Datasheet for the decision of 7 December 2016

Case Number: T 2604/11 - 3.5.06
Application Number: 07749806.1
Publication Number: 2010989
IPC: G06F1/32, G06F1/26
Language of the proceedings: EN

Title of invention: POWER MANAGEMENT SYSTEM AND METHOD

Applicant: HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.

Headword: POWER MANAGEMENT / HP

Relevant legal provisions: EPC Art. 123(2)
EPC 1973 Art. 56

Keyword: Inventive step - after amendment (yes)

Decisions cited:
Catchword:
Case Number: T 2604/11 - 3.5.06

DECISION

of Technical Board of Appeal 3.5.06

of 7 December 2016

Appellant: HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 11 October 2011
refusing European patent application No.
07749806.1 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: W. Sekretaruk
Members: G. Zucka
A. Teale
Summary of Facts and Submissions

I. The appeal is against the decision by the examining division, with reasons dispatched on 11 October 2011, to refuse European patent application No. 07 749 806.1, on the basis that the subject-matter of claims 1-10 was not inventive, Article 56 EPC. The following documents cited during the first instance procedure are relevant for the present decision:

D1 = US 5 915 120 A

II. A notice of appeal, including a statement of the grounds of the appeal, was received on 1 December 2011, the appeal fee being paid on the same day.

III. The appellant requested that the decision under appeal be set aside and a patent granted on the basis of a main or one of three auxiliary requests filed with the grounds of appeal. The appellant made a conditional request for oral proceedings.

IV. The board issued a communication setting out its preliminary opinion on the appeal.

V. On 24 October 2016 the appellant filed claims according to a new single request, replacing all previous requests.

VI. The appellant presently requests that the decision under appeal be set aside and that a patent be granted on the basis of the following documents:

   claims 1-9 as received on 24 October 2016;
VII. Claim 1 reads as follows:

"A power management system (10), comprising:
a power management module (30) configured to receive a requested duration of time (80) for powering an electronic device (12) by a battery (16), the power management module (30) configured to control use of power-consuming applications (40) that are executable on the electronic device (12) based on a prioritization (62) of the power-consuming applications (40) to enable powering of the electronic device (12) by the battery (16) for at least the requested duration of time (80), wherein the power management module (39) is configured to reduce the power consumption of the electronic device (12) by automatically closing a particular power-consuming application (40), wherein the power management module (30) is configured to prevent opening and/or otherwise initiating a particular power-consuming application (40), wherein the prioritization (62) is dynamic and comprises at least two different priority levels of the power-consuming applications (40), wherein one or more of the power-consuming applications (40) has a variable priority, and wherein, in response to opening and/or otherwise initiating a particular power consuming application (40) having a variable priority, the priority level of the particular power consuming application is changed to a higher level."
Reasons for the Decision

1. Amendments; Article 123(2) EPC

The basis in the original application documents for the amendments made in claim 1 is the following:

1.1 Line 7: replacement of "elements" by "applications"

Based on original figure 1: the majority of the power consuming elements listed in block 40 are applications.

1.2 Lines 12-14: "wherein the power management module (39) is configured to reduce the power consumption of the electronic device (12) by automatically closing a particular power-consuming application (40)"

Based on the original description, §§ [0032]-[0034].

1.3 Lines 16-17: "wherein the power management module (30) is configured to prevent opening and/or otherwise initiating a particular power-consuming application (40)"

Based on the original description § [0035].

1.4 Line 19: "wherein the prioritization (62) is dynamic"

Based on the original description page 3, line 3.
1.5 Lines 19-20: "wherein the prioritization (62) [] comprises at least two different priority levels of the power-consuming applications (40)"

The original description § [0014] mentions several priority levels, which means that there are at least two different priority levels.

1.6 Lines 22-23: "wherein one or more of the power-consuming applications (40) has a variable priority"

Based on the original description page 4, third line from the bottom.

1.7 Lines 25-27: "wherein, in response to opening and/or otherwise initiating a particular power consuming application (40) having a variable priority, the priority level of the particular power consuming application is changed to a higher level"

Based on the original description § [0017].

2. Inventive step; Article 56 EPC 1973

2.1 In its reasons, the appealed decision starts from D1 as the closest prior art document. The board agrees that D1 indeed represents the closest prior art and notes that the appellant has not challenged this finding. As set out in the appealed decision (Reasons 1.1), D1 discloses a power management system, comprising:

a power management module (see abstract: "the operation condition changing circuit controls power consumption") configured to receive a requested duration (see abstract: "desired operating time") for powering an electronic device by a battery
(see abstract: "battery for supplying power to the central processing unit and the input/output units"), the power management module configured to control use of power-consuming elements of the electronic device (see abstract: "controls power consumption in the input/output units") based on a prioritization of the power-consuming elements (see column 9, lines 22-33 and figure 8: "preferential order table ... ranks '1' to '5' of the preferential order are assigned to each of the items") to enable powering of the electronic device by the battery for at least the requested duration of time (see abstract: "thus ensuring the desired operating time of the information processing apparatus to be met"), wherein the prioritization comprises at least two different priority levels of the power-consuming elements (see column 9, lines 22-33 and figure 8: "ranks '1' to '5' of the preferential order are assigned to each of the items").

2.2 The problem to be solved by the present application is to prevent the situation that a power-consuming application is automatically shut down to save battery power after it has been opened, due to its lower priority.

2.3 In order to solve this problem, the system of claim 1 foresees that the priority of the application is increased when the application is opened or otherwise initiated.

2.4 This way of proceeding is not disclosed or rendered obvious by any of the documents cited in the search report.
2.4.1 D1 mentions a "preferential order table" (see column 2, lines 4-13), i.e. it also discloses a priority system. Said table is dynamically settable by the user. However, the priorities do not change in response to opening/initiating an application.

2.4.2 In D3 (see figure 9 and §§ [0102]-[0104]), the user can specify the priority of each power-consuming device at a certain time. There is no provision for automatically increasing the priority of a device when it is started.

2.4.3 In D4, the priority of the modules is defined e.g. by the entries in column 2 of Table 3. The priority of a module changes when power to that module is suspended to the benefit of another module with the same priority in column 2.

Hence D4 firstly discloses a system in which the priority of certain modules is lowered. Secondly, the priority change is not triggered by opening/initiating a particular application but by determining during a periodic check that the available power is less than the total power required by all modules; see § [0009].

2.4.4 D6 discloses a system in which priorities are set by the user, after he or she has received a recommendation from the power-consuming device (see § [0031]). An automatic change of the power settings is also mentioned (§ [0031], second and last sentence). There is no provision for automatically increasing the priority of device functions when they are started.

2.5 The board therefore concludes that the subject-matter of claim 1 is inventive; Article 56 EPC 1973.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to grant a patent on the basis of the following documents:

   claims 1-9 as received on 24 October 2016;

   description
   pages 2-15 as published,
   pages 1, 1a and 1b as received on 30 June 2009;

   drawing sheets 1-3 as published.

The Registrar: 

The Chairman:

B. Atienza Vivancos

W. Sekretaruk

Decision electronically authenticated