Datasheet for the decision of 30 September 2014

Case Number: T 1864/10 - 3.4.03
Application Number: 04755389.6
Publication Number: 1656639
IPC: G07F7/10
Language of the proceedings: EN

Title of invention:
METHOD AND SYSTEM FOR CREATING AND OPERATING BIOMETRICALLY ENABLED MULTI-PURPOSE CREDENTIAL MANAGEMENT DEVICES

Applicant:
Uru Technology Incorporated

Headword:

Relevant legal provisions:
EPC 1973 Art. 56, 84, 111(1)

Keyword:
Remittal to the department of first instance - (no)
Inventive step - main request (no) - auxiliary request (no)
Conciseness - auxiliary request (no)

Decisions cited:
G 0010/93

Catchword:
DECISION of Technical Board of Appeal 3.4.03 of 30 September 2014

Appellant: Uru Technology Incorporated
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 15 April 2010 refusing European patent application No. 04755389.6 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman G. Eliasson
Members: T. M. Häusser
T. Bokor
Summary of Facts and Submissions

I. The appeal concerns the decision of the examining division refusing the European patent application No. 04 755 389 for added subject-matter (Article 123(2) EPC) and for lack of inventive step (Article 52(1) EPC and Article 56 EPC 1973).

II. At the oral proceedings before the board the appellant (applicant) requested that the decision under appeal be set aside and a patent be granted on the basis of claims 1-27 of the main request or on the basis of claims 1-27 of the auxiliary request ("Subsidiary 1"), both filed with letter dated 26 September 2014.

The appellant further requested remittal to the department of first instance for a decision on inventive step with regard to documents D3 and D11 cited by the board.

The board decided not to remit the case to the department of first instance.

III. Reference is made to the following documents:

D3: WO 02/49322 A2,
D9: WO 03/017244 A1,

IV. The wording of independent claim 1 according to the main and auxiliary requests is as follows (board's labelling "(ii)" and "(iii)"): 

Main request:
"A portable, hand-held, programmable device (12) for integrating and controlling multiple secure credentialing applications and for interacting with external systems, comprising integrated on said device (12):

a) a fingerprint sensor (30a) provided to scan the user’s finger placed thereon in order to determine the fingerprint and to compare it with stored fingerprints,

b) control circuitry;

c) a microprocessor (32);

d) a memory (34) provided for storing a plurality of credentials associated with a plurality of credentialing functions,

e) a power source (36);

f) a plurality of interfaces provided to interact with external systems of respective types to which corresponding credentials have to be transmitted or presented; and

characterized in that said fingerprint sensor (30a) is provided, only when the scanned fingerprint or a pattern of fingerprints match a stored fingerprint or a pattern of stored fingerprints,

- to activate said device and then
- to act as a select/scroll touch sensitive control pad (30a) enabling the user to select one credentialing function to be executed,

(ii) said credentialing function selecting only that one of the plurality of interfaces to external systems associated with the selected credentialing function, applying power to each circuit of the selected interface, and transmitting or presenting over the selected interface the selected credential associated with the selected credentialing function to an external system of the type for which said credential has to be transmitted or presented."
Auxiliary request:

Claim 1 of the auxiliary request differs from claim 1 of the main request in comprising the following additional feature:

(iii) "said credentials stored in said memory (34) are loaded from an enrollment system (16)".

V. The appellant argued essentially as follows:

a) Procedural issues - request for remittal to the department of first instance

Documents D3 and D11 had not been mentioned in the decision under appeal. Rather, the objection of lack of inventive step in view of the combination of these documents had been raised for the first time during the appeal proceedings. Furthermore, the present claims were essentially identical to those underlying the decision under appeal. The case should therefore be remitted to the department of first instance in order to safeguard the assessment of inventive step in view of this combination of documents in two instances.

b) Main request - inventive step

Document D3 related to a mobile telephone with a fingerprint sensor. In order to operate the telephone the owner had to present his finger to the sensor. If the fingerprint was correctly verified all user functions in the telephone were enabled. It was thus implied that all circuits corresponding to these functions were powered.
The difference of the subject-matter of claim 1 of the main request in relation to the device of D3 was that the fingerprint sensor was usable as a select/scroll device and that power was only applied to the selected interface. The corresponding technical problems were to improve the ease of use of the device and to reduce the power consumption. Reducing power consumption was particularly needed in the device of the present invention, as it was self-powered (see original claim 21).

Document D11 provided the claimed solution to the first problem, namely a mobile telephone with a fingerprint sensor usable as a select/scroll device. However, document D11 did not provide a solution to the second problem. On the contrary, it followed from paragraph [0011] of document D11 that all circuits of the device of D11 were powered when switched on by use of the fingerprint sensor. The skilled person would thus not be led to the claimed solution of the second partial problem.

c) Auxiliary request

Claim 1 of the auxiliary request was further limited in that the credentials were loaded from an enrollment station. In document D3 it had not been disclosed where the credentials came from, e. g. the photograph to be shown at the passport control.

Reasons for the Decision

1. The appeal is admissible.
2. Procedural issues - request for remittal to the department of first instance

2.1 The appellant argued that the objection of lack of inventive step over the combination of documents D3 and D11 had been raised for the first time during the appeal proceedings and that the case should therefore be remitted to the department of first instance in order to safeguard the assessment of inventive step over these documents in two instances.

2.2 According to Article 111(1) EPC 1973 a board of appeal "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". On a board of appeal in charge of reviewing the decision of an examining division refusing an application, this article confers the discretionary power either to rule on the case itself or to remit the matter for further prosecution to the examining division, depending on the circumstances of the case (see G 10/93, paragraph 5 of the Reasons).

Furthermore, in ex parte proceedings, where the departments of both instances must ensure that the conditions for patentability are met, the boards of appeal are restricted neither to examination of the grounds for the contested decision nor to the facts and evidence on which the decision is based (see G 10/93, paragraph 3 of the Reasons).

2.3 In the present case, the application was refused inter alia on the ground of lack of inventive step. The subject-matter of claim 1 pending at the time, which corresponds essentially to claim 1 of the main request, was held by the examining division to lack inventive
step in view of document D9. However, both documents D3 and D11 were referred to in the contested decision in relation to the objection of lack of inventive step of the dependent claims (see point 2.2.6 of the contested decision).

Basing the objection of lack of inventive step of the subject-matter of claim 1 on the combination of documents D3 and D11 rather than on document D9 as the examining division in the contested decision, is not considered to warrant remittal to the department of first instance, especially as the outcome of the case before the board is - for the reasons provided in detail below - the same as that before the department of first instance.

2.4 Therefore, in the interest of efficient proceedings and in order to avoid keeping the public in uncertainty about the fate of the application for potentially several more years, the board judges that the case is not to be remitted to the department of first instance.

3. Main request - inventive step

3.1 Closest state of the art

3.1.1 In the contested decision the examining division started from D9 as the closest state of the art.

This document relates to (see page 12, line 8 - page 13, line 2; Figure 1) input devices in which functions can be selected by touching a sensor with a particular finger depending on the desired function. Imaging means are used for imaging the entire hand in order to identify which finger was touching the sensor. Applications envisaged in document D9 in which such
input devices could be used are CD-players (Figure 13) and mobile telephones (Figure 14).

However, document D9 is not considered to relate to the same purpose as the invention, namely to provide a hand-held, programmable device for integrating and controlling multiple secure credentialing applications and for interacting with external systems. The devices of D9 are not even considered to be structurally close to the invention as they do not involve a fingerprint sensor but imaging means which image the entire hand of the user.

3.1.2 On the other hand, document D3 is conceived for the same purpose as the claimed invention and has the most relevant technical features in common with it as will be shown in detail below.

Document D3 is therefore regarded as the closest state of the art.

3.2 Distinguishing features

3.2.1 Document D3 discloses (page 4, lines 21-28; page 5, lines 20-29; page 6, lines 4-9; Figure 1) a mobile telephone 10 comprising a central processor 11 connected to a display 12, a keypad or keyboard 13 and an antenna 14 for telephone signals. A fingerprint sensor 15 and an RFID chip 16 corresponding to the chips found in RFID smart cards are also connected to the processor 11. The RFID chip 16 is connected to an RFID antenna 17.

On initial purchase of the mobile telephone 10, the new owner enrols his fingerprint and the details of the owner's fingerprint are saved securely in the
telephone. Furthermore, during the enrolment process it is possible to record a photograph of the owner. Additionally, in order for the mobile telephone to provide the features of a credit card, the necessary bank details are securely entered into the memory of chip 16.

In order to operate the mobile telephone 10, the owner must first switch on and then present his finger to the fingerprint sensor 15. If the fingerprint is correctly verified, all user functions in the mobile telephone 15 are enabled.

The mobile telephone 10 may be loaded with a sum of money. To do this the owner must connect the telephone to his bank account via the internet and request the transfer of a specific amount of money to the mobile telephone 10. Once the telephone has been loaded with money, the user is able to operate it for any payment application, just like with an RFID smart card (page 6, lines 11-26).

The mobile telephone 10 provides a means to carry out credit/debit purchases. On making a purchase, the owner presents the telephone to a reader that is interfaced to the retailer's EPOS (electronic point-of-sale) system. Having verified that the user is the legal owner, the reader extracts the credit card details from the telephone. The amount to be paid is entered by the sales assistant on the till. The two pieces of information are combined and sent via the EPOS network to the user's bank (page 6, line 28 - page 7, line 4).

The user may also effect credit/debit processes by telephone, e. g. ordering and paying for theater tickets from home. Normal telephone communication with
the theater is established, the transaction is arranged verbally and the credit or debit card number is given, preferably automatically by the mobile telephone 10 (page 7, lines 6-12).

Furthermore, a photograph of the legal owner stored within the mobile telephone 10 may be used as a visual check of identity, for example at passport control points. To verify his identity, the legal owner presents his mobile telephone 10 to a reader positioned at the control point while his finger is placed on the fingerprint sensor 15. Having processed details in the telephone about the owner, the reader transmits a command requesting the telephone 10 to display the owner's photograph, which may then be shown to the relevant authority (page 8, line 25 - page 9, line 2).

3.2.2 Using the wording of claim 1 of the main request, document D3 discloses a portable, hand-held, programmable device (mobile telephone 10) for integrating and controlling multiple secure credentialing applications (credit card, smart card, identifying photograph) and for interacting with external systems (EPOS reader, reader positioned at identity check control point, receiving telephone), comprising integrated on said device:

a) a fingerprint sensor (fingerprint sensor 15) provided to scan the user’s finger placed thereon in order to determine the fingerprint and to compare it with stored fingerprints (in order to verify the fingerprint),

b) control circuitry (circuitry connecting central processor 11 to display 12, fingerprint sensor 15, RFID chip 16, ...);

c) a microprocessor (central processor 11);
d) a memory (memory of RFID chip 16 and of the mobile telephone 10) provided for storing a plurality of credentials associated with a plurality of credentialing functions,

e) a power source (implicit since the mobile telephone 10 is a portable device);

f) a plurality of interfaces (display 12, RFID antenna 17, antenna 14 for telephone signals) provided to interact with external systems of respective types to which corresponding credentials have to be transmitted or presented, wherein the fingerprint sensor (fingerprint sensor 15) is provided, only when the scanned fingerprint or a pattern of fingerprints match a stored fingerprint or a pattern of stored fingerprints (implicit as the fingerprint is correctly verified) to activate said device (all user functions in the mobile telephone 15 are enabled).

3.2.3 The appellant argued that the subject-matter of feature (ii) of claim 1 of the main request ("said credentialing function selecting ... transmitted or presented") had not been disclosed in document D3. This subject-matter implied that only the circuits of the selected interface were powered, but not the other circuits.

In feature (ii) it is specified that only that interface is selected by the credentialing function which is associated with it. Therefore, due to the association, the claimed selection does not imply that any choice between alternatives is in fact made. Rather, it merely implies that the interface is taken which is associated with the credentialing function anyway.
It is also specified in feature (ii) that power is applied to each circuit of the interface thus selected. However, this does not imply that the circuits of the other interfaces are not powered. Rather, nothing can be deduced from claim 1 of the main request regarding the powering of the circuits of the other interfaces. The board notes, by way of an obiter dictum, that a hypothetical alternative feature which implied that the circuits of the selected interface were powered, whereas the circuits of the other interfaces were not powered, would have no basis in the application as filed and would therefore be contrary to the requirements of Article 123(2) EPC.

It follows from the description of document D3 referred to above under point 3.2.1 that, when, for example, the smart card function is to be used, the corresponding interface, namely the RFID antenna 17 is selected, and the money is transferred to the receiving reader. This implies that each of the corresponding circuits, in this case those of the RFID chip 16, are powered. Similarly, when an identifying photograph is to be shown, the corresponding interface, namely the display 12 is selected, the corresponding circuits are powered and the photograph is shown on the display 12.

Feature (ii) of claim 1 of the main request has therefore also been disclosed in document D3.

3.2.4 The subject-matter of claim 1 of the main request differs from the device of document D3 in that (i) the fingerprint sensor is provided, subsequent to the activation of the device, to act as a select/scroll touch sensitive control pad enabling the user to select one credentialing function to be executed.
3.3 Objective technical problem

The appellant argued that the partial objective technical problem corresponding to feature (ii) was to reduce the power consumption of the device.

However, for the reasons given above, feature (ii) is already disclosed in document D3 and is thus not a feature distinguishing the claimed invention over document D3. Feature (ii) is therefore not relevant for the formulation of the objective technical problem.

The effect of distinguishing feature (i) is to increase the ease of use of the device, as agreed by the appellant. The objective technical problem is therefore to implement a device which is easier to use.

3.4 Obviousness

3.4.1 Document D11 relates to a mobile telephone like the closest prior art document D3 and would therefore be considered by the skilled person when attempting to implement a device which is easier to use.

3.4.2 Document D11 discloses (paragraphs [0017]-[0023] and Figures 1 and 2) a mobile telephone 4 with a display 8 on its front side 2 and a control panel 26 on its rear side 24, which acts as a fingerprint sensor and as a touch panel. In order to activate the device the user must hold his finger on the control panel 26 working in the fingerprint recognition mode. If an evaluation unit determines a match to a stored fingerprint, the mobile telephone is unlocked and the control panel 26 is switched to the touch panel mode. In this mode the user controls the motion of a cursor 20 on the display 8 with the corresponding motion of his finger 25 on the
surface of the control panel 26. By briefly pressing on the surface of the control panel 26 the field highlighted by the cursor 20 can be actuated. In this manner all the functions of the mobile telephone 4 can be performed by means of the control panel 26.

3.4.3 In view of document D11 the skilled person would therefore replace the fingerprint scanner 15 of the device of document D3 by the control panel 26 of document D11 in order to make it easier to use. At the same time he would incorporate the corresponding panel control in the device of D3 by programming the central processor 11 accordingly. In this manner he would arrive at a device in which the control panel 26 is switched, after being used in the fingerprint recognition mode to activate the device, to the touch panel mode thus enabling the user to select the various functions of the device, e. g. the smart card function or the identifying photograph function, by means of the control panel 26.

The skilled person would therefore arrive at the subject-matter of claim 1 of the main request without exercising any inventive skill. Hence, the subject-matter of claim 1 of the main request does not involve an inventive step (Article 52(1) EPC and Article 56 EPC 1973).

4. Auxiliary request

4.1 Amendments

Claim 1 of the auxiliary request differs from claim 1 of the main request in comprising the additional feature (iii) related to the credentials stored in the
memory being loaded from an enrollment system (see point IV above).

4.2 Clarity and conciseness

Claim 1 of the auxiliary request relates to a portable, hand-held device which comprises the memory for storing a plurality of credentials. By means of feature (iii) it is attempted to further limit the claimed portable device by specifying firstly that the credentials are stored in the memory and secondly that the credentials are loaded from an enrollment system.

However, the data stored in the memory do not retain any reminiscence of where they came from, i. e. the data loaded from an enrollment station cannot be distinguished from data loaded from anywhere else. Hence the indication that the credentials are loaded from an enrollment system does not limit the claimed device in any way and does not distinguish the claimed invention from the prior art. The reference to an enrollment system in claim 1 of the auxiliary request therefore raises doubts whether or not the claimed subject-matter is supposed to include such an enrollment system. Consequently claim 1 of the auxiliary request is considered to be contrary to the requirements of Article 84 EPC 1973 for not being clear.

Furthermore, the indication that the credentials are loaded from an enrollment system is also considered extraneous as it does not limit the claimed device. Claim 1 of the auxiliary request is therefore also considered to lack conciseness, contrary to the requirements of Article 84 EPC 1973.
4.3 Inventive step

Document D3 discloses that the photograph is downloaded into the memory of the mobile telephone 10 during the enrolment process (page 5, penultimate paragraph) and that a sum of money to be used in the smart card application is transferred from a bank account via internet (page 6, paragraph 3). Therefore, D3 discloses that the credentials are stored in the memory provided for storing them. Moreover, even if the loading of the credentials from an enrollment station could be construed as a limiting feature, such loading is in fact implicitly disclosed in document D3.

Hence, feature (iii) is disclosed in document D3.

Consequently - as for claim 1 of the main request - the subject-matter of claim 1 of the auxiliary request differs from the device of document D3 in comprising feature (i) and does not involve an inventive step for the reasons provided under points 3.3 and 3.4 above (Article 52(1) EPC and Article 56 EPC 1973).
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:  

The Chairman:

S. Sánchez Chiquero  

G. Eliasson  

Decision electronically authenticated