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Datasheet for the decision of 27 July 2017

Case Number: T 0029/12 - 3.5.06

Application Number: 02025339.9

Publication Number: 1420326

IPC: G06F1/16, G06F1/32

Language of the proceedings: EN

Title of invention:
Circuit and operating method for integrated interface of PDA and wireless communication system

Applicant:
HTC Corporation

Headword:
Integrated interface for PDA and wireless communication system/HTC

Relevant legal provisions:
EPC Art. 123(2)
EPC 1973 Art. 111(1)

Keyword:
Amendments - added subject-matter (yes) - added subject-matter (no)
Remittal to the department of first instance - (yes)

Decisions cited:

Catchword:

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Case Number: T 0029/12 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 27 July 2017

Appellant: (Applicant)	HTC Corporation No. 23, Xinghua Road Taoyuan District Taoyuan City 330 (TW)
Representative:	Becker Kurig Straus Patentanwälte Bavariastrasse 7 80336 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 29 June 2011 refusing European patent application No. 02025339.9 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 29 June 2011, to refuse European patent application No. 02 025 339.9 on the basis that the subject-matter of the independent claims according to a main and an auxiliary request did not involve an inventive step starting from either D5 or D8. These documents are as follows:

D5: "PALM V HANDHELDS TO RECEIVE GSM DATA AND VOICE CONNECTION WITH REALVISION SNAP-ON", 22 September 2000, http://files.shareholder.com/downloads/PALM/858275820x0x239819/cb553ec5-369d-4582-9987-957c1fb60c3f/PALM_News_2000_9_22_General.pdf, retrieved from the Internet 2 March 2010.

D8: US 2001/0037420 A1.

II. A notice of appeal was received on 19 August 2011, and the appeal fee was paid on the same day.

III. With a statement of grounds of appeal, received on 27 October 2011, the appellant refiled the claims according to the main request in the decision and filed claims according to new first and second auxiliary requests. The appellant requested that the decision be set aside and that a patent be granted on the basis of the main or first or second auxiliary requests. The appellant also made an auxiliary request that the case be remitted to the first instance for further prosecution.

IV. In an annex to a summons to oral proceedings the board set out its preliminary opinion on the appeal, namely

that the independent claims of all three requests were unclear, Article 84 EPC 1973, and seemed to contain added subject-matter, Article 123(2) EPC. Moreover they seemed to be so broad that they lacked novelty, Article 54(1,2) EPC 1973, in view of D5 or any three-core cable existing before the priority date.

V. With a response received on 20 June 2017 the appellant submitted amended claims according to third and fourth auxiliary requests. The appellant stated that the representative would not attend the oral proceedings and requested that the decision be set aside and that a patent be granted on the basis of the main or one of the first to fourth auxiliary requests. The appellant also made an auxiliary request that the case be remitted to the examining division for further processing.

VI. Oral proceedings were held on 27 July 2017. As announced in advance, the appellant was not present. At the end of the oral proceedings, the board announced its decision.

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

Description (all requests):
pages 1, 2 and 4 to 18, as originally filed,
pages 2a, 3, received on 26 March 2008.

Claims:
Main request: 1 to 22, main request in the decision refiled with the grounds of appeal.
First auxiliary request: 1 to 22, received with the grounds of appeal.

Second auxiliary request: 1 to 21, received with the grounds of appeal.
Third auxiliary request: 1 to 21, received on 20 June 2017.
Fourth auxiliary request: 1 to 13, received on 20 June 2017.

Drawings (all requests):
Pages 1 to 7, as originally filed.

VIII. Claim 1 according to the main request reads as follows, the claims also comprising a corresponding independent method claim:

"A circuit for an integrated interface of a PDA (102, 202) and a wireless communication system (104, 252), suitable for integrating a PDA (102, 202) and a wireless communication system (104, 252), the circuit for an integrated interface of the PDA (102, 202) and the wireless communication system (104, 252), characterized: by a first serial port (110, 22), having two terminals, wherein one terminal is electrically connected to the PDA (102, 202), the other terminal is electrically connected to the wireless communication system (104, 252), and the first serial port (110, 22) is used to bidirectionally transmit control signals between the PDA (102, 202) and the wireless communication system (104, 252); by a second serial port (112, 24), having two terminals, wherein one terminal is electrically connected to the PDA (102, 202), the other terminal is electrically connected to the wireless communication system (104, 252), and the second serial port (112, 24) is used to bi-directionally transmit audio data between the PDA (102, 202) and the wireless communication system (104, 252); in that, when the wireless communication system (104,

252) is in a standby state and receives a telephone signal, the wireless communication system (104, 252) transmits a wireless-communication-system-wake-up-PDA signal to the PDA to wake up the PDA; in that the wireless communication system (252) is coupled to a wireless communication element (270) and the PDA (102, 202) has an audio element (224); and in that, after the PDA (102, 202) is wakened by the wireless-communication-system-wake-up-PDA signal, an electromagnetic wave received by the wireless communication element (270) is converted at the wireless communication system (104, 252) into the audio data, wherein the audio data is transmitted to the audio element (224) of the PDA (102, 202) via the second serial port (112, 24) and outputted by the audio element (224)."

IX. Editorial amendments aside, claim 1 according to the first auxiliary request differs from that according to the main request in the added features that the wireless-communication-system-state/wake-up-PDA signal is transmitted "via a wireless-communication-system-state/wake-up-PDA signal line (136)" and that the audio data is "directly" transmitted to the audio element (224) of the PDA. The claims also comprise a corresponding independent method claim.

X. Editorial amendments aside, claim 1 according to the second auxiliary request differs from that according to the first auxiliary request in the addition of the following passage relating to the first serial port: "and further used to transmit status data of the wireless communication system (104, 252), and the status data including an antenna intensity". Regarding transmission of the audio data to the PDA audio element, the term "directly" has been deleted.

XI. Claim 1 according to the third auxiliary request reads as follows:

"Integrated interface system of a PDA (102, 202) and a wireless communication system (104, 252), suitable for integrating a PDA (102, 202) and a wireless communication system (104, 252), the integrated interface system comprising: a PDA (102, 202) having two serial terminals, a PDA-turn-on-wireless-communication-system signal out terminal, a PDA-reset-wireless-communication-system signal out terminal, a PDA-state signal out terminal, and a wireless-communication-system state/wake-up-PDA signal out terminal; a wireless communication system (104, 252) having two serial terminals, a PDA-turn-on-wireless-communication-system signal in terminal, a PDA-reset-wireless-communication system signal in terminal, a PDA-state signal in terminal, and a wireless-communication system-state/wake-up-PDA signal in terminal; and a circuit for connecting a PDA (102, 202) and a wireless communication system (104, 252), comprising: a first serial port (110, 22), having two terminals, wherein one terminal is electrically connected to a first serial terminal of the PDA (102, 202), the other terminal is electrically connected to a first serial terminal of the wireless communication system (104, 252), and the first serial port (110, 22) is used to bi-directionally transmit control signals between the PDA (102, 202) and the wireless communication system (104, 252); a second serial port (112, 24), having two terminals, wherein one terminal is electrically connected to a second serial terminal of the PDA (102, 202), the other terminal is electrically connected to a second serial terminal of the wireless communication system (104, 252), and the

second serial port (112, 24) is used to bi-directionally transmit audio data between the PDA (102, 202) and the wireless communication system (104, 252); a PDA-turn-on-wireless-communication-system signal line, having two terminals, wherein one terminal is electrically connected to the PDA-turn-on-wireless-communication-system signal out terminal of the PDA, the other terminal is electrically connected to the PDA-turn-on-wireless-communication-system signal in terminal of the wireless communication system, the PDA-turn-on-wireless-communication-system signal line is used to have the PDA turn on the wireless communication system; a PDA-reset-wireless-communication-system signal line, having two terminals, wherein one terminal is electrically connected to the PDA-reset-wireless-communication-system signal out terminal of the PDA, the other terminal is electrically connected to the PDA-reset-wireless-communication-system signal in terminal of the wireless communication system, and the PDA-reset-wireless-communication-system signal line is used to have the PDA reset the wireless communication system; a PDA-state signal line, having two terminals, wherein one terminal is electrically connected to the PDA-state signal out terminal of the PDA, the other terminal is electrically connected to the PDA-state signal in terminal of the wireless communication system, the PDA-state signal line is used to transmit the status of the PDA to the wireless communication system; and a wireless-communication-system-state/wake-up-PDA signal line, having two terminals, wherein one terminal is electrically connected to the wireless-communication-system-state/wake-up-PDA signal out terminal of the PDA, the other terminal is electrically connected to the wireless-communication-system-state/ wake up-PDA signal in terminal of the wireless communication system, the wireless-communication-

system-state/wake-up-PDA signal line is used to transmit the status of the PDA to the wireless communication system; the system being characterized in that when the wireless communication system (104, 252) is in a standby state and receives a telephone signal, the wireless communication system (104, 252) transmits a wireless-communication-system-wake-up-PDA signal via a wireless-communication-system state/wake-up-PDA signal line (136) to the PDA to wake up the PDA; the wireless communication system (252) is coupled to a wireless communication element (270) and the PDA (102, 202) has an audio element (224): and after the PDA (102, 202) is wakened by the wireless-communication-system-wake-up-PDA signal, an electromagnetic wave received by the wireless communication element (270) is converted at the wireless communication system (104, 252) into the audio data, wherein the audio data is directly transmitted to the audio element (224) of the PDA (102, 202) via the second serial port (112, 24) and outputted by the audio element (224)."

XII. The text of the claims according to the fourth auxiliary request is immaterial to this decision.

Reasons for the Decision

1. 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 As illustrated in figure 1, the application relates to a device for linking a Personal Data Assistant (PDA)

(102) to a "wireless communication system" (104), for instance a GSM phone; see page 2, lines 10 to 15. The phone comprises a "wireless communication element 270" for sending and receiving electromagnetic waves; see page 10, lines 5 to 9. The PDA has an "audio element" which can act as an output transducer, i.e a loudspeaker; see page 14, lines 16 to 19.

2.2 The device includes two bidirectional serial communication lines (termed "ports" in the application) which allow the PDA and phone to communicate with one another, one (110) carrying control/status signals and the other (112) audio data signals. One example of such status data is the antenna intensity (understood by the board to mean received signal strength); see page 8, lines 19 to 22. The combination of the PDA, phone and interface device can operate with the PDA and phone in various power modes, figure 3 showing a flow chart of the events which occur when the combination is first turned on and figure 4 illustrating the steps of a power saving method. In addition to the two serial communication lines, figure 1 shows four further signal lines (130, 132, 134, 136) between the PDA and the phone. For instance, when the phone is in a standby state and receives a telephone signal it transmits a "wireless-communication-system-wake up-PDA" signal (136) to the PDA to wake it up. Audio data from the phone is then directed to and outputted by the audio element of the PDA. The three other signal lines are termed the "PDA-turn-on-wireless-communication-system signal line" 130, the "PDA-reset-wireless-communication-system signal line" 132 and the "PDA-state signal line" 134.

3. The main and first and second auxiliary requests

3.1 In the annex to the summons to oral proceedings the board questioned whether there was a proper basis in the original application, Article 123(2) EPC, for the amendment of claim 1 of these requests to only set out one of the originally disclosed four signal lines (130, 132, 134 and 136) between the PDA and the phone, namely the "wireless-communication-system-state/wake-up-PDA" signal line (136). The original application disclosed either all four lines being present (see figure 1 and original claim 1) or all four lines being absent (see original claim 4), but the possibility that only the "wireless-communication-system-state/wake-up-PDA" signal line (136) needed to be present was an intermediate generalisation that was not directly and unambiguously derivable from the original application.

3.2 In the response received on 20 June 2017 the appellant argued that claim 1 of these requests was not limited to only a "wireless-communication-system-state/wake-up-PDA" signal line 136 being provided, since it merely referred to a case in which, when the wireless communication system was in a standby state and received a telephone signal, the wireless communication system transmitted a wireless communication-system-wake-up-PDA signal to the PDA to wake up the PDA. This was supported by figure 4, steps S4I2, S414 and S406 and the related description in paragraphs [0035]-[0036].

3.3 The board is not persuaded by the appellant's arguments. The appellant has not disputed that the original application only disclosed the presence of all four signal lines (see figure 1; 130, 132, 134, 136) or none; see original claim 4. The board notes that the support provided in the description and figures for the feature in claim 1 of these requests that (omitting

reference symbols) "when the wireless communication system is in a standby state and receives a telephone signal, the wireless communication system transmits a wireless communication-system-wake-up-PDA signal to the PDA to wake up the PDA" is the corresponding signal line (136). Claim 1 thus singles out one of the four signal lines as being essential and treats the other three as being merely optional, an interpretation that, in the board's view, is not directly and unambiguously derivable from the application as filed.

3.4 Hence the board finds that claim 1 of these requests has been amended such that the application contains subject-matter extending beyond the content of the application as filed, contrary to Article 123(2) EPC.

4. The third auxiliary request

4.1 The amendments to claim 1 and claim construction

4.1.1 Compared to claim 1 of the higher-ranking requests, which sets out a circuit for an interface of a PDA and a wireless communication system, claim 1 of this request sets out an integrated interface system comprising a PDA, a wireless communications system and a circuit for connecting a PDA and a wireless communication system. Hence the board understands claim 1 of this request to require the presence of three elements: the PDA, the wireless communication system and the connecting circuit. Claim 1 also sets out the additional features of the terminals of the PDA and the wireless communications system and their inter-connection via the two serial ports and four signal lines.

4.1.2 As claim 1 sets out all four originally disclosed signal lines, it overcomes the objection under Article 123(2) EPC raised against the higher-ranking requests.

4.1.3 The board understands the terminals and the stated use of the two serial ports and four signal lines - which implies the suitability for the use - set out in claim 1 to limit the features of the PDA and wireless communication system. In view of the statement in claim 1 that the first serial port is used to bi-directionally transmit control signals between the PDA and the wireless communication system, the board understands that both the PDA and the wireless communication system are adapted to transmit and receive control signals to/from their respective terminal for serial port one. Likewise, in view of the statement in claim 1 that the second serial port is used to bi-directionally transmit audio data between the PDA and the wireless communication system, the board understands that both the PDA and the wireless communication system are adapted to transmit and receive audio data to/from their respective terminal for serial port two. Turning to the four signal lines, in view of the statement in claim 1 that the "PDA-turn-on-wireless-communication-system" signal line is used to have the PDA turn on the wireless communication system, the board understands that the PDA is adapted to generate such a signal and the wireless communication system is adapted to be turned on by it. In view of the statement in claim 1 that the "PDA-reset-wireless-communication-system" signal line is used to have the PDA reset the wireless communication system, the board understands that the PDA is adapted to generate such a reset signal and the wireless communication system is adapted to reset itself on receiving such a signal. In view of the statement in

claim 1 that the "PDA-state" signal line is used to transmit the status of the PDA to the wireless communication system, the board understands that the PDA is adapted to generate such a status signal and the wireless communication system is adapted to receive it. In view of the statement in claim 1 that the "wireless-communication-system-state/wake-up-PDA" signal line is used to transmit the status of the PDA to the wireless communication system, the board understands that the PDA is adapted to generate such a signal and the wireless communication system is adapted to receive it. Corresponding amendments have been made to independent method claim 6.

4.2 Remittal to the first instance, Article 111(1) EPC

4.2.1 The board finds that the amendments to the independent claims according to the third auxiliary request are so far-reaching that the reasons for the appealed decision are no longer applicable. For instance, whilst claim 1 of the main and auxiliary requests in the decision only set out the function of one signal line, namely the "wireless-communication-system-state/wake-up-PDA" signal line 136, claim 1 now sets out the function of all four signal lines in a way which restricts the features of the PDA and the wireless communication system. Therefore the appeal is allowable.

4.2.2 Following the examination as to the allowability of the appeal, the board of appeal shall decide on the appeal. The board may either exercise any power within the competence of the department which was responsible for the decision appealed or remit the case to that department for further prosecution. Proceedings before the EPO are designed such that issues are normally decided by two instances, i.e. an administrative first-

instance department and, upon judicial review, by the boards of appeal. As the board cannot see a reason to deviate from this rule in the case at hand, it remits the case to the first instance so that it can *inter alia* form an opinion on the inventive step, Article 56 EPC, of the claimed subject-matter, which, in view of the many amendments, may require the consideration of other prior art.

Order

For these reasons it is decided that:

The decision under appeal is set aside.

The case is remitted to the first instance for further prosecution on the basis of the claims of the third auxiliary request.

The Registrar: The Chairman:

B. Atienza Vivancos W. Sekretaruk

Decision electronically authenticated