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Datasheet for the decision of 23 October 2018

Case Number: T 1045/12 - 3.5.06

Application Number: 06256350.7

Publication Number: 1814053

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Language of the proceedings: EN

Title of invention:
Data communication system, device, and method

Applicant:
CANON KABUSHIKI KAISHA

Headword:
Data communication system/CANON

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - (no)

Decisions cited:
T 0002/83, T 1014/07

Catchword:

Europäisches Patentamt
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Beschwerdekammern

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Case Number: T 1045/12 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 23 October 2018

Appellant: (Applicant)	CANON KABUSHIKI KAISHA 30-2, 3-chome, Shimomaruko, Ohta-ku Tokyo (JP)
Representative:	Hitching, Peter Matthew Canon Europe Ltd European Patent Department 3 The Square Stockley Park Uxbridge Middlesex UB11 1ET (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 6 December 2011 refusing European patent application No. 06256350.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	W. Sekretaruk
Members:	A. Teale
	S. Krischer

Summary of Facts and Submissions

I. This is an appeal against the decision, dispatched with reasons on 6 December 2011, to refuse European patent application No. 06 256 350.7. The reasons for the decision stated *inter alia* that the subject-matter of claim 1 of a third auxiliary request lacked inventive step, Article 56 EPC, in view of the document:

D4: US 2005/0243364 A1.

The reasons also referred to the following document as an example of the common general knowledge of the skilled person:

D3: Knowledgebase: "How to Run Long Jobs on the UNIX Systems", ISyE HELPDESK, [Online] 27 April 2005, XP002429983, Georgia Tech College of Engineering. Retrieved from the Internet on 18 April 2007 from URL http://web.archive.org/web/20050427002306/ http:// www.isye.gatech.edu/helpdesk/index.php?x=&modJd=2&id=56.

II. A notice of appeal and the appeal fee were received on 23 January 2012, the appellant requesting that the decision be cancelled entirely and a patent granted.

III. In a statement of grounds of appeal, received on 12 April 2012, the appellant requested that a patent be granted on the basis of the third auxiliary request dealt with in the appealed decision.

IV. In an annex to a summons to oral proceedings the board set out its provisional opinion, expressing doubts as to whether the application complied with Article 123(2)

EPC (added subject-matter), Article 84 EPC 1973 (clarity and conciseness) and Article 56 EPC 1973 (inventive step).

V. With a response dated 20 September 2018 the appellant filed arguments and a replacement set of claims and amended pages of the description.

VI. Oral proceedings were held on 23 October 2018 at which the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the request of 20 September 2018. At the end of the oral proceedings the board announced its decision.

VII. The application is being considered in the following form:

Description:
pages 1 to 4 and 6 to 41, as originally filed, and
pages 5 and 42, dated 20 September 2018.

Claims:
1 to 12, dated 20 September 2018.

Drawings:
Pages 1/16 to 16/16, as originally filed.

VIII. Claim 1 reads as follows:

"A data communication device configured to communicate with a storage device via a network and to store image data in the storage device, the data communication device comprising: a scanner (240) configured to read an image and to input image data; an input unit (230) configured to input user identification information to allow access to the storage device; a log-in processing

unit (201) configured to enable a user to log in to the data communication device, wherein the user logged in to the data communication device can submit an instruction to store image data input by the scanner in a storage area of the storage device accessible based on the input user identification information; an accessing unit (201) configured to store the image data input by the scanner in the storage area of the storage device based on the submitted instruction; and a log-out processing unit (201) configured to enable the user to log out of the data communication device, characterised in that, if storing of the image data is not completed, the accessing unit is configured to continue the storage of the image data input by the scanner in the storage area of the storage device after the user logs out of the data communication device."

The statement of claims also contains an independent claim 10 to a data communication method.

Reasons for the Decision

1. The admissibility of the appeal

In view of the facts set out at points I to III above, the appeal fulfills the admissibility requirements under the EPC and is consequently admissible.

2. Summary of the invention

2.1 The application relates to a network of data communication devices, such as PCs or multi-functional printers ([2]; see figure 2), shared by multiple users; see figure 1. Each user logs in (see [75]) to a data communication device and is granted access rights to

certain data on the system, for instance to scan a document at one device and to transfer the scanned data to a storage device via the network ([4]).

2.2 The application addresses the problem arising when the user logs out of the device while such a data transfer is still in progress. According to the application, this would cause the user's access rights to be cancelled and the transfer to be consequently aborted; see figure 9A; 906 and [73]. The invention, illustrated in figure 9B; 916, is to extend the user's access rights, even if he/she has logged out, until the transfer of scanned data to the storage device is complete; see [74],[82] and [84] and the flow-charts in figures 11 and 12; steps S1107, S1201 and S1202.

3. The prior art on file

3.1 Document D4

3.1.1 D4, regarded as the closest prior art in the decision, relates to a control device (103) which controls data transfer to an image processing device (100), such as an MFP (multi-function peripheral) comprising a printer (300), a scanner (210) and an IC card reader for authenticating the user; see [37],[46] and [100] and figures 1 and 2. A control device (110) sends data from the scanner to memory (DRAM) (116) in the MFP; see [69]. From there, data can be sent to the printer [71] or a host computer [48]. In order to use the MFP, a user must first log in using an IC card to start a "user session"; see [149]. Users either log out manually or are automatically logged out after a predetermined time; see [157] and [165]. D4 does not discuss the fate of processes still in progress when the user logs out or is logged [157] out.

3.2 Document D3

3.2.1 The decision cites D3 as an example of the common general knowledge of the skilled person. According to its title, D3 concerns running "long jobs" on UNIX systems for which "sitting in front of the terminal waiting for the results is not practical"; see page 1, lines 11 to 12. D3 suggests running the program in the background so that it will continue to run after the user has logged out; see page 1, lines 15 to 16. This is achieved by adding the prefix "nohup" (meaning "no hang up") in the command running the program, for example "nohup myprog myargs&".

4. Inventive step, Article 56 EPC 1973

4.1 According to the reasons for the appealed decision regarding the then third auxiliary request (the same as the previous version of the claims in these appeal proceedings), the subject-matter of claim 1 differed from the disclosure of D4 in that the controller responded to the user logging out by allowing data processing to finish if the log out took place during said data processing. No technical problem could be derived from the difference feature, as it was merely a security policy. The skilled person would have implemented the policy with "the tools at hand", for instance by applying the teaching of D3, relating to implementing this security policy in UNIX.

4.2 In the grounds of appeal the appellant argued regarding D3 that, when entering a job command, the user already had to predict whether the job should continue after he/she had logged out and, if so, include the "nohup"

prefix. In contrast, the invention allowed an operation to continue by default after the user had logged out.

4.3 In the annex to the summons to oral proceedings the board pointed out that D4 did not disclose what happened if a scan-and-store operation was still in progress when a user logged out of the device. The board also expressed doubts as to the relevance of D3 to the invention.

4.4 In the submission of 20 September 2018 the appellant argued that the invention operated in the "opposite" way to the device known from D4. The skilled person realizing the apparatus in D4 would have taken into account the security concerns mentioned in D4 and have either stopped all user-initiated processes when that user logged out or paused them, perhaps deleting any data stored in the storage device, and only completing them the next time the user logged in. Furthermore, the claimed solution could not be obvious, since otherwise the same approach would have been used in D4, filed shortly before the present application. The board had also not provided conclusive reasons on the basis of tangible evidence (see decision T 1014/07, reasons point 8) showing why the skilled person starting from D4 would, and not just could (see decision T 0002/83, headnote, point II), have arrived at the claimed invention.

4.5 At the oral proceedings it was common ground between the appellant and the board that the subject-matter of claim 1 differed from the disclosure of D4 in the characterising features, namely

"if storing of the image data is not completed, the accessing unit is configured to continue the storage of

the image data input by the scanner in the storage area of the storage device after the user logs out of the data communication device."

It was also common ground that the objective technical problem solved by these features was to provide an alternative realization of the device known from D4.

4.6 At the oral proceedings the board explained that it had revised its preliminary view on the relevance of D3 and that the skilled person starting from D4 would have recognised that the gap in the disclosure of D4, namely what happened to jobs in progress when the user logged out, could be filled by applying the teaching of D3, in particular by making every scan-and-store job a "nohup" job, thereby allowing such jobs in progress to complete even after the user had logged out. The board also questioned whether, given this gap in the disclosure of D4, the invention could be considered to do the "opposite", as the appellant had stated.

The appellant argued that D4 was concerned with the security of data transmitted by the image processing device. Figure 18B showed in the steps between S1813 and S1818, described in paragraphs [236-249], that the device decided whether or not to transmit print job data in encrypted form, depending on whether the communication channel was logically (step S1813) and physically (step S1816) secure. In this context, the skilled person would have "filled the gap" by stopping all processes when a user logged out. Regarding D3, the appellant argued that D3 only disclosed using the "nohup" prefix as an option. Hence the board's inventive step reasoning was incomplete, as D3 did not disclose using the "nohup" prefix for every job. Moreover the board had not proved an incitement for the

skilled person to combine D3 and D4 and arrive at the claimed subject-matter. The board's argument was thus based on hindsight, as it had not proved, based on tangible evidence (see T 1014/07, reasons, point 8) that the skilled person would have been incited to realize the device in the claimed way, rather than in one of the alternative ways proposed by the appellant.

4.7 The board's finding on inventive step

4.7.1 According to decision T 0002/83, issued in 1984 and cited by the appellant, inventive step depended not upon whether the skilled person could have added features to the closest prior art to arrive at the invention but whether the skilled person "would have done so in expectation of some improvement or advantage"; see headnote, point II, and reasons, point 7. According to further case law of the boards of appeal of the EPO, the issue to be decided is whether the skilled person, seeking a technical solution to the objective technical problem, would have solved it by modifying the closest prior art to arrive at the claimed subject-matter; see Case Law of the Boards of Appeal of the EPO, 8th edition, I D 2 and 5.

4.7.2 In decision T 1014/07 it was found that a refusal by the examining division had arrived at a finding of lack of inventive step by merely establishing that all the features of claim 1 were known either from the closest prior art document or one or more secondary documents, i.e. that "each of the claimed features has been disclosed in the prior art"; see reasons, point 10. The board in that case set aside the decision because it did not provide reasons as to why "the skilled person would have combined the known teachings such as to arrive at the claimed subject-matter when attempting to

solve the underlying technical problem"; see reasons, point 12. As the board put it, [a finding of lack of inventive step must] "identify conclusive reasons on the basis of tangible evidence that would have prompted the skilled person to act in one way or another". The present board finds that the present decision, being based on prior art documents D4 and D3, is based on "tangible evidence".

4.7.3 Regarding the disclosure of D4, the board is not persuaded that it is derivable from D4 that jobs in progress when the user logs out are to be stopped. In particular, the fact that the device in D4 requires at least a physically secure communication channel, optionally using encryption if the channel is logically insecure, does not show that a transfer started when the user was logged in suddenly becomes insecure when the user logs out, since the security of the device is distinct from the security of the communication channel.

4.7.4 Regarding the disclosure of D3, the appellant has disputed whether D3 discloses using the "nohup" prefix for all commands. The board points out that D3 discloses the "nohup" prefix as a solution to the problem of running long jobs, meaning jobs longer than the user was prepared to stay logged in for. D3 explicitly states (see lines 12 to 13) that running jobs with the "nohup" prefix does not negatively impact other users "interactive use of the same computer". Hence D3 does not disclose the "nohup" prefix as something to be used sparingly, if at all. The board finds that, in the context of a command language, the skilled person would have understood that the "nohup" prefix could be used without restriction.

4.7.5 The image processing device known from D4 contains a computer, the users logging in with an IC card to use the device (see [149]) and logging out when they are finished; see [157 and 165]. There is however no disclosure of the fate of jobs in progress when the user logs out. In order to fill the gap in the disclosure of D4, the user must seek to solve the objective technical problem, namely to provide an alternative realization of the device known from D4, or more precisely, how to fill the gap in the disclosure in D4 regarding the situation in which scan-and-store jobs are running when the user logs out. The skilled person would have recognised that, by applying the teaching of D3 to D4 and making all scan-and-store jobs "nohup" jobs, the problem would be solved by allowing all scan-and-store jobs in progress to complete, even if the user logged out. Hence the skilled person starting from D4 and applying the teaching of D3 would have arrived at the subject-matter of claim 1 in an obvious manner.

4.7.6 The appellant has challenged the board to provide documentary proof of all jobs on a computer being run as "nohup" jobs. The board points out that the present case does not depend on such evidence, since the invention is not restricted to continuing all jobs running on a data communication device after the user has logged out. Claim 1 only requires that the scan-and-store job continues.

4.7.7 The appellant further argued that the solution to the objective technical problem taught by D3 was one of several, equally likely options, the others being to stop all user-initiated processes when that user logged out or to pause them, perhaps deleting any data stored in the user storage space, when the user logged out and

to only complete them once the user had logged in again. In the presence of several, equally likely options, the board had to provide a reason why the skilled person would have selected the claimed option. The board is not persuaded by this argument because the fact that there are other options has no bearing on the obviousness of one specific option. Furthermore, if all options are equally likely, then the invention merely results in an obvious and consequently non-inventive selection among a number of known possibilities (see, for example, the Guidelines for Examination, G VII 3.1 (i), November 2018).

4.7.8 Consequently the board finds that the subject-matter of claim 1 does not involve an inventive step, Article 56 EPC 1973, in view of the combination of D4 and D3.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

B. Atienza Vivancos W. Sekretaruk

Decision electronically authenticated