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Datasheet for the decision of 15 September 2020

Case Number: T 1721/13 - 3.5.06

Application Number: 04253586.4

Publication Number: 1489502

IPC: G06F9/445

Language of the proceedings: EN

Title of invention:
Device and method for enabling the use of a device through a wireless interface.

Applicant:
CANON KABUSHIKI KAISHA

Headword:
Enabling a device through a wireless interface/CANON

Relevant legal provisions:
EPC Art. 123(2)
EPC 1973 Art. 56
RPBA 2020 Art. 13(1)

Keyword:
Amendments - added subject-matter (no)
Inventive step - (no)
Late-filed auxiliary requests - admitted (no)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 1721/13 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 15 September 2020

Appellant: (Applicant)	CANON KABUSHIKI KAISHA 3-30-2, Shimomaruko, Ohta-ku Tokyo (JP)
Representative:	Canon Europe Limited European Intellectual Property Group 3 The Square, Stockley Park Uxbridge UB11 1ET (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 4 March 2013 refusing European patent application No. 04253586.4 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	M. Müller
Members:	S. Krischer
	A. Jimenez

Summary of Facts and Submissions

I. The appeal is directed against the decision of the examining division dated 4 March 2013 to refuse application No. 04253586 for lack of inventive step (main request) over D1 (US 2003/48473 A1) in combination with D3 ("The Windows Interface Guidelines for Software Design", 1995, Microsoft Press, Redmond, Washington, 98052-6399, ISBN: 1-55615-679-0) and for added subject-matter in (then) auxiliary requests 1 and 2.

II. A notice of appeal was received on 30 April 2013. The appeal fee was paid the same day. A statement of grounds of appeal was received on 3 July 2013. Claims according to a main request were filed, and the claims according to an auxiliary request filed on 11 January 2013 were maintained.

III. In a communication dated 4 January 2019, the rapporteur raised an objection of lack of inventive step over D1.

IV. In a letter dated 12 March 2019, the appellant submitted arguments and filed claim sets according to a new main request and a new auxiliary request.

V. In its summons to oral proceedings, the board addressed these arguments and gave further reasons why the claims lacked inventive step.

VI. In a letter dated 6 August 2020, the appellant submitted further arguments and filed two new auxiliary requests (auxiliary requests 1 and 2). It also

maintained its main request and its current auxiliary request (renamed auxiliary request 3).

VII. Oral proceedings were held on 15 September 2020 in the form of a videoconference at the appellant's request in view of potential travel difficulties and restrictions and the current UK Government advice against all but essential international travel owing to the coronavirus (COVID-19) pandemic. At the end, the chairman announced the board's decision.

VIII. The appellant's final requests were that the decision be set aside and that a patent be granted on the basis of the claims according to:

- the main request, filed with its letter of 12 March 2019 (and refiled on 6 August 2020);
- auxiliary requests 1 or 2, both filed with its letter of 6 August 2020; or
- auxiliary request 3, filed with its letter of 12 March 2019 as "auxiliary request" (and refiled on 6 August 2020).

The other application documents are the same as indicated in the appealed decision.

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

"1. An information processing apparatus (11) communicable with at least one device or apparatus (12) having both a wire interface and a wireless interface (14), comprising:

first communication setting-executing means for executing a first communication setting (S300-S309) for enabling the device or apparatus to be controlled via the wire interface; and

second communication setting-executing means for executing, by communicating with the device or apparatus via the wire interface after execution of the first communication setting, a second communication setting (S1000-S1010; S1400-S1409) for enabling the information processing apparatus to communicate with the device or apparatus via the wireless interface,

wherein said second communication setting-executing means is arranged to receive, via the wire interface, communication setting information indicating access points searched by the device or apparatus, display the searched access points, and set one of the displayed access points to the device or apparatus."

XIII. Claim 1 of auxiliary request 1 differs from that of the main request in that the paragraphs after the paragraph starting with "second communication setting means" read (additions are underlined):

"wherein said second communication setting-executing means is arranged to receive, via the wire interface, communication setting information indicating access points searched by the device or apparatus, display the searched access points, and set one of the displayed access points to the device or apparatus by transmitting an information setting command via the wire interface,

wherein when an encryption key of said one of the access points is input at the information processing apparatus, said information setting command is also used to set the input encryption key."

XIV. Claim 1 of auxiliary request 2 differs from that of the main request in that the paragraphs after the paragraph

starting with "second communication setting means" read:

"wherein the second communication setting-executing means is arranged to transmit an access point search command via the wire interface, and

wherein said second communication setting-executing means is arranged to receive, via the wire interface, communication setting information indicating access points searched by the device or apparatus in response to the access point search command transmitted via the wire interface, display the searched access points, and set one of the displayed access points to the device or apparatus."

XV. Claim 1 of auxiliary request 3 differs from that of the main request in that the following has been added at the end of the claim:

"and
wherein said second communication setting-executing means comprises connection checking means for checking (S1004; S1406; S1414), via the wireless interface, whether or not connection of the information processing apparatus to the device or apparatus has been established during execution of the second communication setting."

Reasons for the Decision

1. *Summary of the invention*

The claimed invention relates to two consecutive installation steps on a *computer* (called "information processing apparatus (11)" in the claims and "notebook

PC" or "PC" in the original description, page 12, lines 21 and 25; see also figure 1: 11) and a *printer* (called "device or apparatus (12)" in the claims; see also page 12, line 25; figure 1: 12) in order to enable the sending of print jobs from the PC to the printer:

(a) *setting up a USB connection between the PC and the printer:* installing on the PC a port driver for USB printing (figure 3: S303) after the printer has been connected to the PC via a USB cable and a so-called "high-level printer driver" (S307) - see independent method claim 8 of the main request: the "first setting-executing step (S300-S309)", and corresponding means of the PC in apparatus claim 1; see also page 16, line 5 to page 20, line 24 for the steps in figure 3; in particular page 16, paragraph 3; page 18, lines 6-10 and page 19, first paragraph; for the user interaction see figures 2A and 2B;

(b) *setting up (from the PC by using the USB connection) a wireless LAN (local area network) connection between the printer and the wireless access point, guided by the user who is sitting in front of the PC:* see claim 8: "second setting-executing step (S1000-S1010; S1400-S1419)"; figure 13: S1000-S1010; page 33, line 10 to page 37, line 9; steps S1400-S1419 of figure 15 relate to a similar installation on a *second* PC; for the user interaction, see figures 8A-8C.

The installation works as follows: the user initiates a network installation (figure 8A: by clicking on button 70; page 33, third paragraph); upon request of the PC via the USB connection, the printer searches for wireless LAN access points and

transmits information about the detected access points to the PC via the USB connection (page 33, paragraph 3); at the PC, the user selects one of the transmitted access points for the printer (if more than one has been found; page 34, paragraph 3); after the selected access point has been sent via USB to the printer, the latter stores data about the access point (e.g. address, encryption key) in its settings (page 35, first paragraph); then the PC searches for the printer via the wireless LAN (second and third paragraph) and connects to it via wireless LAN (page 37, first paragraph).

2. *Added subject-matter*

2.1 Claim 1 of the present main request is based on that of auxiliary request 1 refused by the appealed decision and received on 11 January 2013. Both contain the step that the PC receives the access points found by the printer and "sets" one of them to the printer. In contrast to the refused auxiliary request, the present main request defines that PC 11 additionally *displays* the access points found by the printer; see figure 8B. On the other hand, the present main request does not contain the step of prompting the user as in the GUI window of figure 8A (asking whether to start the network installation after the driver installation: a step contained in both the refused main and auxiliary requests).

2.2 In the decision (17.1), claim 1 of auxiliary request 1 was objected to for added subject-matter. The explanation therein is very short. It cites the passage on page 34, line 27 to page 35, line 7. Contrary to the decision, the board is of the opinion that this passage

does indeed disclose the feature concerned of the then auxiliary request 1, as well as the similar feature in claim 1 of the present main request ("wherein said second ... means is arranged to receive ... access points ...").

2.3 Thus, the board has no objections as to added subject-matter in this regard.

3. *Inventiveness*

3.1 Claim 1 of all the requests can be summarised as follows: first configuring a PC to communicate over a wire interface with a printer, then - by using the wire interface - configuring (from the PC) the printer to communicate with the PC over a wireless interface, whereby access points searched for by the printer are displayed at the PC and one of them is set in the printer.

3.2 Main request

3.2.1 The appellant has not disputed that D1 ([31], lines 11 and 15-18) discloses a PC and a printer communicating with each other over a wire interface (e.g. USB) and a wireless interface.

3.2.2 In its letter of 12 March 2019 (page 2, fourth complete paragraph, first sentence), the appellant repeats the argument of the grounds of appeal (page 5, first paragraph) that the prior art does not disclose the idea of using an existing wire connection between PC and printer in order to configure a wireless one.

3.2.3 That is correct, but has not been called into question by the board. The only purpose of citing D1 is to show that at the priority date of the application there were printers having both a wire and a wireless interface to communicate with a PC over both interfaces (see figures 1 and 2, and paragraphs [31] to [33]). The appellant has not disputed that this was the case.

3.2.4 The board stresses that the rest of the disclosure of D1 is not important to its argument. In particular, it is immaterial for the board's argument that D1 discloses an invention meant to facilitate the installation of printer drivers for *novice users* (see [5], second sentence; [6], last sentence).

3.2.5 Thus, the claim differs from D1 in the two setting-executing means for setting up the wire interface (USB) of the PC and the wireless interface of the printer respectively.

3.2.6 In the board's opinion, the fact that the PC and the printer have two interfaces to communicate with each other implies that they have to be configured accordingly.

3.2.7 In the grounds of appeal (page 4, second paragraph), it is stated that D1 does not disclose a printer which searches for access points.

3.2.8 However, the board is not aware of any device (at the priority date of the application) using wireless LAN which does not search for access points and allow the user to select one. At the very least, since the selection of an access point is a fundamental configuration setting for a wireless LAN, having a user to configure it can be regarded as a "standard/

mandatory configuration step in order to enable a wireless LAN", as the decision (19.2) formulates it. In the present situation of a printer to be connected to the wireless LAN, it is obvious that the printer (and not the PC) should search for the access point. Furthermore, if the user were in front of the PC, it would be obvious to transmit the list of access points found by the printer to the PC for the user to select one and tell the printer to set it.

3.2.9 During the oral proceedings, the appellant argued that no access point search would be necessary, since the ID of the access point that the PC used could be transmitted to the printer.

3.2.10 As a general solution, the board considers this to be technically counterintuitive, since the printer may be in a different room or at least far enough from the PC that the two devices see different access points. It could be that the PC's access point is not visible at the printer. So, it would make no sense to transmit the PC's access point to the printer. Rather, the skilled person would tend to use the common procedure of starting an access point search at the device which needs to be connected to the wireless LAN.

3.2.11 The appellant furthermore challenged the board's assumption above that the user would be sitting in front of the PC. He or she could also be in front of the printer.

3.2.12 The board agrees that, in principle, there are two options to configure a printer: at the printer itself, or from a computer connected to it. However, at some point, printers had neither a display (let alone a touchscreen) nor alphanumeric keys, and thus had to be

configured from the PC via wire (e.g. the USB cable), the user sitting in front of the PC.

3.2.13 The appellant further argued that there were other ways to connect the printer with the access point, e.g. by "push-button" (Wi-Fi Protected Setup/WPS).

3.2.14 However, the push-button configuration was only introduced in 2006, i.e. after the priority date of the application (2003). See https://en.wikipedia.org/wiki/Wi-Fi_Protected_Setup.

3.2.15 The grounds of appeal (page 5, first paragraph) also argue that D1 does not disclose setting up the wireless communication through the wire interface.

3.2.16 However, it is well-known that printers with a wire interface existed before printers with both wire and wireless interfaces were introduced. These wired printers were typically configured through the wire interface. Therefore, for reasons of convenience, it seems obvious to configure the wireless interface - after the usual configuration of the wire interface - from the PC through the existing and operational wire communication.

3.2.17 The appellant (letter of 12 March 2019, paragraph bridging pages 2 and 3) further argued that configuring the wireless setting in the printer from the PC over the wire connection would allow the printer to make do with a smaller and thus cheaper display than in the assumed alternative where the configuration is done at the printer (e.g. the selection of an access point).

3.2.18 However, the board considers this to be a mere bonus effect which does not call into question the above argument which shows that the skilled person would arrive at the above idea anyway, based on other considerations.

3.2.19 To summarise, the board finds that the subject-matter of claim 1 of the main request constitutes an obvious solution to the problem of configuring a printer for both wired and wireless communication with a PC.

3.2.20 Thus, the subject-matter of this claim is not inventive within the meaning of Article 56 EPC 1973.

3.3 Auxiliary request 3

3.3.1 As to auxiliary request 3, the appellant (letter of 12 March 2019, page 4, third paragraph) stated that the added feature of checking by the PC the wireless connection to the printer, after having configured the printer for it, solved the problem of:

> "how to make sure, during the setting, that the PC has become able to communication with the printer wirelessly"

3.3.2 However, the board finds that it would be straight-forward for a skilled person to include a check whether the wireless connection to the printer works in order to solve the above problem. Moreover, it is obvious to carry out this check via the connection to be checked, i.e. the wireless interface.

3.3.3 The appellant cautions the board against using *ex post facto* analysis in view of the number of features which are not disclosed by any of the cited documents. The

board takes this remark seriously, but takes the view that its analysis only relies on fundamental considerations by the skilled person, namely the application of a conventional configuration method to a further configuration task (see the board's communication of 4 January 2019, sections 10 and 11) and the obviousness of checking that which has been configured, and thus does not rely on hindsight.

3.3.4 Therefore, the subject-matter of claim 1 of auxiliary request 3 is not inventive (Article 56 EPC 1973) either.

4. *Admission of auxiliary requests 1 and 2*

4.1 The amendments in claim 1 of auxiliary request 1 concern inputting an encryption key at the PC which is then transmitted via the wire connection to the printer in order to be set in the wireless LAN settings in the printer.

4.2 The amendments in claim 1 of auxiliary request 2 concern transmitting an "access point search command" via the wire connection to the printer so that the PC can receive the searched access points afterwards.

4.3 Article 13(1) RPBA 2020 requires that any amendment to a party's case after it has filed its grounds of appeal be justified by the party. It may be admitted only at the discretion of the board, which shall exercise this discretion in view of, *inter alia*, whether the party has demonstrated that any such amendment, *prima facie*, overcomes the pending issues.

4.4 The above amendments were not only filed after the grounds of appeal, but after a first communication from the board under Rule 100(2) EPC and the summons to oral proceedings along with a communication under Article 15(1) RPBA 2020.

4.5 The appellant stated that the amendments in auxiliary requests 1 and 2 further differentiated the claimed subject-matter from D1 and facilitated the use of the invention.

4.6 However, the board finds that these amendments do not *prima facie* overcome the objections concerning lack of inventive step of the main request. They merely add some details to the set-up of the wireless connection of the printer (encryption key) and to the access point search of claim 1 of the main request (access point search command) which, on the face of it, would be obvious to be performed under the control of the printer as well. The appellant did not challenge the board on this *prima facie* assessment.

4.7 Therefore, the board does not admit these auxiliary requests into the proceedings, based on Article 13(1) RPBA 2020.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

L. Stridde M. Müller

Decision electronically authenticated