Commissioner's Decision #1421 Décision du commissaire nº 1421

TOPIC: O00 (Obviousness)

SUJET: O00 (Évidence)

Application No.: 2,324,548 Demande n°: 2 324 548

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,324,548, having been rejected under subsection 30(3) of the *Patent Rules*, has been reviewed in accordance with paragraph 30(6)(c) of the *Patent Rules*. The recommendation of the Patent Appeal Board and the decision of the Commissioner are to refuse the application.

Agent for the Applicant:

RIDOUT & MAYBEE LLP 250 University Avenue 5TH Floor

5^{1H} Floor TORONTO, Ontario M5H 3E5

INTRODUCTION

- [1] This recommendation concerns the review of rejected patent application number 2,324,548, which is entitled "Security System and Method for Business Transactions with Customers" and is owned by Wachovia Corporation. The outstanding issue to be addressed is whether the claimed subject-matter would have been obvious. A review of the rejected application has been conducted by the Patent Appeal Board pursuant to paragraph 30(6)(c) of the *Patent Rules*.
- [2] As explained in more detail below, our recommendation is that the application be refused as it does not comply with section 28.3 of the *Patent Act* because the subjectmatter of claims 1-22 would have been obvious to the person skilled in the art.

BACKGROUND

The Application

- [3] Patent application 2,324,548 (the "instant application"), based on a previously filed Patent Cooperation Treaty application, is considered to have been filed in Canada on February 25, 1999 and was made available to the public on September 23, 1999.
- [4] The instant application relates to systems and methodologies for identifying customers for use in determining approvals of financial transactions, including cashout transactions (for example, cashing or accepting checks, issuing cash withdrawals from accounts, etc.) performed by banks and other financial institutions or businesses.
- [5] The instant application provides a security system that issues to each customer an individualized identification card ("ID card") encoded with at least a personalized multi-digit customer identification number ("PIN number") by which the customer may be subsequently identified. At a transaction station (for example, bank teller window, Automated Teller Machine ("ATM"), etc.), the encoded ID card is read by an electronic reading device and the customer is required to input his or her PIN. The

electronic reading device verifies whether or not the correct PIN number has been entered by the customer. The card may additionally be encoded with predetermined personal information regarding the respective customer. Individualized approval or disapproval criteria can be pre-established for each customer based upon the types of business transactions to be conducted by the customer. Such criteria may be stored in encoded form on each customer's identification card and/or in a centralized data storage and processing means.

Prosecution history

- [6] On July 10, 2014, a Final Action ("FA") was written pursuant to subsection 30(4) of the *Patent Rules*. The FA stated that the instant application is defective because the subject-matter of claims 1-22 (the "claims on file") would have been obvious and thus the instant application does not comply with section 28.3 of the *Patent Act*.
- [7] In a January 9, 2015 response to the Final Action ("R-FA"), the Applicant submitted that the subject-matter of the claims on file is not obvious.
- [8] As the Examiner considered the instant application not to comply with the *Patent Act*, pursuant to subsection 30(6) of the *Patent Rules*, the instant application was forwarded to the Patent Appeal Board (the "Board") on April 10, 2015 for review, along with an explanation outlined in a Summary of Reasons ("SOR"). The SOR maintained that the subject-matter of the claims on file would have been obvious.
- [9] In a letter dated June 30, 2015, the Board forwarded the Applicant a copy of the SOR and offered the Applicant an opportunity to make further written submissions and to attend an oral hearing. In a response to the Board's letter dated September 29, 2015, the Applicant declined both the offer to provide written submissions to the SOR and the offer to attend an oral hearing.
- [10] The present panel ("the Panel") was thereafter formed to review the instant application under paragraph 30(6)(c) of the *Patent Rules* and make a recommendation to the Commissioner as to its disposition.

[11] In a letter dated February 16, 2017 (the "Panel Letter"), the Panel set out a preliminary analysis and rationale as to why, based on the record, the subject-matter of the claims on file does not comply with section 28.3 of the *Patent Act*. In a response dated March 20, 2017, the Applicant advised that no further submissions would be provided.

ISSUES

- [12] The only issue to be addressed by this review is whether the subject-matter of the claims on file would not have been obvious pursuant to section 28.3 of the *Patent Act*.
- [13] As the Panel Letter forms the basis for our conclusion that the claimed subject matter would have been obvious, our recommendation below provides an overview of our analysis and rationale presented in the Panel Letter. The Panel notes that the Applicant did not dispute any of the positions taken by the Panel as presented in the Panel Letter.

LEGISLATION AND LEGAL PRINCIPLES

Purposive construction

[14] In accordance with *Free World Trust v. Électro Santé Inc.*, 2000 SCC 66, essential elements are identified through a purposive construction of the claims done by considering the whole of the disclosure, including the specification and drawings (see also *Whirlpool Corp. v. Camco Inc.*, 2000 SCC 67 at paras 49(f) and (g) and 52). In accordance with the *Manual of Patent Office Practice*, §13.05, the first step of purposive claim construction is to identify the person skilled in the art (the "skilled person") and their relevant common general knowledge ("CGK"). The next step is to identify the problem addressed by the inventors and the solution put forth in the application. Essential elements can then be identified as those required to achieve the disclosed solution as claimed.

Obviousness

- [15] The *Patent Act* requires that the subject-matter of a claim not be obvious. Section 28.3 of the Act provides as follows:
 - 28.3 The subject-matter defined by a claim in an application for a patent in Canada must be subject-matter that would not have been obvious on the claim date to a person skilled in the art or science to which it pertains, having regard to

(a) information disclosed more than one year before the filing date by the applicant, or by a person who obtained knowledge, directly or indirectly, from the applicant in such a manner that the information became available to the public in Canada or elsewhere; and

(b) information disclosed before the claim date by a person not mentioned in paragraph (a) in such a manner that the information became available to the public in Canada or elsewhere.

- [16] In Apotex Inc. v. Sanofi-Synthelabo Canada Inc., 2008 SCC 61 at para. 67 [Sanofi], the Supreme Court of Canada stated that it is useful in an obviousness inquiry to follow the following four-step approach:
 - (1)(a) Identify the notional "person skilled in the art";
 - (b) Identify the relevant common general knowledge of that person;
 - (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
 - (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;
 - (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

ANALYSIS

Claim Construction

[17] A claim construction is not set out explicitly, as there are no issues regarding whether all claim elements are essential and there are no issues regarding the meaning of any terms recited in the claims. As stated in the Panel Letter at page 2, all claim elements will be considered essential for the purposes of this review.

Obviousness

Sanofi step (1)(a) – Identify the notional person skilled in the art

[18] In the Panel Letter at page 2, the skilled person was characterized as "skilled in the fields of banking as well as general purpose computing technology and ATMs," as stated in the FA at page 2.

Sanofi step (1)(b) – Identify the relevant common general knowledge of that person

- [19] The Panel Letter at pages 2-3 identified the following items as part of the CGK of the skilled person, evidenced from portions of the instant application and the FA:
 - customer identification means for providing security in transactions involving checks, including visual means to recognize customers (instant application, page 1, lines 9-16; FA at page 2);
 - security limitations of visual identification of customers and an increase in check cashing fraud (instant application, page 1, lines 16-23);
 - customer identification cards, including encodable magnetic strip cards and "smart" cards having an embedded electronic microchip (instant application, page 9, lines 8-14; FA at page 2);
 - the use of PINs for customer identification at electronic reading devices, such as ATMs (FA at page 2);
 - procedures and criteria for cashing third-party checks by customers (FA at page 2); and

- automated transaction systems to process transactions at a central location (FA at page 2).
- [20] The Panel Letter at page 3 also identified a document representative of the CGK and cited in the European Patent Office during prosecution of the corresponding European Patent application, US Patent Number 4,109,238, published August 22, 1978 (the "238 Patent"). The '238 Patent discloses a check verification system at a point-of-use terminal operated by the customer that enables a customer to verify several checking functions. Acknowledgement of check verification is given by printing information including a verification number on the back of the specific check being verified. The printed verification number on the customer-supplied check enables such checks to be factored or purchased for the benefit of the merchant who accepts checks verified by the present system (the '238 Patent, abstract).
- [21] The Panel Letter identified the following items as part of the CGK, evidenced from portions of the '238 Patent:
 - customer identification cards used in combination with PINs to identify customers (Panel Letter, page 3);
 - centralized data storage and processing for check verification and authorization (Panel Letter, pages 6 and 7);
 - a check verification system directed to third party checks, such as government and payroll checks (Panel Letter, page 6);
 - centrally storing predetermined personal information for identification purposes (Panel Letter, page 6); and
 - centralized data storage and processing means for compiling for each customer historical data on third-party checks presented by the customer, wherein determining approval is based on the historical data of the customer (Panel Letter, page 7).
- [22] The Panel Letter also identified CGK elements from document D2 (US Patent Number 5,053,607 to Carlson *et al.*, published October 1, 1991) as cited in the FA.

- [23] D2 discloses a check processing device, adapted for retailer/customer use at the point-of-sale, which communicates with the customer's bank and the retailer's bank in order to transfer funds from the account of the customer to the account of the retailer (D2, abstract).
- [24] The Panel Letter identified the following items as part of the CGK, evidenced from D2:
 - transaction stations located in businesses and, by extension, transaction stations located within a bank location (Panel Letter, pages 6-7); and
 - transaction stations operated by a representative of the business or bank and means for displaying through a visual display monitor to the representative whether the customer correctly enters the personalized customer identification number and the encoded personal information (Panel Letter, page 7).

Sanofi step (2) – Identify the inventive concept of the claim in question or if that cannot readily be done, construe it

- [25] As all claim elements are considered essential, the Panel Letter at page 3 identified the inventive concept for each claim to be the combination of all claim elements.
- [26] Independent claim 1 recites:
 - A security system for use by a business for establishing customer identification in, and determining approval for, acceptance from customers of bank checks drawn by third parties, comprising:
 - (a) means for issuing to each customer an individualized customer identification card having means encoded with a personalized multidigit customer identification number for subsequent identification of the customer;
 - (b) a centralized data storage and processing means for storing for each customer predetermined criteria for determining approval of thirdparty checks presented by the customer; and
 - (c) a transaction station for receiving third-party checks from customers, the transaction station including:

- (i) means for reading the encoded means of each customer identification card upon presentation thereof by each customer;
- (ii) means for customer input of the personalized customer identification number of the customer;
- (iii) means for determining whether the customer correctly inputs the personalized customer identification number; and
- (iv) means for communicating with the centralized data storage and processing means for determining whether a third-party check presented by the customer satisfies the predetermined approval criteria established for the customer.
- [27] Independent claim 9 recites substantially the same elements as independent claim 1, with the additional element of "a centralized data storage and processing means for storing predetermined data on each customer" which includes "predetermined personal information" and "wherein the card has means encoded with at least some of the predetermined personal information."
- [28] Dependent claims 2-8 and 10-22 recite additional features and limitations:
 - claims 2 and 11: the transaction station is an automated machine (claim 2) or ATM (claim 11);
 - claims 3 and 12: the transaction station is operated by a business representative (claim 3) or bank representative (claim 12);
 - claims 4 and 16: the encoded means of the individualized customer identification card comprises an electronic data storage medium;
 - claims 5 and 17: the card reading means comprises a card receiving slot for customer insertion of the identification card and the customer input means comprises a numeric keypad;
 - claims 6 and 18: the transaction station includes means for reading data from a third-party check presented by the customer;
 - claims 7 and 20: the centralized data storage and processing means comprises means for determining approval of third-party checks presented by each

customer according to the predetermined criteria established for the customer (claim 7) or by executing an approval-disapproval algorithm (claim 20);

- claims 8 and 21: the centralized data storage and processing means includes means for compiling for each customer historical data on third-party checks presented by the customer;
- claim 10: the card issuing means and the transaction station are located within a bank location remote from the centralized data storage and processing means;
- claim 13: the transaction station includes means for displaying to the bank representative the determination of whether the customer correctly inputs the personalized customer identification number;
- claim 14: wherein the transaction station includes means for displaying to the bank representative the encoded personal information regarding the customer as read by the card reading means from the customer identification card;
- claim 15: wherein the displaying means comprises a visual display monitor;
- claim 19: the check reading means comprises a microreader device; and
- claim 22: the approval determining means comprises an approval-disapproval algorithm based on the historical data on the customer.

Sanofi step (3) – Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed

- [29] The Panel Letter identified document D1 (US Patent Number 5,341,428 to Schatz, published August 23, 1994), cited in the FA at page 4, as representing the "state of the art" in the *Sanofi* step (3) analysis.
- [30] D1 discloses a check verification method in which a data encryption algorithm is applied to a PIN and selected other information particular to a check (e.g., check number or amount of check). The resulting derivation is printed on the check at the time the document is originated. The recipient of the check is issued a proprietary card (e.g., smart card) which contains an identical algorithm to that used when the document was originated. When the check is presented for cashing, the cardholder is first identified with the card by inserting the card in a terminal and manually entering

a PIN. The check cashier enters the selected information from the face of the check, which is processed utilizing the previously entered PIN and the algorithm from the card to derive a number. The number thus derived may be compared to the derivation which was printed on the check. Thus, the method validates the cardholder as the legitimate holder of the card, the cardholder as the legitimate holder of the check, and the check as having been legitimately produced for the specific cardholder (D1, abstract).

- [31] The Panel Letter at pages 4-5 identified the following differences between the state of the art and the inventive concept of the claims:
 - predetermined eligibility criteria stored in a central location (claim 1);
 - the method is utilized for determining approval of third party checks (claim 1);
 - the transaction station is an ATM (claims 2 and 11);
 - the transaction station is operated by a representative of a business/bank (claims 3 and 12);
 - centralized data storage and processing means for determining approval (claims 7 and 20);
 - centralized data storage and processing means for compiling for each customer historical data on third-party checks presented by the customer, wherein determining approval is based on the historical data of the customer (claims 8, 21, and 22);
 - centrally storing predetermined personal information (claim 9);
 - card issuing means and the transaction station are located within a bank location (claim 10); and
 - the transaction station includes means for displaying to the bank representative whether the customer correctly enters the personalized customer identification number and the encoded personal information, wherein the displaying means comprise a visual display monitor (claims 13-15).

[32] The Panel Letter at page 5 identified no further differences between the state of the art and the inventive concept of dependent claims 4-6 and 16-19, beyond the differences identified for the independent claims on which they depend.

Sanofi step (4) – Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

- [33] The Panel Letter at page 6 submitted that the skilled person would be well versed in the use and advantages of centralized data storage of predetermined eligibility criteria, centralized data storage of predetermined personal information for identification purposes, and centralized data processing of third party check verification and authorization using the predetermined eligibility criteria, as evidenced by the '238 Patent.
- [34] Thus, with respect to the differences identified between independent claim 1 and the state of the art, it would have been obvious to the skilled person having the state of the art D1 check verification system and having a need to centrally store eligibility criteria and centrally process third party checks to turn to well-known techniques.
- [35] Similarly, with respect to the difference identified between independent claim 9 and the state of the art, it would have been obvious to the skilled person having the state of the art D1 check verification system and having a need to centrally store predetermined personal information for identification purposes to turn to well-known techniques.
- [36] The Panel letter at pages 6-7 analyzed the further identified differences between the dependent claims and the state of the art and determined that these further identified differences were part of the CGK of the skilled person. Thus, the further identified differences constitute steps which would have been obvious to the skilled person.
- [37] In summary, as previously set out in the Panel Letter, the subject-matter of claims 1-22 on file would have been obvious to the skilled person, contrary to section 28.3 of the *Patent Act*.

RECOMMENDATION OF THE BOARD

[38] For the reasons set out above, the Panel recommends that the application be refused on the basis that the subject-matter of the claims on file, namely claims 1-22, would have been obvious to the skilled person and are therefore non-compliant with section 28.3 of the *Patent Act*.

Lewis Robart Member Ed MacLaurin Member

Mara Gravelle Member

DECISION

- [39] I concur with the conclusions and recommendation of the Board that the application be refused because the claims on file do not comply with section 28.3 of the *Patent Act*.
- [40] Therefore, in accordance with section 40 of the *Patent Act*, I refuse to grant a patent on this application. Under section 41 of the *Patent Act*, the Applicant has six months within which to appeal my decision to the Federal Court of Canada.

Johanne Bélisle Commissioner of Patents Dated at Gatineau, Quebec, this 30th day of May, 2017