Datasheet for the decision
of 20 January 2012

Case Number: T 1731/08 - 3.4.03
Application Number: 05252105.1
Publication Number: 1710758
IPC: G07F 7/10
Language of the proceedings: EN

Title of invention:
Portable smart card reader having secure wireless communications capability

Applicant:
RESEARCH IN MOTION LIMITED

Headword:
-

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

Keyword:
"Remittal for further prosecution"

Decisions cited:
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Catchword:
-
Case Number: T 1731/08 - 3.4.03

DECISION of the Technical Board of Appeal 3.4.03 of 20 January 2012

Appellant: RESEARCH IN MOTION LIMITED
(Applicant)
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 17 March 2008 refusing European patent application No. 05252105.1 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: V. L. P. Frank
Members: R. Q. Bekkering
T. Bokor
Summary of Facts and Submissions

I. This is an appeal against the refusal of application 05 252 105 for lack of an inventive step, Article 56 EPC 1973, over document D1: US 2004/0188519 A.

II. At oral proceedings before the board, the appellant requested that the decision under appeal be set aside and a patent granted on the basis of Claims 1 to 12 of the Main Request filed with the grounds of appeal,

or in the alternative, on the basis of

Claims 1 to 8 of the Auxiliary Request 'A' filed with the letter dated 20 December 2011, or
Claims 1 to 12 of the First Auxiliary Request, or
Claims 1 to 10 of the Second Auxiliary Request, or
Claims 1 to 10 of the Third Auxiliary Request, or
Claims 1 to 10 of the Fourth Auxiliary Request, all filed with the grounds of appeal.

Furthermore, the appellant requested that, in case the board should find that the decision should be set aside but that documents D7 and D8 need to be considered, the case be remitted to the examining division for further prosecution.
III. Claim 1 of the main request reads as follows:

"A wearable reader device (10) attachable to the clothing or body of a user so as to be visible and for receiving and holding a smart card, comprising:
a housing (105), said housing receiving said smart card;
a first processor (25), said first processor being in electronic communication with an integrated circuit chip (55) of said smart card when said smart card is received in said housing;
a first wireless communications device (40) in electronic communication with said first processor for enabling the reader device to transmit first encrypted information wirelessly and to receive second encrypted information wirelessly; and
a first memory (30) in electronic communication with said first processor, said first memory having one or more routines executable by said first processor, said one or more first routines including a first cryptographic module (35) adapted to encrypt first information to create said first encrypted information and decrypt said second encrypted information to obtain second information;
wherein said first cryptographic module is adapted to generate a first session key and use said first session key to encrypt first message information to create first encrypted message information, wherein said first memory stores a shared secret key, said shared secret key being known to at least one computing device, and wherein said first cryptographic module is adapted to use said shared secret key to encrypt said first session key to create a first encrypted session key, said first encrypted information comprising said
first encrypted message information and said first encrypted session key; wherein said housing includes a channel arranged to receive and hold said smart card on three sides, and exposes a substantial remainder of a front face of the smart card such that personal/identifying information provided on said face can be readily seen; and wherein the housing is sized to extend beyond the length and width of said smart card when received in said channel."

IV. Reference is made to the following further documents:

D2: WO 02/01520 A
D3: EP 1 349 031 A
D4: US 2004/0199474 A
D5: EP 1 471 453 A
D6: US 2003/0183691 A

D7: EP 1 253 559 A
D8: EP 0 703 676 A
D9: GB 2 319 747 A
D10: WO 95/14980 A
D11: US 2005/0001712 A

V. The appellant in substance provided the following arguments:

Document D1 concerned a smart card reader device for biometric identification. There was no disclosure in D1 of visual identification in relation to a smart card, neither was there any disclosure of the card reader device being wearable. The mention in D1 of the fact that some cards were produced with a picture of the
cardholder could not be fairly considered suggesting wearability and visibility of the card reader, as according to D1 the use of a picture for identification purposes was in fact considered unsuitable. Accordingly, the subject-matter of claim 1 of the main request was inventive having regard to document D1.

Moreover, as documents D7 to D11 were cited for the first time in the appeal proceedings and the decision under appeal was not based on a consideration of these documents, it was requested that should these documents, and in particular documents D7 and D8, need to be considered, the case be remitted to the examining division for further prosecution, providing the appellant applicant with first instance examination based on these documents and, if needed, appeal at second instance.

**Reasons for the Decision**

1. The appeal is admissible.

2. **Main request**

2.1 **Novelty, inventive step**

2.1.1 **Document D1**

Document D1 discloses a reader device for receiving and holding a smart card, comprising

- a housing receiving said smart card (cf figure 3),
- a processor in electronic communication with an integrated circuit chip of the smart card when the smart card is received in said housing (cf paragraphs [0046], [0055] to [0057]; figure 2),

- a wireless communications device in electronic communication with the processor for enabling the reader device to transmit first encrypted information wirelessly and to receive second encrypted information wirelessly (cf paragraphs [0047], [0056], [0071]; figures 2, 12),

- a memory in electronic communication with the processor having one or more routines executable by the processor including a cryptographic module adapted to encrypt first information to create the first encrypted information and decrypt said second encrypted information to obtain second information (cf paragraphs [0046], [0071]; figure 12),

- wherein the housing includes a channel arranged to receive and hold the smart card on three sides (cf figures 3, 4, 6).

2.1.2 The subject-matter of claim 1 differs from the reader device of document D1 in that:

- the reader device is wearable and attachable to the clothing or body of a user so as to be visible,

- the cryptographic module is adapted to generate a first session key and use the first session key to encrypt first message information to create first encrypted message information, wherein the memory
stores a shared secret key, the shared secret key being known to at least one computing device, and wherein the cryptographic module is adapted to use the shared secret key to encrypt the first session key to create a first encrypted session key, the first encrypted information comprising the first encrypted message information and the first encrypted session key,

- the housing exposes a substantial remainder of a front face of the smart card such that personal/identifying information provided on said face can be readily seen, and

- the housing is sized to extend beyond the length and width of the smart card when received in the channel.

The subject-matter of claim 1 is, thus, new over document D1 (Article 54(1) and (2) EPC 1973).

2.1.3 The subject-matter of claim 1 is also new over any of the other, more remote documents D2 to D6 cited in the examination proceedings.

2.1.4 The effect of the above first distinguishing feature is that a user is more easily able to keep the smart card reader device with him or her at all relevant times, thereby eliminating the problem of users inadvertently leaving the smart card in a reader device and thus, for example, encountering problems accessing locations that require the identifying information on the smart card and creating a security problem arising from the fact that other individuals could use the still active smart card for instance to access an associated computing...
device to falsely send and receive secure messages (see also application, paragraphs [0009] and [0036]).

The effect of the above second distinguishing feature is that symmetric encryption, as opposed to the more complex asymmetric public key encryption used in D1, is provided for.

The effect of the above third distinguishing feature is that the personal/identifying information may be used, for example, to provide access to certain restricted locations where it is often important for this information to be visible so that it may be readily checked by a guard or the like (see also application, paragraphs [0008] and [0034]).

Finally, the effect of the above fourth distinguishing feature is among other things to protect the smart card from being bent or otherwise damaged.

2.1.5 As the above effect pertaining to the second distinguishing feature is unrelated to that of each of the remaining distinguishing features, the objective partial problem to be solved relative to D1 arising in respect of the above second distinguishing feature is to provide an alternative, simpler encryption technique.

On the other hand, the above effects brought about by the first, third and fourth distinguishing features are related to each other to the extent that visibility of the personal/identifying information on the front face of the smart card is also linked to the wearability of the reader device and the wearability in turn calls for an adequate mechanical protection of the smart card.
Accordingly, the objective partial problem to be solved relative to D1 arising in respect of the above first, third and fourth second distinguishing features is to improve the usage of the known reader device in terms of scope, convenience and security.

2.1.6 As to the above first partial problem, since the symmetric encryption technique claimed is generally known to a person skilled in the art working in the technical field at issue of smart card systems (see eg document D4, paragraphs [0154] and [0155]), it would be obvious to use it as a simpler alternative in the reader device of D1.

However, as to the above second partial problem to be solved relative to D1, the solution as claimed is not considered to be obvious to the person skilled in the art having regard to document D1 or any of the documents D2 to D6 cited by the examining division.

In the decision under appeal it is argued that "document D1 indicates that the device is used as an ID card or a personal identification device (see p. 7, par. 86-93) and that the smart card has a picture of the card holder (p. 2, par. 26). Given this indication, it would be obvious to the person skilled in the art to adapt the housing of the device, so that the front face of the smart card with the picture and the identifying information remains visible when the smart card is inserted in the housing, in order to allow visual identification of the user" (cf decision, page 8, fourth paragraph).
However, as argued by the appellant, document D1 is exclusively concerned with the usage of the reader device for electronic identification and at no point a visual assessment of any data printed on the front face of the smart card is envisaged. In fact, according to D1, although some cards are produced with a picture of the cardholder, "the picture may not be checked in common transactions where the card is physically presented, and the picture cannot be checked in e-commerce transactions" (cf paragraph [0026]). Document D1 indeed avoids the use of a picture of the cardholder for identification purposes, perceived as problematic, and instead uses biometric data such as a fingerprint from the user (cf paragraph [0055] to [0057]; figure 12).

Moreover, neither in the usage of the reader device for financial transactions, nor in the usage for access control, envisaged in D1, can the wearability and the visibility of the reader device, and thereby the visibility of personal/identifying information provided on the front face of the card when in the reader, being held to be obvious.

Clearly, for the envisaged usage for e-commerce and ATM transactions, as well as for car access control, there would be no apparent reason for requiring the reader device to be wearable and visible, as in these cases generally there is no counterpart present for visually inspecting the information provided on the front face of the card. For the remaining usage of the reader device envisaged in D1 such as POS transactions and building access control, arguably such a counterpart could be present, but, as indicated above, D1 rather
avoids using a picture of the cardholder for identification purposes and instead uses biometric data, so that the claimed solution cannot be considered obvious starting from D1.

2.1.7 The remaining documents D2 to D6 cited by the examining division do not render the claimed solution obvious either.

2.1.8 Accordingly, the subject-matter of claim 1 of the main request is not obvious having regard to document D1 (Article 56 EPC 1973).

2.1.9 In the board's view however documents D7 to D11 (cited in the proceedings of divisional application EP 1 916 632 A) which were introduced into the proceedings by the board seem relevant.

The appellant has requested that as these documents were cited for the first time in the appeal proceedings and the decision under appeal was not based on a consideration of these documents, the case be remitted to the examining division for further prosecution, providing the appellant applicant with first instance examination based on these documents and, if needed, appeal at second instance.

The board considers it appropriate under these circumstances that, pursuant to Article 111(1) EPC 1973, the case be remitted to the department of first instance for further prosecution.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution.

Registrar: S. Sánchez Chiquero

Chair: V. L. P. Frank