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**Datasheet for the decision  
of 22 October 2009**

**Case Number:** T 1850/07 - 3.5.03

**Application Number:** 01966926.6

**Publication Number:** 1325621

**IPC:** H04M 17/00

**Language of the proceedings:** EN

**Title of invention:**  
Roaming reload manager

**Patentee:**  
Sicap AG

**Opponent:**  
Atos Worldline GmbH Payment Systems Integration

**Headword:**  
Roaming reload manager/SICAP

**Relevant legal provisions:**  
EPC Art. 56

**Keyword:**  
"Inventive step (yes)"

**Decisions cited:**  
-

**Catchword:**  
-



Case Number: T 1850/07 - 3.5.03

**DECISION**  
of the Technical Board of Appeal 3.5.03  
of 22 October 2009

**Appellant:** Atos Worldline GmbH Payment Systems  
(opponent) Integration  
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**Representative:** Naeven, Ralf  
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**Respondent:** Sicap AG  
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**Representative:** BOVARD AG  
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**Decision under appeal:** Decision of the opposition division of the  
European Patent Office posted 1 August 2007  
rejecting the opposition against European  
patent No. 1325621 pursuant to Article 102(2)  
EPC 1973.

**Composition of the Board:**

**Chairman:** A. S. Clelland  
**Members:** F. van der Voort  
R. Moufang

## Summary of Facts and Submissions

I. This appeal is against the decision of the opposition division rejecting an opposition filed against European patent No. 1325621 which is based on European patent application No. 01966926.6.

II. The opposition was filed against the patent as a whole and on the ground that the claimed subject-matter did not involve an inventive step (Article 100(a) EPC).

In support of its arguments the opponent referred to the following documents:

D1: WO 01/35628 A;

D2: EP 1 143 693 A;

D3: DE 299 14 380 U;

D4: WO 00/18155 A;

D5: EP 0 827 119 A;

D6: WO 00/33264 A;

D7: GB 2 172 775 A;

D8: "Classical versus Transparent IP proxies", Network Working Group, M. Chatel, Request for Comments 1919, March 1996, pages 1-35; and

D9: US 6 129 271 A.

III. The opposition division held that the grounds for opposition did not prejudice the maintenance of the patent as granted (Article 102(2) EPC 1973).

IV. The opponent (appellant) lodged an appeal against the decision and requested that it be set aside and that the patent be revoked in its entirety. It was argued that

the claimed subject-matter did not involve an inventive step. Oral proceedings were conditionally requested.

V. The respondent (proprietor) filed a reply to the statement of grounds of appeal and requested that the appeal be dismissed. Oral proceedings were conditionally requested.

VI. The parties were summoned by the board to oral proceedings. In a communication accompanying the summons the board drew attention to issues to be discussed at the oral proceedings.

VII. In preparation for the oral proceedings both the appellant and the respondent filed further arguments.

VIII. Oral proceedings were held on 22 October 2009. The appellant requested that the decision under appeal be set aside and that the patent be revoked. The respondent requested that the appeal be dismissed.

At the end of the oral proceedings the board's decision was announced.

IX. The appellant's arguments in respect of independent method claim 1 as granted may be summarised as follows:

D1 represented the closest prior art. D2 was assumed to be a correct translation of D1.

Starting out from D1 as representing the closest prior art, the objective problem to be solved was to implement a known structure, consisting of a central unit and reloading units of different network operators, such that

the administration of value card codes remained within the respective reloading units and such that it was assured that, on selling a prepaid card code, the received credit was forwarded to the reloading unit of the buyer's home network.

The formulation of this technical problem did not involve an inventive step, since it was known from the prior art that in networks without a central unit, value card codes were administered and verified in the operator's own network. Reference was specifically made to D5 (claim 1, and col. 3, lines 28 to 32).

The skilled person, when faced with the above objective technical problem, would find himself in a "one-way street"-situation; the distinguishing features would almost inevitably have occurred to him and would at least be an obvious practical possibility. Reference was specifically made to D3 (page 1, 2nd paragraph), D5 (col. 3, lines 28 to 32) and D9 (col. 1, lines 28 to 33).

The objective technical problem could alternatively be formulated as implementing a known structure for loading a chip card or a network user's account, in which the structure consisted of a central unit and reloading units of different network operators, such that a verification of value card codes in the central unit was avoided.

The person skilled in the art, when faced with this problem, would have considered a combination of the teachings of D1 and D9 and the common structure of a network, as illustrated, for example, in D5, and would thereby have arrived at the concept of the network architecture which constituted the core idea of the patent.

For the skilled person, the specific distinguishing features of the claim merely represented a simple technical implementation of this concept. Reference was specifically made to D9 (col. 1, lines 23 to 30, col. 2, line 57 to col. 3, line 18, col. 3, lines 25 to 35 and Fig. 1).

The subject-matter of claim 1 as granted did not therefore involve an inventive step.

The submissions concerning claim 1 as granted applied *mutatis mutandis* to independent system claim 10 as granted. The arguments also applied to claim 15, for which the same objective technical problems as mentioned above were applicable with the additional condition that networks of different countries were used.

X. The respondent's arguments may be summarised as follows:

The statement of grounds of appeal did not comply with the requirements of Article 12(2) RPBA and was therefore to be rejected. Alternatively, the appeal was to be rejected for the following substantive reasons:

D1/D2 disclosed only three of the twelve technical features of claim 1. The technical problem as defined by the opposition division and the conclusion that the claimed subject-matter involved an inventive step were wholly correct, whereas the technical problems as formulated by the appellant contained structural features of the claimed solution and could not therefore be used for the definition of the objective technical problem solved by the claimed subject-matter.

XI. Claim 1 as granted reads as follows:

"A method for loading and reloading of chipcards, used in mobile radio devices (10), or user accounts assigned to the chipcards with a credit for a monetary amount value, in which method a reloading unit transmits the credit to the chipcard or to the user account assigned to the chipcard and stored on a central customer database, whereas the chipcard is assigned to a call number of a user of the mobile radio network (50), a service number of a central unit (30) being called using a communications device, and by means of the communications device at least a code (13) of a prepaid value card (11) and an identification of the chipcard or the user account to be loaded or reloaded being transmitted, characterised in

that the central unit (30) determines, by means of a database that contains a stored list of mobile radio network operators, a first reloading unit (41) of a first mobile radio network operator who issued the prepaid value card (11),

that the central unit (30) transmits, via a first communications channel (50/51), the code (13) and a proxy MSISDN to the first reloading unit (41), and the first reloading unit (41) credits a monetary amount value, which is assigned to the code (13), to the central unit (30) by means of the proxy MSISDN, and

that the central unit (30) transmits, via a second communications channel (50/52), the monetary amount value and the identification of the chipcard or the user account to be loaded or reloaded to a second reloading unit (40) of a second mobile radio network operator, with whom the chipcard is approved for use of the mobile radio network (50), for loading or reloading the

chipcard or the user account."

Claim 10 as granted reads as follows:

"A system for loading or reloading chipcards, used in mobile radio devices (10), or user accounts assigned to the chipcards and stored on a central customer database with a credit for a monetary amount value, which system comprises at least two reloading units (40/41), connected to a mobile radio network (50), and at least one mobile radio device (10) with a chipcard that is assigned to a call number of a user of the mobile radio network (50), the reloading units (40/41) containing codes (13) of a particular mobile radio network operator which are stored with an assigned credit in a database connected to the reloading units (40/41), characterised in

that the system includes a central unit (30) connected to the mobile radio network (50), which central unit (30) is connected to a database that contains a stored list of mobile radio network operators, by means of which list the mobile radio operator who issued a particular prepaid value card (11) with code (13) is able to be determined,

that the central unit (30) contains at least one proxy MSISDN for each mobile radio network operator for crediting of a monetary amount value, assigned to a code (13), via a reloading unit (40/41) of the respective mobile radio network operator,

that the central unit (30) comprises means for sending a code (13) and a respective proxy MSISDN to the first reloading unit of the first mobile radio network operator who issued the prepaid card of the code (13) via a first communication channel (50/51) and means for



receiving the credited monetary amount value of the first mobile radio network operator, and

that the central unit includes means for transmitting an identification of the chipcard or the user account to be loaded or reloaded and of a monetary amount value assigned to the code (13) via a second communication channel (50/52) to a second reloading unit (40) of a second mobile radio network operator with whom the chipcard is approved for using the mobile radio network (50)."

Claim 15 as granted reads as follows:

"The system comprising means for carrying out all the steps of the method according to one of the claims 1 to 9, further characterised in that different mobile radio network operators of different countries having different reloading units (40/41) each with at least one database, in which database a list is stored of codes allocated to value cards (11) and an associated monetary amount value per code (13), and that the central unit (30) includes a proxy MSISDN for each mobile radio network operator and/or a corresponding subscription."

## **Reasons for the Decision**

### **1. *Admissibility (Rule 65(1) EPC 1973)***

The respondent argued that the appeal did not appear ("scheint") to comply with the requirements of Article 12(2) RPBA, since the statement of grounds of appeal consisted of twenty two pages plus a four-page annex and did not therefore set out clearly and concisely the

reasons.

Even if it were assumed that the respondent meant to refer to Article 10a(2) RPBA (OJ 11/2004, 541), which was in force when the statement of grounds of appeal was filed, rather than Article 12(2) RPBA, the board notes that non-compliance with Article 10a(2) RPBA does not necessarily lead to the appeal being inadmissible. It is sufficient that the grounds of appeal allow the board to understand why the appellant considers the decision to be incorrect. In the board's view, in the present case, this requirement is complied with. Nor did the respondent argue otherwise.

Hence, since the appeal complies with Articles 106 to 108 EPC 1973 and Rules 1(1) and 64 EPC 1973, the appeal is admissible.

## 2. *Inventive step*

2.1 It was common ground between the parties that document D1 represented the closest prior art and that for the purposes of examining inventive step D2 was to be considered as a correct translation of D1. The opposition division also considered D1 as representing the closest prior art and D2 as being a correct translation of D1. The board sees no reason to question this. Hereinafter, when discussing the disclosure of D1, specific references to passages will therefore be with reference to D2 rather than D1.

2.2 D1 discloses a method of reloading a user account, assigned to a user of a mobile radio communication device, with a credit for a monetary amount value. In an area B (D2, Fig. 1) a home service control point SCPb, which is

connected to a service switch point SSPb, transmits the credit to the user account, which is stored in a customer database of the home SCPb (D2, page 3, line 50, and page 4, lines 9 to 11).

The procedure in D1 to reload the user account when the user is not in his/her home area B, but roaming in another area C, and has purchased a rechargeable card in that area (hereinafter referred to as a local prepaid card) is as follows: the user, using his/her mobile handset, calls a service number and transmits the code of the local prepaid card together with an identification of the user account, i.e. the calling handset number (D2, page 2, lines 14 to 16 and paragraph [0010], page 4, lines 19 to 23, and Fig. 1). A service switching point SSPc which is connected to a service control point SCPc in the area C (D2, page 3, lines 52 to 55, and Fig. 1) receives the call and determines, on the basis of the calling handset number, the SCP which stores the service data of the user, in this case the home SCPb in area B, and transmits via a first communication channel 2 (D2, Fig. 1) the prepaid card code and the calling handset number to the home SCPb. The home SCPb then retransmits this information to a central unit, i.e. a service data point SDP (D2, page 4, lines 5 to 7). The central unit SDP then transmits to the home SCPb the monetary amount value via a second communication channel 3 (D2, page 4, lines 7 to 9 and Fig. 1). Subsequently, the home SCPb credits the monetary amount value (D2, page 4, lines 9 to 11) and informs the user via the service switch point SSPc about the successful reload (D2, page 4, lines 14 and 15).

- 2.3 The appellant argued that the service points SCPb, SSPb in area B and the service points SCPc, SSPc in area C

corresponded to the second and the first reloading units, respectively, as referred to in claim 1 as granted. For the sake of argument, the board will follow this interpretation.

2.4 It was common ground between the parties that D1 did not disclose the following features of claim 1 as granted:

i) the central unit determines, by means of a database that contains a stored list of mobile radio network operators, a first reloading unit of a first mobile radio network operator who issued the prepaid card;

ii) the central unit transmits, via a first communications channel, the prepaid card code and a proxy MSISDN to the first reloading unit;

iii) the first reloading unit credits a monetary amount value which is assigned to the prepaid card code to the central unit by means of the proxy MSISDN; and

iv) the central unit transmits the identification of the user account to be loaded or reloaded via a second communications channel to the second reloading unit.

The board sees no reason to question this.

2.5 The above-mentioned distinguishing features i) to iv) have the technical effect that, whereas in the method of D1, after receiving the call from the first reloading unit SCPc, SSPc, the second reloading unit SCPb, SSPb controls the whole recharging procedure, in the course of which it establishes a connection with the central unit SDP in order to obtain the prepaid card information (face value

and validity date) as stored in the central unit SDP (D2, page 3, paragraph [0011], and page 3, last line, to page 4, line 7), in the claimed method, the central unit is called and, in response, the central unit determines which reloading unit it contacts in order to receive a monetary amount value assigned to the prepaid card code and to subsequently transmit the monetary amount value to the home reloading unit for reloading the user account.

In other words, according to the claimed method, the recharging procedure is centrally controlled by the central unit, thereby making any communication between the reloading unit in the area in which the user purchased the local prepaid card and the home reloading unit no longer necessary. In particular, each of the plurality of reloading units need no longer maintain lists of all other reloading units and calling handset numbers in order to be able to determine to which reloading unit the subscriber's call is to be routed, i.e. the home reloading unit, and to subsequently exchange data with this reloading unit.

2.6 The objective technical problem underlying the claimed subject-matter when starting out from D1 may therefore be seen in providing an alternative way of reloading a user account by means of a prepaid card when the user is outside his/her home network area and uses a prepaid card purchased in another network area.

2.7 The board does not accept the technical problems as formulated by the appellant (see point IX above) for the following reasons:

As to the first formulation it is noted that in D1 the

administration of value card codes is not only with the respective reloading units, but is partly managed by the central unit SDP which stores all the prepaid card data (D2, paragraph [0013]). Hence, the first part of the problem does not correctly take into account the disclosure of D1. Further, it is noted that the claimed solution does not solve the second part of the problem, i.e. does not assure that, on selling a prepaid card code, the received credit is forwarded to the reloading unit of the buyer's home network; the claim does not include features relating to receiving the credit on selling the prepaid card, which could, for example, be at a kiosk, and how, if at all, this credit is to be forwarded to the buyer's home loading unit.

The alternative problem contains pointers to the claimed solution, namely that there is no verification of value card codes in the central unit, and, hence, would introduce an element of *ex post facto* reasoning into the examination of inventive step.

- 2.8 In the board's view, in order to arrive at the claimed method starting out from D1, it would, *inter alia*, be necessary for the skilled person to decentralise the prepaid card information from the central unit SDP back to the respective reloading units in the different network areas, thereby effectively doing away with the central unit SDP all together. This would, however, go against the teaching of D1, since the aim of the invention disclosed in D1 is to avoid the complicated and difficult network topology of a mesh network architecture in which prepaid card information is communicated between any two reloading units SCP, SSP and to avoid distributed prepaid card information. This aim is particularly achieved by the

introduction of a central unit SDP outside of the reloading units SCP, SSP, which stores all prepaid card data for the mobile prepaid service, thereby creating a network topology which is a star architecture (see D2, paragraphs [0006], [0009], [0013] and [0014]).

The board is therefore not convinced that a person skilled in the art, starting out from D1 and faced with the above objective technical problem, would, without exercising inventive skill, have arrived at the claimed solution.

2.9 In support of its arguments the appellant also referred to documents D3, D5 and D9, which are discussed below.

2.10 D3 relates to a conversion apparatus for telecommunication networks, whereby a user of a home network H (see Fig. 1) is able to access a visited telecommunication network V, without a roaming agreement between the two networks being required (D3, page 3, 2nd paragraph). This is achieved by redirecting the signalling between the home network H and the visited network V via an intermediate network, i.e. partner network P, which has a roaming agreement with both the home network H and the visited network V and which is connected to the home network H via the conversion apparatus 3 (D3, page 4, lines 19 to 25, page 9, line 31 to page 10, line 6, and page 10, lines 23 to 26).

D3 does not disclose a central unit and does not relate to prepaid services in a mobile radio network. It therefore does not disclose or suggest any of the features i) to iv) (see point 2.4 above).

2.11 D5, which is acknowledged in the patent in suit, discloses a method of reloading a credit onto a SIM-card 7 of a

mobile phone 6 (D5, the abstract and Fig. 2). The credit is prepaid by the user by purchasing a value card 13 which has a code 15. The user calls a service number via a mobile communication network 10 and is prompted to enter the code, which is subsequently verified in a database 17 (D5, col. 3, lines 24 to 35). Thereafter, the credit is loaded onto the SIM-card of the mobile phone by means of a reloading unit 24 (D5, col. 8, lines 18 to 31).

D5 is thus concerned with a single mobile radio telecommunication network including a single reloading unit and not with the reloading of a user account or a SIM-card in a situation where the user is outside his/her home network area and/or has purchased a prepaid card issued by a different mobile radio network operator equipped with another reloading unit. Hence, D5 does not disclose or suggest the distinguishing features i), ii) and iv) (see point 2.4 above).

- 2.12 D9 (see the abstract and Fig. 1) relates to a test system for testing an electronic funds transfer network. The electronic funds transfer network allows a customer of a bank 102 to withdraw cash money at an ATM 103 of another bank 101 or deposit cash money at this other bank to the debit/credit of the customer's own account at the home bank 102. The banks do not communicate directly with each other, but only communicate with a central organisation, i.e. network processor 100, also referred to as a "switch", which routes transaction information from/to the banks and which acts as a clearing house for reconciling the respective bank accounts (see col. 1, lines 23 to 26, and col. 3, lines 13 to 35). The ATM of the other bank may be in a foreign country (col. 1, lines 49 to 53).



D9 does not therefore relate to a mobile telecommunication network and, in particular, a prepaid service in a mobile radio network in which different network operators are involved. The appellant admitted this, but argued that the skilled person would nevertheless consider D9, since it hinted at a star architecture with a central unit which included a database and communicated with different service providers, i.e. banks, connected to the central unit, using an administrative concept, i.e. that of depositing a monetary amount value, which was equivalent to the reloading of a user account in a prepaid service with different mobile radio network operators. The account number at the customer's bank in D9 corresponded either to the prepaid value card code or to the user account number in the home network area in D1. The person skilled in the art would therefore, on applying the teaching of D9 to the method of D1 and taking into account the common structure of a mobile radio network, as known from, e.g., D5, have arrived at the concept of the claimed method, the technical implementation of the distinguishing features thereof being a simple matter for the skilled person.

The board does not find these arguments convincing. If, for the sake of argument, it were assumed that the skilled person would consider D9 and apply its teaching to D1, the reloading units SCPb, SSPb and SCPc, SSPc would indeed no longer directly communicate with each other but only with central unit SDP. However, assuming that the home bank 102 corresponds to reloading unit SCPb, SSPb in the home network area B of D1, which in turn corresponds to the second reloading unit in claim 1 as granted (see points 2.2 and 2.3 above), in order to reload his/her account, the user at the first reloading unit SCPc, SSPc, which corresponds to the other bank 101,

would still provide the prepaid card code to this first reloading unit which would, instead of contacting the second reloading unit SCPb, SSPb, contact the central unit SDP directly. Hence, the central unit would receive the prepaid card code from the first reloading unit rather than transmit it to the first reloading unit, contrary to distinguishing feature ii) (see point 2.4).

2.13 It follows from the above that even if a person skilled in the art, starting out from D1 and faced with the above-mentioned objective technical problem (see point 2.6), were to consider any one or any combination of D3, D5 and D9 and apply its teaching to D1, he/she would not have arrived at a method which includes all the features of claim 1 as granted.

2.14 In view of the submissions made by the appellant in writing and in the course of the oral proceedings, the board also considered the question of whether or not the subject-matter of claim 1 as granted would have been obvious to the person skilled in the art when starting out from the disclosure of D5, which discloses the features of the preamble of claim 1 as granted (see point 2.11 above), and faced with the problem of making the system suitable for use with prepaid cards of different network operators. The definition of this problem would not involve an inventive step, since mutual recognition of each others means for payment was a well-known administrative concept at the filing date, e.g. in the case of cash withdrawals at ATMs of other banks. As to its solution, D5 would however hint at a solution which is similar to the method of D1, i.e. using a central unit which stores all prepaid card codes of all operators involved, since the databank 17 in the method of D5 is for storing all prepaid card

codes (see D5, the abstract ("sämtliche an Wertkarten vergebenen Codes") and col. 3, lines 28 to 32 ("Datenbank . . . , in welcher sämtliche Codes und die zugeordneten Geldbetragswerte, für die jemals Wertkarten erstellt worden sind, abgespeichert sind.")).

2.15 The above considerations in respect of claim 1 as granted apply, *mutatis mutandis*, to the subject-matter of the independent system claims 10 and 15 (see point XI above). The remaining claims of the patent as granted are dependent claims.

3. In view of the above, the board concludes that the arguments submitted by the appellant are not sufficient in order to set aside the decision under appeal. The appeal is therefore to be dismissed.

## **Order**

### **For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

D. Magliano

A. S. Clelland