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Datasheet for the decision of 20 September 2019

Case Number: T 2263/13 - 3.5.06

Application Number: 08154370.4

Publication Number: 1980972

IPC: G06F21/00

Language of the proceedings: EN

Title of invention:
Information-processing apparatus, method for controlling information-processing apparatus, and storage medium

Applicant:
Canon Kabushiki Kaisha

Headword:
Logging out inactive printer users/CANON

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no)

Decisions cited:

Catchword:

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Case Number: T 2263/13 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 20 September 2019

Appellant: (Applicant)	Canon Kabushiki Kaisha 30-2, Shimomaruko 3-chome Ohta-Ku, Tokyo 146-8501 (JP)
Representative:	Garner, Jonathan Charles Stapleton 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 19 April 2013 refusing European patent application No. 08154370.4 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	M. Müller
Members:	A. Teale
	B. Müller

Summary of Facts and Submissions

I. This is an appeal against the decision, dispatched with reasons on 19 April 2013, to refuse European patent application No. 08 154 370.4 on the basis that the claims of a main and a second auxiliary request lacked inventive step, Article 56 EPC, in view of the document

D1: US 2005/0231760 A1.

The claims according to a first auxiliary request were found to contain added subject-matter, Article 123(2) EPC.

II. A notice of appeal and the appeal fee were received on 18 June 2013, the appellant requesting that the decision be set aside and that a patent be granted.

III. With a statement of grounds of appeal, received on 28 August 2013, the appellant filed an amended set of claims as sole request. If the appeal could not be allowed, the appellant requested a further opportunity to submit arguments and/or amendments and, if the board was considering dismissing the appeal, oral proceedings.

IV. In an annex to a summons to oral proceedings the board set out its preliminary opinion that the subject-matter of *inter alia* claim 1 seemed not to involve an inventive step, Article 56 EPC, in view of D1. Claim 8 also seemed to contain added subject-matter, Article 123(2) EPC.

V. With a letter dated 20 August 2019 the appellant filed amended claims and a new description.

VI. At the end of the oral proceedings on 20 September 2019 the appellant requested that the decision under appeal be set aside and that a European patent be granted on the basis of the following documents:

Description: pages 1 to 43 as filed with the letter dated 20 August 2019,
Claims: 1 to 7 as filed with the same letter,
Drawings: 1/20 to 20/20 as originally filed.

VII. At the conclusion of the oral proceedings the board announced its decision.

VIII. Claim 1 reads as follows:

"1. An information-processing apparatus capable of maintaining a state in which a plurality of users have been logged in to the information-processing apparatus, comprising: a display control means (104) configured to cause a display means (301) to switch an operation screen for a user who is currently logged in to the information-processing apparatus (101) between an active state, where the user can operate the operation screen, and an inactive state, where the user cannot operate the operation screen; a first setting means (104) configured to set a start point for measuring a logout time for a first user, when the operation screen for the first user enters the active state;
a detecting means (104) configured to detect an operation via the operation screen for the first user, before the operation screen for the first user switches to the inactive state; a second setting means (104) configured to update the start point for the first user, when the detecting means detects the operation via the operation screen for the first user; a control means (104) configured to automatically log out the

first user, when the operation screen for the first user is in the active state and the logout time has elapsed from the start point for the first user (S1605, YES), and a preventing means (104) configured, while the operation screen for the first user is switched to the inactive state (S1607) in accordance with the operation screen for the second user entering the active state (S1608), to prevent automatic logging out of the first user, even if the operation screen for the first user is in the inactive state and the log-out time has elapsed from the start point for the first user."

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.

2. Summary of the invention

2.1 The application relates to an "information-processing apparatus", for instance a network printer (see figures 1 and 2; 101), having a touch panel unit (see figure 3; 301) which displays a user interface screen; see, for example, figure 9.

2.2 For security reasons, the printer can only be operated by users who have logged in using a user ID and a password; see [2, 61] and figure 11. Several users can be logged in at the same time, but only one user, namely the one with an "active operation screen" (active state; see [71]), can operate the printer, in contrast to the other users who have an

"inactive operation screen" (inactive state; see [72]). Figure 5 shows the possible user account states; see [70-73].

2.3 Previously, such printers automatically logged out inactive users after a predetermined time; see [5]. This had the disadvantage that if, for instance, user A was using the printer and temporarily allowed user C to use it, then user A could be automatically logged out against their will while user C was using the printer. This implies, in the board's understanding, that, once user C had finished with the printer, user A would have the inconvenience of logging in again; see [7]. The invention seeks to enhance the usability of the printer by preventing user A from being automatically logged out in this situation.

2.4 As figure 13 shows, a user who has logged in to the printer and has finished with it, perhaps only temporarily, can select either the "Inactive state" option (1309), which puts their operation screen into an inactive state (see [115, 116]), or the "logout" option (1310). In either case another logged in user can then make their operation screen active; see figure 15; "Active state" option 1501, and [123].

2.5 For each user the printer stores a "logout transition time", the time from which a user is "permitted" to log out (see figure 6, 605 and [82]). The logout transition time is updated if the user carries out operations as an active user on the operation screen of the printer; see page 27, lines 9 to 15. The board understands the term "permitted" in this context to mean that the user is automatically logged out.

2.6 Claim 1 is directed to the embodiment illustrated by the flowchart in figure 16 in which a user (user A) is logged in with an active operation screen. Figure 16 contrasts the situations in which firstly user A is alone (step S1603 onwards) and secondly a second user (user C) also logs in with an active operation screen; see step S1607 onwards. If user A is alone and operating the printer then the logout reference time is repeatedly updated (step S1604). If however the printer is idle, meaning that user A carries out no operations (step S1603), then, once the logout transition time has elapsed (step S1605), user A is automatically logged out (step S1606), enhancing printer security; see [108, 124].

2.7 If user A is using the printer and user C logs in (see [109, 112]) then automatic logging out of user A is inhibited (step S1611), even if user A's logout reference time has elapsed (step S1601), thus improving printer usability; see [124]. If user C's operation screen becomes inactive (step S1609; see [113]), which the board understands to mean that user C selects the "inactive state" option 1309 in figure 13 and hands the printer back to user A, then user A's operation screen is again made active (step S1610).

3. Document D1

3.1 The decision assessed inventive step starting from D1 which relates to an information processing apparatus, for instance a "multifunctional peripheral" device (see [23, 41], last sentence, and figure 3), allowing multiple logins; see title. For security reasons, only logged-in users may operate the device; see [9]. Although many users may be logged-in, the device only accepts operating instructions from the "front" user

(as opposed to the other, "back" users; see [101]) to whom the screen (311) of the device's control panel (see figure 4) has been assigned; see [14], first sentence. Using a "switch operation" screen, the screen can be reassigned to another user; see [19, 138] and figure 11B.

3.2 According to a first embodiment [105], back user A remains logged in, even though user B is now the "front" user, allowing the device to be shared between users A and B.

3.3 In another embodiment (see [22, 150] and figures 16A/B) a back user (user C in these figures) is automatically forced to log out after a "timeout", i.e. the expiry of a predetermined time period. For example, user C can be automatically logged out an hour after a "back switch", i.e. another user taking over control of the device; see [101], last sentence.

3.4 In the embodiment shown in figure 20B (see [159]), if user A has completed a job and indicated that they have no further jobs, then they are back switched, causing another user to be invited to enter authentication information and become "front" user; see figure 20D. This is to prevent the next user from pretending to be user A when using the device; see [106]. The board understands this to mean that, after user A has finished, although user B is already "logged in", they (user B) still need to enter a username and password before they can use the device.

3.5 In the terms of claim 1, the "front" and "back" users in D1 are regarded as users with "active" and "inactive" operation screens, respectively. The Application-Specific Integrated Circuit (ASIC) (212) in

D1 is seen as a display control means in the claim. Figures 5A to 5C show an active operation screen for user A being switched to an inactive state when user B logs in. In contrast to the application, in D1 the timeout occurs with respect to the "back switch" of a user, rather than from the time the user is "front switched"; see [150]. Hence D1 does not disclose updating the user start point based on detecting user operations. D1 also does not disclose automatically logging out front users. Back users may however be automatically logged out, for instance after a period of an hour; see [150].

3.6 In the terms of claim 1, D1 consequently discloses an information-processing apparatus capable of maintaining a state in which a plurality of users have been logged in to the information-processing apparatus, comprising a display control means (figure 2; 212) configured to cause a display means (figure 4; touch panel 311) to switch an operation screen for a user who is currently logged in to the information-processing apparatus between an active state (figure 5A; user A active), where the user can operate the operation screen, and an inactive state (figure 5B; user A inactive), where the user cannot operate the operation screen.

3.7 Hence the subject-matter of claim 1 differs from the disclosure of D1 in the following features:

a. a first setting means configured to set a start point for measuring a logout time for a first user, when the operation screen for the first user enters the active state;

b. a detecting means configured to detect an operation via the operation screen for the first

user, before the operation screen for the first user switches to the inactive state;

c. a second setting means configured to update the start point for the first user, when the detecting means detects the operation via the operation screen for the first user;

d. a control means configured to automatically log out the first user, when the operation screen for the first user is in the active state and the logout time has elapsed from the start point for the first user, and

e. a preventing means configured, while the operation screen for the first user is switched to the inactive state in accordance with the operation screen for the second user entering the active state, to prevent automatic logging out of the first user, even if the operation screen for the first user is in the inactive state and the log-out time has elapsed from the start point for the first user.

4. Inventive step, Article 56 EPC

4.1 According to the appealed decision, the apparatus according to claim 1 of the main request differed from that known from in D1 in that the condition for preventing automatic logging out of the first user after the predetermined idle time had elapsed was specifically defined to be "in a case that an operation screen for a first user has switched to the inactive state in accordance with switching of an operation screen for a second user to the active state". Defining a criterion for automatically logging out a user did

not contribute to the technical character of the apparatus. Instead it was a solution to an administrative problem and, accordingly, could be given to the skilled person as the objective problem to be solved. Thus the objective technical problem was to modify the apparatus of D1 such that the automatic logout was performed according to the above condition. Starting from D1 and faced with the above problem, the skilled person would consequently have arrived at the subject-matter of claim 1 in an obvious manner.

4.2 According to the appellant, D1 teaches away from the claimed solution by suggesting that "back" users should be logged out from the information processing apparatus, thus limiting the number of back users. In contrast, according to the invention, users in the inactive state are not logged out, thereby allowing the user in the inactive state to return to the active state, even if another user in the active state has used the apparatus for a long time, thus improving the usability of the apparatus.

4.3 The appellant has also argued that difference features "d" (relating to logging out active users) and "e" (relating to not logging out inactive users) should not be regarded as unrelated, since there is common ground, namely that for all users a start point is set for measuring a logout time, the start point only being updated for an active user carrying out operations on the operation screen. The claim could be reformulated to emphasise this.

4.4 The board finds that the first and second setting means and the detecting means (difference features "a" to "c") have the same effect vis-à-vis a user as the "timeout" disclosed in D1, which starts to run when a

user is back switched; see [150]. In both cases a signal is produced once the user has been inactive (albeit in the "active" state in the application and "back switched" in D1) for more than a predetermined period of time. Hence difference features "a", "b" and "c" form a group solving the problem of providing an alternative "user inactivity" signal. The board finds that the claimed alternative approach to deriving a "user inactivity" signal would have been obvious for the skilled person starting from D1. This assessment, set out in the board's provisional opinion, was not challenged by the appellant. Hence inventive step depends upon the use to which this signal is put.

4.5 Features "d", on the one hand, and "e", on the other, set out the consequences of the "user inactivity" signal in the "active" and "inactive" user states, respectively. Features "d" and "e" are technically unrelated; either one could be implemented on its own without the other. Hence their contributions to inventive step must be considered separately.

4.6 The appellant argued in this regard that the skilled person, not exercising an inventive activity, would treat active and inactive users the same and thus subject both to the same automatic logout policy. As a consequence, the skilled person might consider incorporating either feature "d" or feature "e" into the disclosure of D1, but not both. The board disagrees, because it would have been apparent to the skilled person that features "d" and "e" address different problems. Automatically logging out active users after a period of inactivity increases security, whereas automatically logging out inactive users avoids system resources being reserved by inactive users who are not coming back. To achieve their respective

effects, the time out periods in both cases would have to be significantly different, too. An active user should be logged out after a short period of inactivity - within a minute, say - whereas inactive users might be logged out only after a long period of inactivity such as the period of an hour disclosed in D1. It would therefore have been obvious to the skilled person to treat active and inactive users differently.

4.7 Feature "d", using the "inactive user" signal to automatically log out a user with an active operation screen after a predetermined time, is a usual implementation of the need in D1 to ensure security (see [9]), for instance preventing other users from pretending to be user A, if user A uses the device and then walks away, a problem mentioned in D1; see [106].

4.8 Although feature "e" appears, at first glance, to use the "inactive user" signal, on closer inspection the preventing means has the effect that feature "e" ignores it; users with inactive processing screens remain logged in even if an automatic logging out time expires. This possibility is known from D1 which only discloses automatically logging out "back" users after a predetermined time as an option; see [150], lines 9 to 11. Hence feature "e" is known from D1.

4.9 Consequently the subject-matter of claim 1 does not involve an inventive step, Article 56 EPC, in view of D1.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

L. Stridde M. Müller

Decision electronically authenticated