

Commissioner's Decision #1325  
Décision du Commissaire #1325

TOPIC: O00  
SUJET: O00

Application No. : 2,286,794  
Demande n° : 2,286,794

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,286,794 having been rejected under subsection 30(3) of the *Patent Rules*, has consequently been reviewed in accordance with subsection 30(6) of the *Patent Rules* by the Patent Appeal Board and the Commissioner of Patents. The findings of the Board and the decision of the Commissioner are as follows:

Agent for the Applicant:

McMillan LLP  
Brookfield Place, Suite 4400  
181 Bay St.  
Toronto, Ontario M5J 2T3

## INTRODUCTION

[1] This is a re-determination by the Commissioner of Patents, by order of the Federal Court (*Blair v Canada (Attorney General)*, 2010 FC 227, 81 CPR (4th) 403 [“FC2”]), of the question of obviousness that led to the refusal of patent application 2,286,794 filed by Mr. Scott Blair.

[2] In accordance with the Court’s instructions, the present decision focuses solely on whether the claimed invention is obvious. To this end, the Patent Appeal Board, on behalf of the Commissioner, has reviewed the application pursuant to section 30(6) of the *Patent Rules*. For the reasons that follow, the Board recommends that the Commissioner refuse the application.

## OVERVIEW

[3] The application, entitled “Subway TV Media System”, was rejected by the Examiner in a Final Action dated 21 October 2002. As characterized by the Court, the invention disclosed and claimed in the application relates to “a video display system for subway systems, and involves video display monitors mounted in a specified location on subway cars”; see FC2 at ¶ 8. The Examiner found all claims obvious, citing three documents (prior art) in support of that finding.

[4] Following the rejection, the application was refused by the Commissioner in *Re Blair Patent Application No 2,286,794* (2006), 48 CPR (4th) 90 (Patent Appeal Board and Commissioner of Patents), CD 1264 [“CD1”].

[5] The Applicant appealed the refusal to the Federal Court (Court File No T-1176-06) [“FC1”], filing fresh evidence (Gibson and Wilkins affidavits) before the Court. In light of the fresh evidence, the Court ordered the Commissioner to re-determine the question of obviousness in light of fresh evidence filed on appeal, any further submissions made by the Applicant, and the record previously before the Commissioner.

[6] Upon re-determination, the Commissioner refused the application a second time in *Re Blair Patent Application No 2,286,794* (2007), 64 CPR (4th) 441 (Patent Appeal Board and Commissioner of Patents), CD 1280 [“CD2”].

[7] The second refusal was appealed by the Applicant to the Federal Court; see FC2, above. On this appeal, the Court found the following errors in CD2:

- (1) it was not open to the Board to find the Gibson and Wilkins affidavits unnecessary (¶ 52-54);
- (2) there was no clear identification of the “person skilled in the art” (the “POSITA”) (¶ 55); and,
- (3) it was inappropriate to dissect claim 1 into its elements rather than consider the claim as a whole (¶ 57).

[8] As a result of these findings and in light of additional fresh evidence (the Morris affidavit), the Court ordered, for a second time, the Commissioner to re-determine the question of obviousness.

[9] To initiate the re-determination, the Board sent a letter dated 12 April 2010, inviting the Applicant to an oral hearing and/or to provide further submissions. The Board also observed that there was a difference between the background of the POSITA as defined by the Court and the backgrounds of the various experts who furnished expert evidence, as follows:

### 2. Person Skilled in the Art and Expert Evidence

Having reviewed the second decision of the Court and the expert evidence currently on file before the Commissioner, the Board notes that the Applicant submitted to the Court that the skilled person is "a person

familiar with the installation of video systems" (para 56) whereas the expert affiants have backgrounds in "various aspects of the transportation industry" (para 11) or "subway advertising".

Bearing this in mind, the Board invites the Applicant to make any further submissions it may wish regarding the nature of the applicable skilled person and the relevance of the affiants's evidence and/or to file further evidence.

[10] The Applicant responded on 18 March 2011, furnishing three new affidavits from experts in the field of video installation (the Ballantyne, DiNardo, and Ng affidavits) and electing to provide written submissions without a further hearing. Further, the written submissions addressed, at the request of the Board, the impact of *Apotex Inc v Sanofi-Synthelabo Canada Inc*, 2008 SCC 61 [*Sanofi*] – a decision handed down subsequent to CD2 that revisited the test for, and the approach to, assessing obviousness.

[11] In light of the impact of the *Sanofi* decision on obviousness and the findings of the Court in FC2, the Board conducted a *de novo* analysis of the question of obviousness, including the proper approach to its assessment, taking into account the fresh evidence on this appeal, the Applicant's further written legal submissions, and the record previously before the Commissioner.

## ISSUE

[12] The sole issue is whether the claims of the present application are obvious, having regard to both the prior art cited by the Examiner and the evidence filed by the Applicant.

## LEGAL FRAMEWORK

### Statutory Basis

[13] In addition to being novel in view of the relevant prior art (s.28.2 of the *Patent Act*), the subject matter claimed in a patent must not be obvious. An invention is not obvious if, as noted by the Applicant, it exhibits a "scintilla" of inventiveness; see e.g., *Diversified Products Corp v Tye-Sil Corp* (1991), 35 CPR (3d) 350 at ¶ 365.

[14] This ingenuity requirement arose from judicial interpretation of "invention" under section 2 of the Act. To assess whether an invention satisfies this requirement, section 28.3 of the Act provides that claimed subject matter must not be obvious to the person skilled in the art or science in light of information disclosed before the claim date. The statutory provision, as noted by the Applicant, does not define the term "obvious."

### Establishing an Objective Framework

[15] Before turning to the present claims, it is necessary to address the framework in which obviousness will be assessed.

[16] A framework for assessing obviousness was endorsed by the Supreme Court in *Sanofi*, in which the Court imported four steps for assessing obviousness from the U.K., namely, the *Windsurfing/Pozzoli* 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?

[17] The first three steps serve to provide a clear, objective context in which the ultimate statutory question is to be addressed, in step four. It is in this final step that any tests or factors for the assessment of obviousness are to be considered; see *Sanofi* and *Practice Notice on Obviousness* - November 2, 2009 at page 3. For example, it was in step four that an “obvious to try” test was applied in *Sanofi*.

#### Test for Obviousness

[18] The test for obviousness, submits the Applicant, is that set out in *Beloit Canada Ltée/Ltd v Valmet Oy* (1986), 64 NR 287, 8 CPR (3d) 289 (FCA) at 294, which asks whether the skilled reader would “have come directly and without difficulty to the solution taught by the patent.” That was the state of the law when this case was last before the Board and Commissioner.

[19] As the law now stands, however, *Beloit* is no longer the sole test for obviousness; in the context of discussing the obviousness inquiry, the Supreme Court in *Sanofi* noted that “rigid rules are inappropriate unless mandated by statute”; see *Sanofi* at ¶ 63 and *Corlac Inc v Weatherford Canada Inc*, 2011 FCA 228 at ¶ 67. Likewise, in *Janssen-Ortho Inc v Novopharm Ltd*, 2007 FCA 217 at ¶ 25, it was also stated “[t]here is no single factual question or a set of questions that will determine every case, or any particular case.”

[20] To be clear, *Beloit* remains a valid test for obviousness. However, it must be applied in an informed way; the Federal Court has cautioned that too rigid an application of the test risks being “perilously close to anticipation”; see *Janssen-Ortho Inc v Novopharm Ltd*, 2006 FC 1234, aff’d 2007 FCA 217.

[21] Turning to the case at hand, in our view, nothing in *Sanofi* renders the *Beloit* test inapplicable to the subject matter of the present claims. However, we find that the facts lead us to additionally take into account a factor endorsed in *Janssen* at ¶ 25: the trend in the general state of the art.

[22] We also note the following submissions made by the Applicant to the Board concerning the legal principles for obviousness:

- (1) simplicity does not negate inventiveness;
- (2) obviousness can be equated to “plain as day” or “crystal clear”; and,
- (3) inventiveness in an idea is sufficient notwithstanding there being no difficulty in putting it into effect.

[23] The Board recognized and considered the first point in *Re Ascom Hasler Mailing Systems Inc* (2010), CD 1304, 2010 CarswellNat 2821 at ¶ 50, and the third point finds support in *R v Uhlemann Optical Co* (1949), 11 CPR 26 at 46-7 (Ex Ct); aff’d (1951), 15 CPR 99 at 104-6 (SCC). Regarding the second point, while it too finds its basis in the case law, we add that the Court of Appeal has warned that catchphrases derived from the jurisprudence (such as “plain as day” or “crystal clear”) are not to be treated as though they are rules of law; see *Janssen* at ¶ 28).

[24] In sum, the test we shall use at step four in the present case will be to ask, having considered all the expert evidence and taking into account the common general knowledge including the POSITA’s knowledge of the trends in the general state of the art (the *Janssen* factor), whether a POSITA would, in light of the cited prior art, have come directly and without difficulty to the solution taught by the patent (the *Beloit* question).

## ANALYSIS

Before turning to the question of obviousness, it is necessary to consider the claims.

### The Claims

[25] Claim 1 of the present application is the only independent claim. It was construed by the Court in FC2 (see FC2, ¶ 59 and 60) to include a combination of seven essential elements, as follows:

- (1) a subway car for mass transportation including longitudinal opposed sidewalls, a ceiling adjoining the sidewalls (“subway car”);
- (2) a video display system comprising a plurality of video display monitors each having a video screen (“multiple monitors”);
- (3) a video signal source unit operatively connected to said monitors (“video source”);
- (4) said monitors being spaced along the length of the car on opposed sides thereof (“spaced monitors”);
- (5) each of said monitor being mounted at the junction of the sidewall and ceiling (“wall-ceiling junction placement”);
- (6) with the screen of the monitor substantially flush with the adjacent wall surface structure of the car (“flush mounted”); and,
- (7) directed obliquely downwardly toward the car seats, so that each video screen is readily visible to passengers in the subway car. (“angled for viewership”)

[26] For the sake of convenience, reference will be made to the abbreviated forms of each essential element shown in parentheses above.

[27] There are 10 additional claims in the application. At the hearing for CD1, the Applicant asked that the Board drop claims 7-11 from consideration; see CD1 at page 6.

[28] Claims 2-6 depend on claim 1. If claim 1 is obvious, the Board must consider whether any of the remaining claims define additional elements that – when considered in combination with the essential elements of claim 1– would lead to a conclusion of non-obviousness.

[29] The four step *Sanofi* approach will first be applied to claim 1 and subsequently to the dependent claims 2-6.

### Step (1) (a) Identify the notional "person skilled in the art"

[30] The POSITA was defined by the Court in FC2 as “a person familiar with the installation of video systems.”

### Step (1) (b) Identify the relevant common general knowledge of that person

[31] The Board agrees with the Applicant’s submission regarding the relevant common general knowledge, which includes:

... knowledge of the installation of video systems in various locations [...] the skilled person would be aware of the locations as at [the relevant date] in which video systems were installed and would know that subways existed but that they did not contain video systems

[32] Further, we find that it was routine for the POSITA to consider a variety of factors when installing a video display system in a new location. These factors include: the purpose of the system; user requirements including viewability by the intended users; and, available space to accommodate cables, monitors, and mounting means. We base this finding on what the

descriptive portion of the application (the description) indicates to be common general knowledge.

[33] The description states that the embodiments described and illustrated therein (which are encompassed by the claims) are examples based on the specific design of the Toronto Transit Commission (TTC) subway cars; see page 12. The description adds that video installation would differ “from subway system to subway system according to the form of car...” and would have to “adapt [the detail of mounting means and locations] to different constructions of subway cars.”

[34] From our reading of the description, apart from guiding the POSITA to select a location that is “clear of the doors and windows” and “where it can be viewed by all passengers” (points that are no doubt self-evident to the POSITA), the selection of the location and mounting means is left to judgement based on ordinary skill. This indicates that selecting a suitable location for monitor installation based on certain parameters was routine skill at the relevant date.

[35] This finding is consistent with the Ballantyne affidavit, according to which he, as someone aware of the common general knowledge, has installed video systems in various legislatures, university distance-learning links, Olympic broadcast systems, operating rooms, and TV studios. As a person skilled in the art of video installation, he was able to install video systems in diverse environments in government, education, broadcasting, and health care sectors. For each project, no doubt, Mr. Ballantyne would have been faced with different factors. We conclude that he drew upon the routine skill and knowledge of the skilled person, taking into account the necessary factors when situating monitors in each case.

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

[36] The Court did not address the inventive concept. However, the Applicant submits that the inventive concept is the combination of essential elements (set out at ¶ 26, above) as construed by the Court. We agree to proceed on this basis, as the Court characterized the present claims as a proper combination. Consequently, it is appropriate in this case to “take into account all of the essential elements”: see *Bridgeview Manufacturing Inc v 931409 Alberta Ltd*, 2010 FCA 188 at ¶ 51; *Corlac* at ¶ 69.

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

[37] The Examiner cited three prior art documents to support his position that the present claims are obvious:

- I. United States Patent No. 5,606,154 to Doigan et al. (published 25 February 1997);
- II. French Patent Application No. 2,652,701 to Comerzan-Sorin (published 5 April 1991); and,
- III. Canadian Patent No. 1,316,253 to Tagawa et al. (published 13 April 1988).

[38] The Applicant and expert affiants (Ballantyne, Ng, and DiNardo) provided the Board with their understanding of the cited art. The Board generally agrees with their characterization of the cited documents, summarized below, except for the construction of the expression “light rail horizontal people mover.”

[39] Comerzan-Sorin and Tagawa et al. are both directed to video installations wherein the user is expected to be stationary for a prolonged time period. We agree with the Applicant that these disclosures focus on specific problems not directly related to the present inventive concept.

[40] In particular, in Comerzan-Sorin, the invention is directed to providing video monitors primarily for individualized viewing in, e.g., aircraft, trains, cars, hovercraft, or boats. Individual video monitors are provided along with a larger, collective screen (page 2, lines 65-66). Comerzan-Sorin does not mention subways.

[41] Similarly, Tagawa et al. are concerned with individualized viewing. In particular, they focus on simplifying wiring to the individual terminals. Their disclosure is directed to installations in airplanes, trains, buses, stadium seats, and theatres. As with Comerzan-Sorin, there is no reference to subways.

[42] Unlike the other two publications, Doigan et al. is not directed to individualized viewing and it discloses the use of video monitors in locations where a user is expected to remain only briefly. More specifically, Doigan et al. addresses the problem of electronically selecting specifically timed advertising messages to coincide with the (short) duration of a passenger’s trip or wait.

[43] While the disclosure in Doigan et al. is primarily directed to elevators and their landings, it also discloses “other types of shuttle transport” such as “light rail horizontal people movers” (column 2, line 47 to column 3, line 7).

[44] The Applicant submits that the expression “light rail horizontal people movers” does not include subways. To the Applicant, “light rail horizontal people movers” differ from subways as the latter do not stop in response to service requests. The Applicant has not explained, and we do not see, how stopping in response to a service request can represent a material difference in relation to the inventive concept, which does not include stopping in response to service requests as one of its elements; see ¶ 26, above. In any case, when one considers the context in which it is used, the expression “light rail horizontal people movers” reasonably includes a subway car since Doigan et al. further indicate that a people mover “provid[es] access at predetermined points



along the path, either automatically, or in response to requests for service”; see col. 2, lines 51-53.

[45] If Doigan et al. intended to mean subways, the Applicant submits, they would have used precisely this word. The Board is not persuaded by this submission. Broad language is typical in patents in order to avoid a narrow interpretation of the monopoly.

[46] Mr. Ballantyne submits, with Mr. Ng and DiNardo generally concurring, that the term “light rail horizontal people movers” does not include subways. The Board considers this term not to be a term of art in the field of video system installation. Having considered the expert evidence, we find that the POSITA would have understood “light rail horizontal people mover” to include subways, or, at a minimum, to obviously connote something analogous to a subway.

[47] As for the placement of monitors, Doigan et al. is silent on situating the video monitors; that is left to the POSITA to determine in accordance with their common general knowledge. Consistent with their primary purpose of providing individualized viewing, Comerzan-Sorin focuses on seat-back installations. Similarly, Tagawa et al. teach installations on the backs, arm rest, or tables of each seat for individual viewing and control.

[48] In sum, bearing in mind that one must not “separately consider[] each element” (FC2 at ¶ 57) of a proper combination, none of the cited references teach the inventive concept (e.g., the combination) as a whole.

[49] For the purposes of these reasons, we accept the Applicant’s submission that the difference between the inventive concept and the state of the art is the combination of elements (see ¶ 37). That is to say, we will treat the difference over the prior art as being the bringing together of the various parts to arrive at the combination of elements identified by the Court (see ¶ 26). Effectively, having agreed to consider the inventive concept to be the list of essential elements identified by the Court, we shall treat the combination as a whole (or, equivalently, the whole of the inventive concept) as being the difference over the prior art.

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?

[50] Having found that the combination as a whole is not found in the prior art, it is worth emphasizing that merely being different from what is known in the prior art makes the claimed subject matter novel. However, it does not necessarily follow that the difference required some degree of ingenuity (see ¶ 14).

[51] The presence of one of a variety of indicators may be suggestive of ingenuity; e.g., a surprising result, commercial success, addressing a long felt want, selection of an advantageous

variant from among all options, simplification of a device, etc. The Board finds no such indicators in the present case. Rather, the difference over the state of the art appears to be consistent with the trend shown in the prior art and required only ordinary skill to implement (e.g., monitor placement within the subway car).

*Trend Illustrated in the Art: Video Systems in Public Transport*

[52] As noted above, the climate in the field at the relevant date, and in particular trends in the field, may be a relevant factor. Looking to the cited art, this is an important factor in the present case.

[53] Taken as a whole, the cited prior art shows a trend of installing video systems to entertain and/or inform passengers in a variety of transportation systems.

[54] This trend is acknowledged on the first page of the present specification, where it describes how various transportation means (e.g., aircraft), other than subways, were being equipped with video systems prior to the filing date. The Applicant explains that, until the present disclosure, subways had been ignored on account of the relatively short journey experienced by passengers (e.g., fifteen minutes). This statement is consistent with the teachings of Comerzan-Sorin and Tagawa.

[55] Doigan et al., on the other hand, address the problem of entertaining passengers on short journeys or during waits. Further, given our interpretation (above) of “light rail horizontal people movers”, Doigan et al. directly teaches the provision of video systems on subways (or the like) to entertain passengers on short journeys.

[56] Thus, regardless of whether the step of extending the trend in long-haul transportation to a subway was inventive, Doigan et al. already took that step before the relevant date.

[57] Given the trend illustrated in the art and the teachings in Doigan et al., no inventive ingenuity would have been involved in choosing to install a video system in a subway car. However, it is important to consider whether, having followed the trend in the art by deciding to install a video system in a subway car, an inventive step would have been involved in designing the particular implementation now claimed.

*Monitor Placement*

[58] As for the wall-ceiling junction placement of the monitors within the subway, in accordance with our findings on common general knowledge above, monitor placement based on given parameters is a matter of ordinary skill and therefore is not in and of itself inventive.

[59] Moreover, according to the Applicant's description as filed, there appears to be little significance attributed to the claimed location. It is described "by way of example only" and "pertains specifically to the type of subway car currently in use in the Toronto Transit System, and illustrates a means and location for mounting the video monitors in such as system"; see description at page 7, lines 23-26 and page 12, ¶ 2.

[60] Looking to the prior art, the video installation expert affiants list five factors taught in Comerzan-Sorin to be considered when situating the video monitors. They also point out, and we accept, that these factors are specific to row seating, such as in an aircraft. Because subways do not normally have row seating, they reason, the factors taught in the prior art do not apply to subways. But if subways are known to have seating that faces the placement site referred to in the claims (i.e., seating that runs parallel to the length of the car), then, by extension, it seems only logical to orient video monitors so that they would be viewable to observers sitting in such cars. The overriding factor is viewability, regardless of the seating orientation specifically taught by the references.

[61] While we agree that the factors to be considered when situating monitors in Comerzan-Sorin are not specific to subways, we do see overlap. For example, Comerzan-Sorin considers the "view angle of each user" while the present claim requires monitors to be "angled for viewership." We find this teaching is consistent with our finding on the common general knowledge that the POSITA is adept at taking into account the factors necessary to situate a video monitor. In situating a video monitor, the POSITA will account for the intended use thereof, the placement and orientation of users, obstacles, etc.

[62] Accordingly, we see no ingenuity in selecting the wall-ceiling junction in a subway car for the installation of video monitors.

#### *Remaining Essential Elements*

[63] In its submission to the Board, the Applicant did not emphasize the remaining essential elements. Nonetheless, they will be considered for completeness as they are part of the claimed combination. It is our opinion that these elements, when taken in combination with the other claimed elements, do not establish an inventive step. Each element is considered below.

[64] The provision of multiple, spaced monitors that are angled for viewership does not involve an inventive step. They flow from ordinary skill in that the POSITA would consider the location and orientation of the passengers (dispersed throughout the subway car) when determining placement, orientation, number, and size of monitors. Though they relate generally to row seating, Comerzan-Sorin and Tagawa account for these factors when installing (numerous) monitors oriented for viewership. Similarly, faced with video installation in a subway car, the POSITA would have considered the position(s) of the passengers and adjusted accordingly.

[65] As for flush mounting, this feature is characterized in the description of the present application as an aesthetic feature, not a functional feature; see page 11, lines 13-17. We do not see how it could supply the combination with the scintilla of ingenuity required for patentability.

[66] Finally, the combination includes a video source that is operatively coupled to the monitors. The POSITA would have viewed this as a requirement for any video monitor. Indeed, each of the cited documents makes reference to a video source.

[67] In Doigan, a centralized video source is coupled to monitors in shuttles using wiring that, according to Mr. Ballantyne, would run along a cable fixed to the shuttle (such as an elevator cable). For this reason, he concludes that Doigan is incompatible with subways. We have two difficulties with his submission.

[68] First, the present claims do not specify the location of the video source. Moreover, the specification contemplates a variety of embodiments wherein the source is either centralized, located in each car, or located in a single car. Further, connections may be made by wire or wireless means (page 5, line 4-6). Accordingly, the claim is broad enough to read on Doigan et al. on this point.

[69] Second, we disagree with his construction of the term “shuttle” as requiring a cable. While the shuttle described in Doigan et al. may be fixed to a cable, linear induction motors and other means were also contemplated (Doigan et al., col. 2). Therefore, we find that the claimed invention does not distinguish over Doigan in this respect.

[70] Accordingly, a technical consideration of the remaining essential elements does not indicate the requisite ingenuity to sustain a patent for the claimed combination. However, a conclusion on obviousness of the combination cannot be drawn without ensuring that the totality of the evidence submitted by the Applicant has been considered.

#### *Letters and Affidavits Filed by the Applicant*

[71] The affiants characterized by the Applicant as experts in video installation (Mr. Ballantyne, Mr. Di Nardo, and Mr. Ng) stated that, having reviewed the cited prior art and the present application, they would not have found the present inventive concept obvious on the relevant date. However, they provide no rationale for their conclusions, and do not address the question of whether, in light of the trend shown in the art and the common general knowledge, the inventive concept involves an inventive step. Their submissions do not persuade us that any ingenuity would have been required to arrive at the inventive concept.

[72] Having fully considered the affidavits of the Applicant’s three experts in video installation, the Board must also consider the remaining evidence. This consists of letters

submitted during examination from Mr. Gillespie, Mr. Wilkins, and Mr. Berry, and affidavits submitted subsequent to the Final Action from Ms. Gibson, Mr. Morris (referred to at ¶ 5 and ¶ 8, respectively) and Mr. Wilkins.

[73] Mr. Gillespie and Mr. Berry have extensive experience in the field of transportation, while Mr. Wilkins is experienced in rail/transit signalling. Ms. Gibson and Mr. Morris are experts in communications/marketing/corporate relations and mass transit, respectively.

[74] Their evidence serves primarily, in our view, to illustrate that the claimed subject matter differs from the state of the art at the relevant date. We agree that there are differences over the state of the art and that the claimed subject matter is novel; see ¶ 50.

[75] Mr. Gillespie stated that the Comerzan-Sorin reference is distinguishable from the present application in that the former does not relate to short term travel. He also asserts that he had “never seen the use of television systems on city limited vehicles.”

[76] Similarly, Mr. Berry distinguished the present application over prior video systems in that the Applicant proposes positioning the monitors above the seats so as to be readily visible to passengers. Further, Mr. Berry emphasized the individualized video installations in Comerzan-Sorin.

[77] We agree with the characterization of Comerzan-Sorin by Mr. Gillespie and Berry. The distinction is addressed in the analysis above; see ¶ 39. The remainder of their submissions also relate to novelty, not ingenuity.

[78] The Gibson affidavit, the Applicant points out, states that, though she has observed various forms of subway ads and entertainment media, as of the relevant date Ms. Gibson “had not been aware of a single instance of any successful installation of a video display system on board a mass transit subway car with monitors housed or mounted at the juncture of the wall and ceiling of the subway car.” In his affidavit, Mr. Wilkins makes the same point.

[79] The Morris affidavit includes exhibits comprising photographs of various subway cars from around the world. The photographs show that the cars have video monitors installed in locations other than that now claimed.

[80] In respect of the Morris affidavit and exhibits, we agree with the Applicant that contrary to the comment made in CD1, there are locations other than the wall-ceiling junction where monitors may be installed in subway cars.

[81] Accordingly, we find the letters and affidavits of Mr. Gillespie, Mr. Wilkins, Mr. Berry, Ms. Gibson and Mr. Morris to speak to the novelty of the present invention and assists in our obviousness analysis only to the point of step 3 - identifying the differences over the state of the

art. We agree with the experts that the invention differs from the state of the art. However, the obviousness assessment is not complete until the ultimate question is addressed (i.e., in step 4 of our *Sanofi* analysis). Their evidence provides little assistance in addressing this question.

[82] Ms. Gibson, Mr. Wilkins, and Mr. Morris offered their opinions on the ultimate question of obviousness, each finding the present claims unobvious. As with the submissions of the three experts in video installation, they offer a limited explanation for their conclusion on obviousness. Similarly, their submissions do not persuade us that any ingenuity would have been required to arrive at the inventive concept.

[83] Having considered the totality of evidence from the Applicant, our finding on obviousness remains unchanged.

#### *Analysis From an Alternative Starting Point*

[84] The same conclusion could have been reached using a different starting point.

[85] In the TTC subway cars discussed in the specification, poster ads were located at the wall-ceiling junction. As the Applicant's primary intended use of the video system is to run advertising messages (description at pages 2-3; and, page 12, line 10), the present claims merely involve the step of substituting video monitors for the poster ads of the prior art. Following the general trend in public transportation systems as discussed previously, there does not appear to be anything to elevate the present inventive concept above a mere substitution. There is no evidence of any problems that were overcome, apart from the application of routine skill, in switching to electronic media. We take from the lack of technical details in the specification that there were no challenges in situating power and video cables, no specific construction of mounting means required, etc. From this perspective, it is difficult to see that there was any ingenuity in situating the monitors. The location was long ago selected when poster ads were mounted.

[86] There is no evidence that any inventive skill was required to adapt the video system to the TTC cars. As discussed above, the POSITA was able to take into account constraints imposed by the existing structure and give due consideration to the purpose of the video system. From this alternative analysis, we also find that the present claims involve no inventive step.

#### *Summary - Claim 1*

[87] To conclude our analysis of claim 1 under the step four of the *Sanofi* approach and to complete the application of the legal framework set out at ¶ 25, above, we turn to the *Janssen* "trend in the art" factor and the *Beloit* test.

[88] As we found above, at the relevant date, there existed a trend in the art of installing video systems in a wide variety of transportation means, whether long-haul or short. It follows that the POSITA would have been directly led to the installation of a video system in a subway as well. Moreover, Doigan et al. explicitly teaches installation of a video system in a subway (or in something that is at the very least analogous thereto).

[89] In adopting the trend by deciding to install a video system in subway cars, the POSITA would then have had to decide where to situate the video monitors. In light of our findings regarding the level of routine skill of the POSITA, selecting a suitable location for the monitors would not have involved any inventive skill. The description in the present application teaches that a variety of locations could be selected, depending on the specific subway car. Routine skill alone would have directly led the POSITA to select the “wall-ceiling” junction placement of monitors, where the design of the subway car so dictated.

[90] Considering the trend in the art, routine skill, and our findings regarding the remaining essential elements, we find, applying the *Beloit* test, claim 1 to be obvious as the POSITA would *have come directly and without difficulty to the solution taught by claim 1*.

#### Analysis - Claims 2-6

[91] No submissions were made by the Applicant in respect of claims 2-6; the Applicant appears to rely on a finding of non-obviousness of claim 1.

[92] We are of the view that claims 2 to 6 recite additional elements that are either acknowledged as conventional, taught in the cited art, or would have been inherent to a video display system. These elements include:

- A. specifying that the video signal source unit comprises a video tape player, etc... (claim 2);
- B. the monitors include LCD screens (claim 3);
- C. a self-contained “wiring cabling system” (claim 4);
- D. a “rigid transparent unit” to protect the monitor (claim 5); and,
- E. the shape of the rigid transparent unit (claim 6).

[93] Regarding the rigid transparent unit, we find that the POSITA would have thought it sensible to provide protection for any fragile equipment, such as video monitors, placed in a public setting. Concerns for theft and vandalism would have led the POSITA to provide rigid protective means. It would have been self-evident that it would need to be transparent.

[94] Accordingly, we find that the additional elements introduced by claims 2-6, in combination with the essential elements of claim 1, would have been obvious for want of an inventive step.

## **CONCLUSION**

[95] In light of the above reasons, the Board finds that claims 1-6 would have been obvious to a person skilled in the art of video system installation as of 7 May 1997.

## **RECOMMENDATION OF THE BOARD**

[96] In view of the above findings, the Board recommends refusal of the application under section 40 of the *Patent Act*.

Mark Couture  
Member

Paul Fitzner  
Member

Ed MacLaurin  
Member

## **DECISION OF THE COMMISSIONER**

[97] I concur with the Patent Appeal Board's findings and their recommendation that I uphold the Examiner's rejection of the application due to the claims being obvious in view of the cited prior art.

[98] Accordingly, 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.

Sylvain Laporte  
Commissioner of Patents  
Dated at Gatineau, Quebec,  
this 21<sup>st</sup> day of March, 2012