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**Datasheet for the decision
of 23 October 2012**

Case Number: T 1568/08 - 3.4.03

Application Number: 00989250.6

Publication Number: 1245010

IPC: G07F 7/10, G06F 17/60,
G07F 19/00

Language of the proceedings: EN

Title of invention:
Vending machine purchase via cellular telephone

Patentee:
The Coca-Cola Company

Opponent:
Swisscom (Schweiz) AG

Headword:
-

Relevant legal provisions:
EPC Art. 123(2)(3)

Relevant legal provisions (EPC 1973):
EPC Art. 54, 56, 84, 100(a)(c)

Keyword:
"Determination of closest prior art (reasons 4.3)"

Decisions cited:
-

Catchword:



Case Number: T 1568/08 - 3.4.03

DECISION
of the Technical Board of Appeal 3.4.03
of 23 October 2012

Appellant: The Coca-Cola Company
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 10 June 2008
revoking European patent No. 1245010 pursuant
to Article 101(3)(b) EPC.

Composition of the Board:

Chairman: G. Eliasson
Members: V. L. P. Frank
T. Bokor

Summary of Facts and Submissions

I. This is an appeal by the patent proprietor against the decision of the opposition division to revoke the patent EP 1 245 010 for lack of an inventive step (Article 101(3)(b) EPC).

The patent was opposed in its totality. Grounds of opposition were lack of novelty and inventive step and unallowable extension of the subject-matter of the patent (Articles 100(a) and (c), 54 and 56 EPC 1973).

II. At oral proceedings before the board, the appellant proprietor requested that the decision under appeal be set aside and the patent be maintained in amended form on the basis of claims 1-25 filed during the oral proceedings as revised main request, with the amended description as filed during the oral proceedings.

The respondent opponent requested that the appeal be dismissed.

III. The patent claims relevant to the present decision read as follows:

"1. A system for facilitating a credit-based purchase of a product by a consumer from a vending machine absent a dedicated online connection between the vending machine and a financial institution, the system comprising:
a vending machine that has the product available for sale, wherein the vending machine comprises:
a local receiver in the vending machine for receiving a vend code, and means for dispensing

the product in response to the receipt of the vend code; and

a server for communicating with and associated with a billing agency and being remote from and not in communication with the vending machine and accessible via a telephone network by a cellular telephone operated by and associated with the consumer; wherein the server, upon connection to the consumer's cellular telephone, receives a request for the purchase of the product from the vending machine, creates a transaction record for the request, and communicates the vend code to the cellular telephone,

whereby the consumer may then transmit the vend code to the local receiver of the vending machine to authorize the vending machine to dispense the product without currency being provided to the vending machine."

- "2. The system of claim 1, wherein the cellular telephone accesses the server upon dialing of a number by the consumer on the cellular telephone, wherein the number corresponds to the product requested; and wherein the server determines the product requested by capturing the number dialed by the consumer."
- "10. A method for facilitating a credit-based purchase of a product from a vending machine absent a dedicated online connection between the vending machine and a financial institution comprising the steps of:

at a server for communication with and associated with a billing agency and being remote from and not in communication with the vending machine, receiving via a telephone network a call from a cellular telephone identified with a consumer, the call being for the purpose of requesting purchase of a product from the vending machine; based on the call, identifying the product and a purchase price associated with the product; in response to identifying the purchase price, creating a transaction record that includes a billing record that may be used to bill the consumer and to collect funds from the consumer in relation to the purchase price; in response to identifying the product, generating a vend code for instructing the vending machine to dispense the product; and transmitting the vend code to the cellular telephone via the telephone network, whereby the consumer may then input the vend code to the vending machine in order to receive the product therefrom without having to provide currency to the vending machine."

"13. The method of claim 10 or 11, wherein the product is identified based on one or more input signals received from the cellular telephone during the call."

"14. The method of claim 13, wherein the one or more input signals comprise the consumer dialing additional numbers."

"15. The method of claim 13 wherein the one or more input signals comprise a verbal response from the consumer."

IV. The following documents are cited in this decision:

D1 = WO 99/13398 A

D4 = WO 99/22346 A

V. In the decision under appeal, the opposition division found that:

- The requirements of Articles 123(2) and (3) EPC were fulfilled.
- The definition of the term "*vending machine*" was an important issue since a "*conventional vending machine*" implied certain features that were not explicitly described in the patent-in-suit. The 1995 Collins English Dictionary defined a vending machine as "*a machine that automatically dispenses consumer goods such as cigarettes, food, or petrol, when money is inserted*" and thus could be considered to be a physical machine that dispensed physical products. The term "*vending machine*" had a well understood meaning in the art, i.e. a unitary item that had a security arrangement, an enclosure and a mechanical means for dispensing products and which could be used by the public. The term "*vending machine*" therefore implied structural features and had implicit limitations. The system of D1 did not employ such features and hence, while it was used

for vending digital content, was not a conventional vending machine.

- Document D1 was considered to be the closest prior art because the claimed invention was directed at the deployment of a payment method in a conventional payment apparatus. The claimed system differed from that disclosed in D1 in that the payment was deployed in a conventional vending machine rather than in a conventional computer system for releasing software for use. As D1 disclosed a reference to conventional vending machines, the opposition division considered that since the machine in which the payment method was deployed was described in analogy to a vending machine, the skilled person would readily consider applying the teaching of D1 in the context of a conventional vending machine which implicitly comprised the features of a product dispenser. Hence the subject-matter of claim 1 did not involve an inventive step.

- Although the code disclosed in D1 was used to release software for use whereas in the patent the vend code was used to dispense a physical product, the details of the dispensing function with respect to the vend code were not part of the claimed invention. The division did not see any technical effect caused by the alleged differences in the use of the vend codes of D1 and those of the patent. It considered therefore that the method of claim 10 did not involve an inventive step for the same reasons as for claim 1.

VI. The respondent opponent argued essentially as follows:

Amendments:

- Claim 1 was amended in an unallowable manner. The feature *"a server for communicating and associated with a billing agency"* was not derivable from the application as filed. The application only disclosed a server being operated by a billing agency.
- Also the features *"a cellular telephone operated by and associated with the consumer"* and *"the server, upon connection to the consumer's cellular telephone"* of claim 1 were not derivable from the application as filed.
- The feature *"wherein the cellular telephone accesses the server upon dialing a number by the consumer on the cellular telephone"* of claim 2 was unclear, since it implied a temporal order. Such a feature was a method feature, but was not part of the system claimed. The same argument applied to the feature *"the server, upon connection to the consumer's cellular telephone"* of claim 1.
- The feature *"based on the call"* of claim 10 was a not allowable generalization of the three manners originally disclosed, namely based on the number called, dialing additional numbers or voice request.
- The feature *"for facilitating a credit-based purchase of a product from a vending machine absent a dedicated online connection between the vending machine and a financial institution"* was a negative

feature not derivable from the application as filed. This feature excluded from the present claims 1 and 10 vending machines having an online connection. Moreover this feature introduced two entities in the claim, the financial institution and the billing agency, although their respective character and function were unclear.

- Finally the subject-matter of claims 14 and 15 was unclear, since it was not understandable how input signals could comprise dialing additional numbers or a verbal response from the consumer.

The following objections to claims 1 and 10 were raised by the respondent opponent in his reply to the statement of grounds of appeal. These objections were however withdrawn at the oral proceedings before the board:

- There was no base in the application as filed for the feature *"the billing agency remits at least a portion of the collected funds"* in claim 1.
- The feature *"based on the call identifying ... a purchase price associated with the product"* of claim 10 was not disclosed in the application as filed. The application disclosed that the product was identified, not the price.

Novelty and inventive step:

- The system of claim 1 was not new over the disclosure of document D1. Document D1 disclosed a system for credit-based purchase of a product

(assets) from a digital content vending machine absent a dedicated online connection between the vending machine and a financial institution. The vending machine comprised a local receiver for receiving a vend code (key 58) which was transmitted to the user over the telephone. As the feature "a cellular telephone" was not part of the claimed system and merely optional, document D1 took away the novelty of the system of claim 1.

- The system of claim 1 and the method of claim 10 did not involve an inventive step over the combination of documents D1 and D4. Document D1 contained a direct link to vending machines, since it compared the digital content vending machine to a conventional coffee vending machine. This link was the motivation required by a skilled person to apply the payment method of D1 in a conventional vending machine such as the one disclosed eg in document D4.

- The system of claim 1 and the method of claim 10 did also not involve an inventive step over the combination of documents D4 and D1. A skilled person, starting from the vending machines disclosed in document D4, would have sought to avoid the use of a dedicated online connection in order to save costs. He would recognize that the payment method disclosed in D1 was also suitable for conventional vending machines, in particular, considering the explicit reference in D1 to conventional vending machines.

VII. The appellant proprietor argued essentially as follows:

Amendments:

- The feature *"a server for communicating and associated with a billing agency"* was derivable from the application as filed. It was clear from the original wording "associated with" in original claim 1 that the billing agency did not have to be the operator of the server. It merely required an "association" or connection. The "association" of original claim 1 was further embodied in the present claims by the communication between the server and the billing agency, as described in the application as filed, on page 9 for example.

- The features *"a cellular telephone operated by and associated with the consumer"* and *"the server, upon connection to the consumer's cellular telephone"* of claim 1 were directly derivable from the original application. The application disclosed "a cellular telephone associated with" and "identified with" the consumer. Thus the connection between the cellular telephone and the consumer was embodied by the operation of the cellular telephone by the consumer. The skilled person would have clearly understood that the identity or association of the cellular telephone with the consumer was simply to allow the consumer to be sent the vend code by the server and thus simply required that the consumer be the operator of the telephone. The feature *"upon connection"* specified that the request was transmitted once the communication was established.

- The original application suggested three separate attributes of the call as possible ways of identifying the product which could be used singly or in combination, namely the number called, the input of additional dialed digits after the call was connected, and/or a verbal response from the consumer. In each case the identification was "*based on the call*". Thus, the application as filed described examples of how the product could be identified based on the call, i.e. based on information conveyed when the call was connected or during the time the call was connected. The specific ways in which the product could be identified were examples of how the call was used to identify the product; the application as filed did not teach that these were the only ways the call could identify a product.

- The step of creation of a transaction record in method claim 10 related to the purchase price of the product concerned. Each product had an associated purchase price. The application related to a vending machine and a way of paying for products dispensed from a vending machine. The skilled person would therefore understand that the step of identification of the product as part of the billing process included identification of the associated purchase price, as this was necessary for the purpose of the transaction. The creation of the transaction record and generation of the vend code was in response to a request for a product. Thus identification of the product implicitly included identification of the purchase price. It was hence clear that the purchase price was important for the transaction record, and

the billing record, which was a part of the transaction record, included the product price. Thus, the transaction record required the purchase price and was hence created when the purchase price was identified.

- The feature *"for facilitating a credit-based purchase of a product from a vending machine absent a dedicated online connection between the vending machine and a financial institution"* was merely an explication of the capabilities of the system. The expression *"for"* meaning *"suitable for"*. The capabilities of the system were defined by the constitutive parts of the system, ie the features found in the claim after the statement *"the system comprising:"*. The objected feature did not limit the claim and could, in principle, be deleted without altering its scope.

Novelty and inventive step:

- The present invention enabled vending machines to accept electronic payments in the absence of a dedicated online connection. The solution of the present invention involved the non-obvious utilization of a consumer's own cellular telephone as a means of providing network connectivity. Hence the technical field of the present invention was the field of vending machines and methods and systems for facilitating the purchase of a product from vending machines.
- Document D4 disclosed a system and procedure for implementing a payment service using a

telecommunication system where a terminal device in a telecommunication network was used for paying for purchases made through a vending machine. It enabled the consumer to pay by means of a mobile telephone. The customer's mobile telephone, ie a first terminal device, was connected to a telecommunication network and used to order a product. A second terminal device within the vending machine, also connected to the telecommunication network, received instructions from the telecommunication network such that the vending machine dispensed the ordered product. D4 hence was directed to a similar purpose as the present invention and belonged to the same technical field. This document thus represented the prior art which required the minimum of structural and functional modifications to arrive at the claimed invention.

- The objective technical problem with respect to D4 was how to enable a cashless transaction to occur absent a dedicated online or network connection to the vending machine. The solution of the present invention consisted in using the consumer's cellular telephone to provide wireless authorization of the sale, rendering thus unnecessary the second terminal device within the vending machine. This was not taught or suggested by the cited prior art.

- The opposition division however started from document D1 as closest prior art and saw the objective technical problem in how to deploy the payment method of D1 in a conventional vending machine, in order to enable the machine to accept payment via a mobile telephone. The opposition

division asserted that due to the reference in D1 to a vending machine as an analogy to explain the payment system of D1, the skilled person would find it obvious to apply the teaching of D1 to a conventional vending machine. However, the determination of D1 as the closest prior art (or indeed as a realistic starting point) was incorrect, and the "problem and solution" approach proposed was derived with the use of impermissible hindsight of the present invention. The technical field of the present invention was the field of vending machines, and not the field of general payment systems. The technical field of D1 was the field of systems for the purchase of digital content, which was a remote technical field not related in any way to the purchase of products from a vending machine. Thus D1 could not be considered a realistic starting point for the assessment of inventive step.

Reasons for the Decision

1. The appeal is admissible.
2. *Amendments (Article 100(c) EPC 1973, Article 123(2) EPC and Article 84 EPC 1973)*
 - 2.1 The respondent opponent argued that the granted patent had been amended beyond the content of the application as filed. Some of these objections resulted in amendments to the claims, which in turn gave rise to objections that these amendments rendered the claims unclear. However, none of these objections persuaded

the board that the patent could not be maintained as amended. The reasons therefore are the following:

2.2 Claim 1

2.2.1 The respondent opponent objected that the feature of claim 1 *"a server for communicating and associated with a billing agency"* had not been disclosed in the application as filed. Communicating with something required a physical connection whereas associated with something involved merely a mental connection. The application as filed only disclosed that the server was operated by the billing agency (page 1, line 38; page 2, lines 20; claim 15, feature (c)).

2.2.2 The appellant proprietor argued however that claim 1 as filed disclosed *"a server associated with a billing agency"*. The board, in agreement with the appellant proprietor, considers moreover that it was clear to the person skilled in the art that the server was not necessarily operated by the billing agency, but that it required a communication channel to transmit the transaction record to the billing agency. Moreover the feature *"for communicating with the billing agency"* merely expresses the server's suitability for communicating with the billing agency, a fact that can be derived from the application as filed, in particular by the server sending a record to the billing agency and the agency acknowledging its receipt to the server.

2.2.3 The board finds for these reasons that the feature *"a server for communicating and associated with a billing agency"* is directly and unambiguously derivable from the application as filed.

2.2.4 The appellant opponent further argued that the features *"a cellular telephone operated by and associated with the consumer"* and *"the server, upon connection to the consumer's cellular telephone, receives a request"* were not directly and unambiguously derivable from the application as filed.

2.2.5 The board however considers these objections unfounded. The application as filed discloses *"a cellular telephone identified with the consumer"* (claim 1), *"a cellular telephone having an associated account identified with the consumer"* (claim 15) and *"a cellular telephone associated with the consumer"* (page 3, line 35). It is clear to the skilled person that the association with the consumer's cellular telephone is required for sending the vend code and for billing purposes. This applies also for anonymous/prepaid accounts which do not permit a direct identification of the consumer. A true identification of the consumer is not required; it suffices merely an association with an account for billing purposes. That the cellular telephone is operated by the consumer is clearly derivable eg from figure 1 where the consumer 102 holds the cellular telephone 114 in his hand.

2.2.6 That the server receives a request upon connection to the consumer's cellular telephone is not simply a method feature, as argued by the respondent opponent, but a feature of the claimed system, since it specifies not only when but also how the request is received. Systems receiving requests without a connection to a consumer's cellular telephone are thus excluded. Furthermore originally filed claim 1, step (b)

specifies that *"upon connection of the consumer's telephone to the server via the telephone network"* the request is received for purchase of the product from the vending machine.

2.2.7 The board finds for these reasons that the features *"a cellular telephone operated by and associated with the consumer"* and *"the server, upon connection to the consumer's cellular telephone, receives a request"* are directly and unambiguously derivable from the application as filed.

2.3 Claim 2

2.3.1 The respondent opponent objected that the expression *"wherein the cellular telephone accesses the server upon dialing of a number by the consumer on the cellular telephone"* rendered claim 2 unclear, since the term *"upon"* implied a temporal ordering which belonged to a method, but not to a system claim.

2.3.2 The board considers, however, as already pointed out in relation to a similar feature in claim 1, that the use of the term *"upon"* implies not simply a method step, but a feature of the claimed system, since it specifies in this case not only when but also how the server is accessed.

2.3.3 The board is satisfied for these reasons that the system of claim 2 is clear.

2.4 Claim 10

2.4.1 The respondent opponent argued that the feature *"identifying the product based on the call"* of claim 10 was an unallowable generalization, as the patent only disclosed three concrete embodiments: that the product was identified based on the number called, dialing additional numbers or voice request.

2.4.2 The board, however, shares the view of the appellant proprietor that the skilled person understands directly and unambiguously that the product has to be identifiable by the server based on the telephone call and that the description gives examples of how this might be achieved. In particular, the embodiments on pages 4/5 and 8 of the description as filed disclose these possibilities as not limitative by using "may". On page 2 the description discloses two possible embodiments: a first embodiment for purchasing a product (a single telephone number for each product, additional digits or verbal response after the call is connected) and a second embodiment for obtaining a given credit for buying products (additional digits or verbal response after the call is connected, as the amount of credit desired is not foreseeable and no telephone number can be assigned to it). However, the overall teaching is that the identification of the desired transaction (product or credit) is based on the telephone call.

2.4.3 The board finds for these reasons that the feature *"identifying the product based on the call"* of claim 10 is directly and unambiguously derivable from the application as filed.

2.5 Claims 1 and 10

2.5.1 The respondent opponent argued that the feature "*for facilitating a credit-based purchase of a product from a vending machine absent a dedicated online connection between the vending machine and a financial institution*" of claims 1 and 10 was not derivable from the application as filed. In particular, this amendment introduced a financial institution and a billing agency as different entities into the claim. These entities were not disclosed as such in the application as filed. Furthermore, the objected amendment limited the scope of the claim without having a basis for it in the application as filed. For example a vending machine accepting cash, debit cards and purchases by cellular telephones required an online connection to check the validity of the debit cards. Such machines however were now excluded from the present claims by the contested feature which required the absence of an online connection.

2.5.2 The appellant proprietor argued that the contested feature merely expressed that the system was "*suitable for*" operating a vending machine under circumstances in which a dedicated online connection was absent. This suitability was however provided by the features detailed in the constitutive part of the claim, ie after the sentence "*the system comprising:*". The vending machine could sell products even when an online connection was available, but it had the inherent property, due to its constitutive features, to sell products in the absence of an online connection. The contested feature did not impose any limitation on the

claim, but merely explained the capability of the system.

2.5.3 The feature "*a vending machine absent a dedicated online connection*" may be interpreted in two manners: a) that an online connection is not available or b) that the vending machine has no online connection, ie that the machine is provided without an online connection. The first interpretation implies that although an online connection may be provided, it is not required for selling the product. The second interpretation however implies a constitutive feature of the system requiring that the vending machine has no online connection at all.

2.5.4 The patent clarifies the meaning of this feature, since it is stated that "*The present invention eliminates the need for currency for a vending machine and also eliminates the need for a dedicated online connection*" ([0005]). Hence neither currency or an online connection are needed for making the purchase, although both possibilities are not excluded, eg acceptance of currency for cash purchases and an online connection for debit card purchases. Thus the feature "*absent a dedicated online connection*" has to be interpreted, as argued by the appellant proprietor, that an online connection is not required for making the purchase. The contested feature is thus not a constitutive feature of the claimed system, but merely details the system's capability.

It appears moreover unlikely to the board that vending machines actually having an online connection would have been considered by the skilled person as being

unsuitable for the implementation of the invention, given that the skilled person knows that vending machines usually try to serve as many consumers as possible.

2.5.5 The boards find for these reasons that the feature "*for facilitating a credit-based purchase of a product from a vending machine absent a dedicated online connection between the vending machine and a financial institution*" is not limitative and has merely an explicative character.

2.5.6 The respondent opponent further argued that the feature "*a server associated with a billing agency*" of claims 1 and 10 was unclear and not supported by the description.

2.5.7 The board considers that although the term "*associated with*" is very broad it is not unclear. "*Associated with*" means, as pointed out by the respondent opponent, any kind of mental connection, any link that can be established between two entities. It is furthermore supported by the disclosure of the interaction between the server and the billing agency.

2.6 Claims 14 and 15

2.6.1 The respondent opponent argued that the methods of claims 14 and 15 were unclear, since it could not be understood what was meant by "*one or more input signals comprise the consumer dialing additional numbers*" (claim 14) or "*one or more input signals comprise a verbal response from the consumer*" (claim 15).

2.6.2 The board however observes that both claims depend on claim 13, which specifies that the product is based on one or more input signals received from the cellular telephone during the call. It is thus clear to the skilled person that these input signals are generated by method steps comprising either the consumer dialing additional numbers or by a verbal response of the consumer.

2.6.3 The board is thus satisfied that the method steps of claims 14 and 15 are clear.

3. *Novelty (Article 54 EPC 1973)*

3.1 The respondent opponent argued that document D1 took away the novelty of the system of claim 1.

3.2 Document D1 discloses a digital content vending machine in which a client 12 on a personal computer PC contains an infrastructure 16 and an inventory 18. The infrastructure 16 presents a graphical user interface on the client 12 which metaphorically represents a village containing a plurality of stores operated by vendors 42. Customers 40 shop in the stores by selecting assets, constituting the inventory 18, and sending money 52 and an identifier 54 to a clearing house 50 via a communication system such as telephone, private network or the Internet. The clearing house 50 returns a key 58 used to remove a digital wrapper protecting the asset from unauthorized use (Abstract). The problem addressed by D1 is to find a new mechanism for the marketing of digital content (page 3, lines 28 to 31; page 4, lines 2 to 3). The digital content vending machine is presented in D1 on hand of the

analogy to a conventional vending machine, such as a coffee machine, and to a village square for the graphical user interface (page 7, lines 11 to 24).

3.3 The board however shares the finding of the opposition division that document D1 does not disclose a vending machine. A vending machine is usually provided in a place with public access, so that any consumer can purchase the products the machine sells, and not in the consumer's home, as is the case with the personal computer of D1. By placing it in publicly accessible places it requires, as already pointed out by the opposition division, security arrangements, a physical enclosure and mechanical means for dispensing the products sold (decision under appeal, reasons, point 2). All these features are missing from the "digital content vending machine" of D1. The respondent opponent did not argue in the appeal why the opposition division's view was erroneous. He merely alleged in the statement of grounds that D1 disclosed a vending machine (page 5 of the letter of 28 November 2008).

3.4 The board agrees for these reasons with the opposition division's finding that document D1 does not take away the novelty of the system of claim 1 or the method of claim 10, as it does not disclose a conventional vending machine.

4. *Inventive step (Article 56 EPC 1973)*

4.1 The main point in this appeal is that of inventive step and, in particular, which is the most appropriate prior art document from which an inventive step attack can be started. It is the established case law that the choice

of the closest prior art should be realistic and not based on hindsight. It is furthermore essential to read the prior art documents with the eyes of the skilled person at the filing (or priority) date of the patent, ie without any knowledge of the present invention. Insights gained from reading the state of the art once the teaching of the patent is known are based on hindsight.

4.2 It is undisputed that the patent relates to systems for purchasing products from an automatic vending machine by using a cellular telephone ([0001]). Such machines were identified by the opposition division as *"conventional vending machines"*.

4.3 *Determining the closest prior art*

4.3.1 The respondent opponent argued, as the opposition division did in the appealed decision, that document D1 represented the closest prior art, because the claimed invention was directed at the deployment of a payment method in a conventional payment apparatus. The claimed system differed from that disclosed in D1 in that the payment was deployed in a conventional vending machine rather than in a conventional computer system for releasing software for use. As D1 disclosed a reference to conventional vending machines, the skilled person would readily consider applying the teaching of D1 in the context of a conventional vending machine.

4.3.2 The appellant proprietor argued that the present invention enabled vending machines to accept electronic payments in the absence of a dedicated online connection at the vending machine site. As the

technical field of the present invention was the field of vending machines and methods and systems for facilitating the purchase of a product from vending machines, the closest prior art should be sought in this field or in one closely related to it. The opposition division's assertion that D1 was the closest prior art, since the claimed invention was directed at the deployment of a payment method in a conventional payment apparatus, was incorrect and based on hindsight.

4.3.3 Document D1 discloses, as mentioned above in relation to the discussion on novelty (cf point 3.2), a digital content vending machine in which digital products are stored on a user's personal computer in an at least partially encrypted manner, ie "wrapped". Once the user decides he wants to purchase one of these products, he contacts a suitable agency to obtain a key code to unlock the digital product. The agency may be contacted eg over the telephone network, a private network or the Internet.

4.3.4 Document D4 on the other hand discloses a system comprising a conventional vending machine. In this system a first terminal device 1, ie the consumer's cellular telephone, a second terminal device 4, ie a cellular telephone located in the vending machine 3, and an intelligent network 7, corresponding to the server of the present patent, are connected over a telecommunication network 6. Once the consumer has decided to purchase a given product he initiates a call from his cellular telephone to the number shown on the vending machine. The consumer is connected via the mobile communication network 6 to the intelligent network 7, where the request is interpreted and

forwarded to the mobile station 4 of the vending machine 3. A billing ticket is generated on the basis of the call by the intelligent network 6 and charged to the consumer's account (abstract; page 6, line 7 to page 7, line 6; Figure).

4.3.5 The board shares the view of the appellant proprietor that document D4 and not document D1 represents the closest prior art. As the problem addressed by the present invention relates to enabling electronic payments in a conventional vending machine when an online connection is not present, the technical field of the present invention is the field of vending machines, and not the field of general payment systems.

4.3.6 Document D1 relates to the distribution of digital content stored on a personal computer which is "unwrapped" by a code key obtained after paying for it. The technical field of document D1 is hence the field of systems for the purchase of digital content. D1 addresses the user's inconvenience to purchase software after the purchase of the corresponding hardware. It solves this inconvenience by pre-installing the software on the computer and later "unwrapping" it once the code key has been purchased (page 4, lines 2 to 11). Hence the problem addressed by D1 is not how to pay for the digital content, but how to render the digital content available to the consumer, hence avoiding a further trip to the computer store. Thus the need in D1 to protect the not yet paid digital content from the user by "wrapping" it. In other words, the user "has" already the digital content, but is prevented from using it until he has paid for it.

4.3.7 Hence, the approach of D1 would correspond in the "real" (ie non digital) world to a consumer having the product at his home in a locked cabinet which is unlocked by a code obtained from the vendor. Clearly such a system is not what one would normally understand as a "conventional vending machine".

4.3.8 The board considers for these reasons that, although D1 is entitled "Digital content vending, delivery and maintenance system" and refers to a "digital content vending machine", it neither discloses nor relates to conventional vending machines (page 7, line 8-9). Document D1 is thus not an appropriate starting point for the problem-solution approach. On the contrary, the board considers that document D4 is the appropriate starting point representing the closest prior art. The respondent opponent's argument that the skilled person would consider the application of the payment method disclosed in document D1 to the vending machine disclosed eg in document D4 is hence based on hindsight, so that the skilled person would not have any motivation to combine D1 and D4.

4.4 *Inventive step starting from document D4*

4.4.1 The respondent opponent argued that, starting from document D4, the system of claim 1 differed from the system of D4 in that there was no online connection between the vending machine and the server. This feature reduced the cost of a vending machine, since no online connectivity had to be provided and maintained. The technical problem addressed by the invention was thus cost reduction of the conventional systems. The skilled person, an engineer developing vending machines,

would thus look for alternative payment means that allowed payment in the absence of an online connection. He would recognize that D1 enabled remote payment without any online connection, as the code key could be transmitted over the consumer's telephone and entered into the computer by the consumer himself (D1, page 11, lines 22-23; page 13, lines 19-29). Hence the claimed system was obvious to the skilled person having regard to the combination of documents D4 and D1.

4.4.2 The board is not persuaded by these arguments. As already mentioned previously the problem addressed by document D1 is neither cost reduction nor how to pay for a purchased product. D1, in particular, places no importance on the way the key code is obtained. This can be done over the telephone network, a private network or the Internet. Thus connectivity is not the problem of D1. There is no shift in connectivity, as in the present patent, from the vending machine to the user or consumer. In D1 all possible connections to the server are under the control of the user, since he provides the telephone connection, the private network or the Internet access. All these possible connection alternatives are presented on an equal footing in D1, so that D1 does not offer itself as a solution for situations where online connection is not available.

4.4.3 The problem addressed by D1 is how to make the product readily available to the consumer. This is achieved by placing the product in his action sphere, ie on the consumer's personal computer. The need for "wrapping" the digital content, ie making it impossible to be readily used, comes from placing it into the consumer's action sphere. These aspects are however foreign to the

act of buying a product from a vending machine, which is comparable to the act of buying software at a store, the act that document D1 tries to avoid.

4.4.4 The board considers that the objective technical problem addressed by the patent when starting from document D4 is the same as the original problem disclosed in the patent, namely to permit a credit-based purchase of a product from a vending machine when an online connection is unavailable. This technical problem is however unrelated to the problem addressed by D1, which is the availability of digital content, not its payment. To recognize that the payment method used for purchasing digital content in D1 could be applied for paying products purchased at a vending machine is not obvious to the notional skilled person. Such an approach is based on hindsight, as the common traits between the patent and the system of D1 become apparent only after having gained knowledge of the patent.

4.4.5 The solution to the problem of allowing a credit-based purchase of a product from a vending machine in the absence of an online connection consists, according to the patent, in using the consumer's cellular telephone to transmit the purchase request to a server, which in turns communicates a vend code to the consumer after having verified the consumer's identity for billing purposes. The heart of the present invention is hence the recognition that the connectivity of the consumer can be used for making and authorizing the purchase from the vending machine. This teaching is not disclosed or suggested by document D1 nor by the other prior art documents available.

4.5 The board judges for these reasons that the system for facilitating a credit-based purchase of a product by a consumer from a vending machine absent a dedicated online connection of claim 1 involves an inventive step within the meaning of Article 56 EPC 1973.

4.6 Claim 10 is directed to a method for facilitating a credit-based purchase of a product from a vending machine absent a dedicated online connection. It involves the same principle of using the consumer's connectivity for making the purchase as in the system of claim 1 and hence also involves an inventive step.

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 with the order to maintain the patent in an amended form with the following documents:

Description: pages 2, 3, 6 of the amended printed version as filed during the oral proceedings;
pages 4, 5 of the patent specification;

Claims: 1-25 as filed during oral proceedings;

Figures: 1, 2 of the patent specification.

Registrar

Chair

S. Sánchez Chiquero

G. Eliasson