must be dismissed.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

G. Rauh

A. S. Clelland