

Commissioner's Decision #1479

Décision du commissaire #1479

TOPICS: B00 Ambiguity or Indefiniteness (incomplete)

O00 Obviousness

SUJETS: B00 Caractère ambigu ou indéfini (incomplet)

O00 Évidence

Application No: 2,661,893

Demande no: 2 661 893

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,661,893, having been rejected under subsection 30(3) of the *Patent Rules* (SOR/96-423), has consequently been reviewed in accordance with paragraph 30(6)(c) of the *Patent Rules*. The recommendation of the Board and the decision of the Commissioner are to refuse the application.

Agent for the Applicant

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INTRODUCTION

[1] This recommendation concerns the review of rejected Canadian patent application number 2,661,893 (“the instant application”), which is entitled “METHOD AND APPARATUS FOR WIRELESS REMOTE CONTROL COMMUNICATION OF A WELDER” and is owned by ILLINOIS TOOL WORKS INC. (“the Applicant”). A review of the rejected application has been conducted by the Patent Appeal Board (“the Board”) pursuant to paragraph 30(6)(c) of the *Patent Rules*. As explained in more detail below, our recommendation is that the Commissioner of Patents refuse the application.

BACKGROUND

The Application

- [2] Patent application no. 2,661,893 was filed in Canada on September 20, 2007 under the provisions of the *Patent Cooperation Treaty* and was laid open to the public on May 29, 2008.
- [3] The instant application relates to wireless remote control of welding systems and methods of adapting existing welding systems so as to provide for such wireless remote control. The instant application proposes the use of a wireless receiver connected to the existing connection port for a wired connection, the wireless receiver then capable of communicating with a wireless remote control to effect changes in the welding parameters.
- [4] Figure 1 of the instant application, shown below, illustrates the welding system 10 with a connected wireless receiver 36 that communicates with the wireless remote control 50.

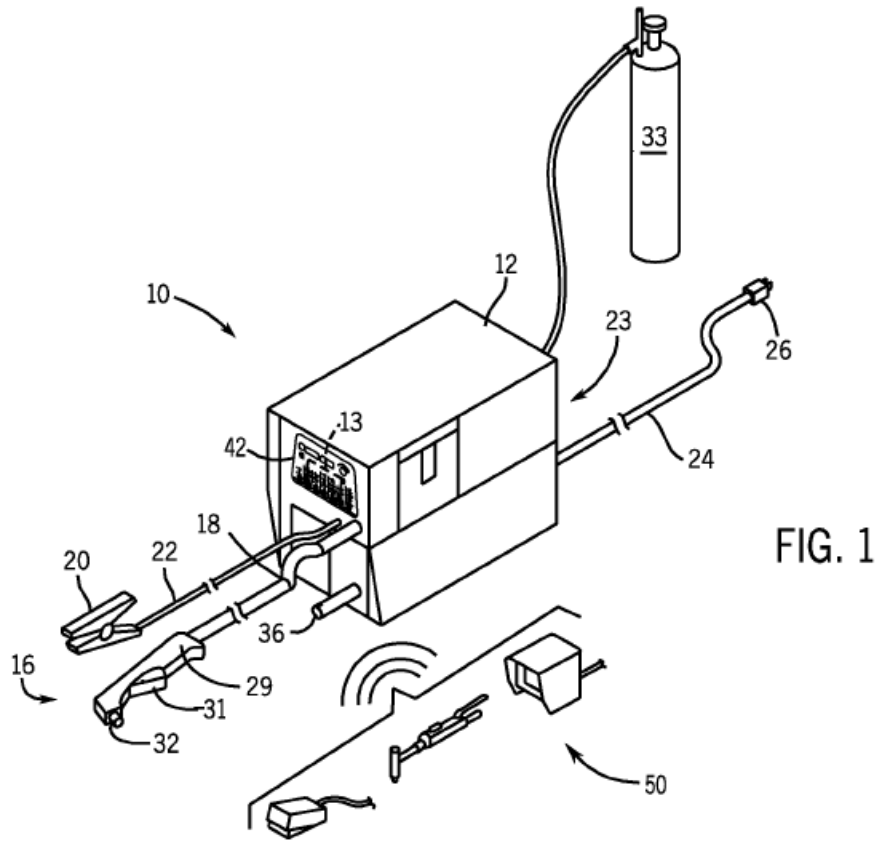


FIG. 1

Prosecution History

[5] On February 26, 2016, a Final Action (“FA”) was written pursuant to subsection 30(4) of the *Patent Rules*. The FA stated that the instant application is defective on the grounds that the claims 1-17 on file at the time of the FA (“claims on file”) would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act* and that claims 1, 7, 12 and 16 are indefinite, contrary to subsection 27(4) of the *Patent Act*.

[6] In an August 24, 2016 response to the FA (“RFA”), the Applicant proposed amendments to independent claims 1, 7, 12, and 16 on file to address the indefiniteness defect. The Applicant also submitted arguments in favor of the claims on file and the proposed claim set 1-17 (“proposed claims”).

- [7] As the Examiner considered the application not to comply with the *Patent Act* and *Patent Rules*, pursuant to paragraph 30(6)(c) of the *Patent Rules*, the application was forwarded to the Board for review on October 26, 2016 along with an explanation outlined in a Summary of Reasons (“SOR”). The SOR set out the position that the proposed claims and arguments sufficiently addressed the indefiniteness defect but not obviousness.
- [8] In a letter dated November 2, 2016, the Board forwarded to the Applicant a copy of the SOR and requested that the Applicant confirm its continued interest in having the application reviewed or that the application be withdrawn.
- [9] In a response dated January 11, 2017, the Applicant indicated its continued interest in having the application reviewed and requested an oral hearing.
- [10] The present panel (“the Panel”) was formed to review the instant application under paragraph 30(6)(c) of the *Patent Rules*.
- [11] In a Preliminary Review letter (“PR letter”) dated August 16, 2018, the Panel set out its preliminary analysis of the indefiniteness and obviousness issues with respect to the claims on file and the proposed claims.
- [12] In a response to the PR letter dated November 9, 2018 (“RPR”), the Applicant submitted further arguments in favor of the claims on file and proposed claims.
- [13] An oral hearing was held on November 16, 2018.

ISSUES

- [14] The issues to be addressed by the present review are whether:
- claims 1, 7, 12 and 16 on file are defective due to indefiniteness and therefore non-compliant with subsection 27(4) of the *Patent Act*; and

- the claims on file are defective due to obviousness and therefore non-compliant with section 28.3 of the *Patent Act*.

[15] If the claims on file are considered to be defective, we may turn to the proposed claims and consider whether they constitute amendments necessary for compliance with the *Patent Act* and *Patent Rules*.

LEGAL PRINCIPLES AND OFFICE PRACTICE

Claim Construction

[16] 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 (revised June 2015), the first step of purposive claim construction is to identify the person skilled in the art 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.

Indefiniteness

[17] Subsection 27(4) of the *Patent Act* requires claims to distinctly and explicitly define subject-matter:

The specification must end with a claim or claims defining distinctly and in explicit terms the subject-matter of the invention for which an exclusive privilege or property is claimed.

[18] In *Minerals Separation North American Corp v Noranda Mines Ltd*, [1947] Ex CR 306, 12 CPR 99 at 146, the Court emphasized both the obligation of an applicant to make clear in

the claims the ambit of the monopoly sought and the requirement that the terms used in the claims be clear and precise:

By his claims the inventor puts fences around the fields of his monopoly and warns the public against trespassing on his property. His fences must be clearly placed in order to give the necessary warning and he must not fence in any property that is not his own. The terms of a claim must be free from avoidable ambiguity or obscurity and must not be flexible; they must be clear and precise so that the public will be able to know not only where it must not trespass but also where it may safely go.

Obviousness

[19] Section 28.3 of the *Patent Act* sets out the conditions under which a claim may be found to be obvious:

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.

[20] In *Apotex Inc v Sanofi Synthelabo Canada Inc*, 2008 SCC 61 [*Sanofi*] at paragraph 67, the Supreme Court of Canada proposed a four-step approach to performing the obviousness assessment:

- (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?

[21] In determining whether an invention is obvious or requires a degree of invention, we are guided by *Canadian Gypsum Co v Gypsum, Lime & Alabastine, Canada Ltd*, [1931] Ex CR 180 at 187 [*Canadian Gypsum*] for the principle that inventive ingenuity may be found in the underlying idea or in the practical implementation of that idea, or in both.

ANALYSIS

Claim Construction

The person skilled in the art

[22] In the PR letter, the Panel clarified its understanding of the person skilled in the art:

In the FA at page 2-3, the person skilled in the art was identified as a team of professionals with backgrounds related to one or more of welding and welding systems, wired communication technologies and wireless communication technologies. However, in our preliminary view, given that the CGK set out in the FA includes knowledge in all of these fields, the person skilled in the art would also have backgrounds in all of them.

[23] The above characterization was not disputed by the Applicant in the RPR or at the hearing. We apply it in our analysis below.

The relevant common general knowledge

[24] In the PR letter, the relevant CGK was set out as including both the CGK identified in the FA and the additional points set out by the Panel upon review of the Background of Invention portion of the instant application:

Design, manufacture, integration, operation, maintenance, control of:

Welding:

- including different techniques, procedures, processes
- welding safety

- Primary and auxiliary tools related to welding

Welding systems:

- controls, power sources, tools, accessories, user interface
- Design, manufacture, integration, operation, maintenance, control thereof
- wired and wireless remote operation and control, including hand, foot and fingertip controls

Design, implementation, manufacture, application, operation, maintenance of:

- wired communication networks
- wireless communication networks

Knowledge of various wire and wireless communication technologies and protocols including, but not limited to:

Commonly known wireless technologies:

- ZigBee, Bluetooth
- Wi-Fi, IEEE802.11
- Cellular, CDMA, GPRS, GSM, 3G, LTE
- RF, VHF, UHF

Common related wired/wireless technology pairs:

- Ethernet/Wi-Fi
- USB - wired/wireless
- Fibre Optics/Free Space Optics

Common wired connectors/technologies:

- RJ45 (Ethernet), RJ11 (telephone), Video (Coaxial, VGA, S-video, etc.), Audio, USB, PS/2, parallel/serial ports, Optical/Fiber

Present Application - Background:

- Welding systems with wired remote controls for communication and control of various welding parameters [Desc: para.0002]
- Welding systems with wireless remote controls for communication and control of various welding parameters [Desc: para.0005]

Additional points identified by the Panel in PR letter:

- the drawbacks of conventional welding control systems, such as the need to leave a welding operation and go back to the welding machine itself to make adjustments to the welding parameters;
- the use of wired remote control welding systems to alleviate the drawbacks of the conventional systems;
- the drawbacks of the wired remote control systems, such as the potential damage to the communication cables and welding control system from contact with surrounding heavy equipment and the introduction of high frequency electrical noise to the welding system from the surrounding high voltage environment through the communication cables;
- the emergence of newer welding systems designed to include wireless remote control devices; and
- the resulting known deficiency in existing wired remote control welding systems in comparison with the newer systems that incorporate wireless communication control technology and the need for a system to retrofit existing wired remote control welding systems to provide for wireless remote control.

- [25] In response to the above, the Applicant, in the RPR and at the hearing, contended that contrary to the last point of CGK taken by the Panel from the instant application itself, it was the Applicant that recognized the “need for a system to retrofit existing wired remote control welding systems to provide for wireless remote control” and that without this knowledge there was no motivation to arrive at the claimed combination of elements. At the hearing, the Applicant particularly contended that there was no direct, explicit disclosure of this “need” anywhere but in the instant application.
- [26] While it is true that there may be inventive ingenuity in the recognition of a problem in the prior art (*Cabot Corp v 318602 Ontario Ltd* (1988), 20 CPR (3d) 132 (FCTD), citing H.G. Fox in his book *Canadian Law and Practice Relating to Letters Patent for Inventions*, at pp 70 and 71), in the present case, we consider that the specification does not establish that the Applicant was the first to recognize the need set out above, based on our assessment of the context of this statement in the application itself.
- [27] In particular, the “need for a system to retrofit existing wired remote control welding systems to provide for wireless remote control”, as noted by the Applicant in the RPR, was made in paragraph [0005] of the instant application, which falls within information set out as “BACKGROUND OF THE INVENTION” and therefore, in our view, not part of the invention itself. The aforementioned “need” is described as one that “remains” despite the fact that a “problem persists regarding existing welding systems not currently configured to allow for operation via a wireless remote control.” Further, this statement is made prior to the “BRIEF DESCRIPTION OF THE INVENTION”, which section states that the “present invention overcomes the aforementioned drawbacks.” In this context, the invention, in our view, does not encompass the “aforementioned drawbacks” set out in paragraph [0005] of the instant application from which the point of CGK set out in the PR letter was taken.
- [28] In our view, the points from the instant application taken to have been part of the relevant CGK, based on the context in which they are described and the language used in them, do

not describe a part of the Applicant's alleged invention and instead describe ongoing issues related to the prior art welding systems that were apparent to those skilled in that art. We therefore conclude that the "need for a system to retrofit existing wired remote control welding systems to provide for wireless remote control" was part of the relevant CGK of the person skilled in the art.

[29] We apply this CGK in our analysis of obviousness below.

Problem, solution and essential elements

[30] In the present case, there are no issues on the record of any debate as to the meaning of any terms in the claims, nor does the Panel see any issues in that regard. There is also no analysis as to which claimed features are essential and which are not, if any.

[31] In our analysis of obviousness below, we have taken into account all the features of the claims on file. Therefore, a determination of the problem, solution and essential elements is unnecessary.

Indefiniteness (Lack of Clarity)

[32] We stated in the PR letter that we agree that independent claims 1, 7, 12 and 16 are indefinite and therefore non-compliant with subsection 27(4) of the Patent Act. As noted in the SOR, the Applicant has proposed amendments to these claims in the RFA to address the defects identified in the FA. As mentioned in the PR letter, the proposed amendments render the claims compliant with subsection 27(4) of the Patent Act.

[33] No submission was made with respect to the indefiniteness issue in the RPR or at the hearing. We conclude that independent claims 1, 7, 12 and 16 on file are indefinite and therefore non-compliant with subsection 27(4) of the *Patent Act*. We also conclude that the proposed claims overcome this defect. However, given our findings below as to obviousness, this point is moot.

Obviousness

(1)(a) Identify the notional “person skilled in the art”

[34] The person skilled in the art has been set out above under Claim Construction at paragraph [22].

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

[35] The relevant CGK has also been identified above under Claim Construction at paragraph [24].

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

[36] In the PR letter, claim 1 was taken as representative of the independent claims and is set out below:

1. A welding-type system comprising:
 - a power source having a controller to regulate welding operation;
 - a welding torch connected to the power source;
 - a wireless remote control configured to remotely transmit a signal for controlling at least one of a plurality of welding parameters in the welding system;
 - a wireless receiver connected to the controller remote from the wireless control and configured to receive the signal and allow the controller to regulate at least one of the plurality of welding parameters in response thereto; and
 - wherein the wireless receiver is further configured to engage an existing connection port located on an exterior of the power source, wherein the existing connection port is configured to engage standard welding cables, and the existing connection port is configured to engage both a control cable coupled to a wired control device and the receiver in place of the control cable.

[37] In the PR letter, we stated with respect to the inventive concept of independent claim 1 that:

In the FA at page 5, the inventive concept of claim 1 on file was characterized as “a wireless receiver ‘configured to engage an existing connection port’.” In essence, the wireless receiver allows for a retrofit of an existing wired remote control welding system so as to provide for wireless remote control through connection to an existing wired remote control connection port.

The Applicant did not dispute the characterization of the inventive concept set forth in the FA.

[38] As stated in the PR letter, in the FA the inventive concepts of the other independent claims 7, 12 and 16 on file were taken to be the same as that of claim 1 on file.

[39] In the PR letter we noted that the inventive concepts of dependent claims 2-6 on file were set out in the FA, the FA further stating that dependent claims 8-11, 13-15 and 17 did not specify any inventive concepts beyond those of dependent claims 2-6. The inventive concepts of dependent claims 2-6 were set out as:

Claim 2 defines the connection port as a 14-pin connector;

Claim 3 defines the welding parameters to include current, voltage inductance, and pulse commands;

Claim 4 describes the power source, controller and wireless receiver as operatively connected;

Claim 5 lists a variety of wireless technologies and protocols that may be used with the wireless receiver, including radio, cellular, Bluetooth, Wi-Fi, 802.11; and

Claim 6 list[s] options for the wireless remote control including handheld, foot pedal and fingertip control.

[40] The Applicant did not dispute any of the above in the RPR or at the hearing. We therefore apply the inventive concepts as stated above in our analysis below.

(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

[41] In the PR letter, with respect to the differences between the inventive concept and the state of the art, we stated:

In the present case, it is our preliminary view that the state of the art is best represented by the disclosure of the conventional wired remote control welding systems in the Background of the Invention section of the instant application.

The difference between the state of the art and the inventive concept of independent claims 1, 7, 12 and 16 then becomes the lack of the retrofit wireless receiver which is connected to an existing wired remote control connection port.

[42] As set out in the PR letter, with respect to dependent claims 2-6, 8-11, 13-15 and 17 on file, our preliminary view was that the additional features of these claims were part of the relevant CGK, which includes the conventional wired remote control welding systems that best represent the state of the art, as set out above. Therefore, in light of the fact that in this case the state of the art is best represented by the skilled person's CGK, the difference with respect to the state of the art and the inventive concepts of dependent claims 2-6, 8-11, 13-15 and 17 on file would be the same as that of the independent claims on file.

[43] The Applicant made no submission with respect to the above in the RPR or at the hearing. We proceed on the basis of the difference identified in the PR letter as reproduced above.

(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?

[44] In the PR letter, we stated that in our preliminary view, the difference identified at step (3) would have been obvious having regard to any of the following prior art documents cited in the FA:

D4: "Wireless Universal Serial Bus Specification", Revision 1.0, 12 May 2005 (12-05-2005)

D6: Avocent., "LongView Wireless User Guide",
<http://site.i-techcompany.com/DataSheet/Avocent/lv5800UG.pdf>, 2005

D10: D-Link, "D-Link AirPlus G DWL-G730AP",
[http://www.dlink.com/-/media/Consumer_Products/OWUOWL%20G730AP/Manual/OWL%20G730AP/Manual/OWL%20G730AP Manual_EN_UK.pdf](http://www.dlink.com/-/media/Consumer_Products/OWUOWL%20G730AP/Manual/OWL%20G730AP%20Manual_EN_UK.pdf), 10 August 2004 (10-08-2004)

- [45] D4 describes the specification for a Wireless Universal Serial Bus (USB) adaptor (see Chapter 8 in particular) that takes an existing, well known wired connection port and adapts it for wireless use.
- [46] D6 is an installation/user guide for a commercially available device that provides for wireless connection of keyboard, video, mouse and audio peripherals to a server as opposed to the conventional wired manner. The wireless transmitter connects to a server and then interfaces with a wireless receiver to which the remote peripherals may interact.
- [47] D10 is a user manual for a wireless pocket router. When used in router mode, the device connects to a network via a wired connection and then provides for wireless access to the network from compatible wireless devices. The pocket router is similar to any conventional wireless router in its functions.
- [48] In the PR letter, our preliminary analysis as to the obviousness of the identified difference was stated as:

In our preliminary view, D4, D6 and D10 all illustrate previously known adaptors for converting a wired communication link to one that is wireless. In each case the adaptors connect to a connection that was previously used for a wired connection and use this to provide wireless access.

Although these prior art documents are not from the welding system field, the person skilled in the art, as noted earlier, has knowledge relating to welding systems as well as wired and wireless communication technologies in general. Given that there was a recognized need for a way to retrofit existing wired remote control welding systems so as to give them wireless capability, the well-known concept of using an adapter to convert a wired communication link to a wireless one, as illustrated in each of D4, D6 and D10 would have been an obvious solution to that need. The wireless receiver as set forth in the claims on file is another form of the known prior art adaptors, as illustrated by each of D4, D6 and D10, used to convert a wired communication link to a wireless one.

In our view, the person skilled in the art, faced with the problem of wired remote control welding communication systems that lack wireless communication capability and searching for a solution to such a problem, would have become readily aware of the known concept of using an adapter to convert

a wired communication link to a wireless one. Although some adaptation would be required to implement such an adapter in a welding-type system comprising a conventional wired remote control connection, in our preliminary view, this adaptation would not involve any inventive ingenuity. The specification of the instant application does not suggest that any inventive ingenuity would be involved in creating the wireless receiver set out in the claims in general terms. The specification sets out at para [0020] various known means of wireless communication that may be used and various well-known forms (see CGK set above) for the wireless remote control such as a foot pedal control, a handheld control or a fingertip control.

In our preliminary view both the conception of the invention (the use of an adapter to convert wired communication to wireless) and its practical implementation would have been obvious to the skilled person (*Canadian Gypsum, supra*).

[49] In the RPR and at the hearing, the Applicant contended that it was the Applicant that discovered the need to retrofit existing welding devices that use wired type remote controls and that there was no motivation in the art to arrive at the invention.

[50] As explained earlier in our discussion of the relevant CGK, it is our view that the need referred to by the Applicant was part of the relevant CGK of the person skilled in the art. Therefore, in our view, this need did provide a motivation to the skilled person to seek out a means of giving the prior art welding systems wireless remote control capability. Since the person skilled in the art had a general knowledge of wired and wireless communication systems, the use of an adapter as a wireless receiver to allow for wireless communication between a wireless device and the welding power source would have been self-evident in light of any one of prior art documents D4, D6 or D10, which illustrate prior art examples of adapting a wired communication link to a wireless one.

[51] The Panel further notes that, in our view, even absent the motivation to retrofit prior art welding systems, taken from the background information set out in the instant application, the skilled person would still consider the conversion of prior art wired remote control welding systems to wireless to have been obvious. In our view, based on the CGK of the person skilled in the art in relation to general wired and wireless communication systems, this person would have been well-aware of the general trend towards wireless

communication and the advantages of such systems. Given that newer remote control welding systems were well known with built-in wireless capability (which has not been disputed by the Applicant), in our view, the skilled person working in this field would have perceived three options in light of the development of the newer wireless systems: replace older wired systems with newer wireless ones; forgo the advantages of wireless systems and continue using wired ones; or find a way of converting wired systems to wireless ones. In our view, the manner of accomplishing the third option would have been obvious given any of the prior art documents D4, D6 or D10.

- [52] In the RPR and at the hearing, the Applicant asserted that the adapters disclosed in the prior art would not be used as a “retrofit” device and could not be used in the same form for welding equipment as they contend the Panel has asserted, instead requiring modification to be used with welding systems and there being no indication in the prior art documents as to how they would be modified.
- [53] With respect to the first point, in our view, the use of the term “retrofit” does not change what has been done to arrive at the inventive concept of the claims. The invention is the use of a wireless receiver to engage an existing connection port of a welding power source (which is itself unchanged) in order to convert a wired remote control link to a wireless one. The wireless receiver is still an adaptor, similar to those of the prior art documents that provide the same general functionality.
- [54] With respect to the second point, the Panel in the PR letter did not assert that the adaptors of the prior art could be used without modification in a welding system. As stated in the PR letter, some adaptation would be needed to use such adaptors in a welding system as the connections for each system would be different. However, in our view, this adaptation would not have required inventive ingenuity.
- [55] In the PR letter, we noted that the specification of the instant application does not discuss any issue to overcome with respect to creating the wireless receiver once such a receiver has been conceived. The specification discussed known means of wireless communication

and well-known forms of the associated wireless remote control, such as a foot pedal control, a handheld control or a fingertip control. If there had been some special implementation issues specific to welding systems, outside of the capabilities of the person skilled in the art who possessed the relevant CGK, then the absence of such discussion in the instant application would, in our view, lead to an issue of insufficiency of the specification under subsection 27(3) of the *Patent Act*. However, in the view we take of the application, the specification is sufficient. Technical details concerning the modification of adaptors for use with a welding system are not required in the description because such details were within the CGK of the skilled person on the filing date.

[56] In the RPR and at the hearing, the Applicant further asserted that in the PR letter the Panel had looked at the elements of the claims individually rather than as a combination and had attempted to combine “a plethora of cited references” to arrive at the claimed combination. The Applicant cited *Illinois Tool Works Inc v Cobra Anchors Co Ltd* (2002), 20 CPR (4th) 402 at 437-438 (FC) and *Bridgeview Manufacturing Inc v 931409 Alberta Ltd*, 2010 FCA 188 at paragraph 51 in support of the principle that the obviousness of a combination cannot be assessed by assessing the obviousness of its individual elements.

[57] We agree that a combination must be assessed as a whole in determining whether or not it would have been obvious to the person skilled in the art in light of the relevant CGK and the prior art. In the present case, the Panel has followed the *Sanofi* four-step approach in assessing the obviousness of the claimed invention, identifying its inventive concept, which has not been disputed by the Applicant. As instructed by *Sanofi*, the difference between the inventive concept and the state of the art has been analysed and it has been determined that this difference constitutes a step that would have been obvious. Further, in the present case, the assessment of obviousness, rather than being based on a combination of prior art references, is based on a combination of the relevant CGK of the person skilled in the art with any one of the prior art references D4, D6 or D10.

[58] With respect to the dependent claims on file, we further note that in our view, even if the additional features of these claims were taken as differences at step 3 above, we would

nonetheless conclude that such differences would have been obvious to the person skilled in the art, given that the additional features represent well-known elements of conventional wired remote control welding systems or well-known features of wireless communication systems.

[59] Having considered the record before us, including the Applicant's submission in the RPR and at the hearing, we conclude that the claims on file would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*.

Proposed Claims

[60] With respect to the proposed claims submitted with the RFA, we stated in the PR letter that:

As noted above with respect to indefiniteness, in the R-FA the Applicant proposed amendments to independent claims 1, 7, 12 and 16 on file to address this defect. No amendments were proposed that would affect the substantive subject-matter claimed and therefore possibly affect our preliminary view as to the obviousness of the claims on file.

As such, it is our preliminary view that the proposed amendments to the claims in the R-FA do not render the claims unobvious and are therefore not "necessary" for compliance with the *Patent Act* and *Patent Rules* as required by subsection 30(6.3) of the *Patent Rules*.

[61] In the RPR, the Applicant confirmed that the proposed claims "do not alter the essence of the claims to which the Final Action is directed, and to which the Panel's Preliminary Review is directed." No submission was made in the RPR or at the hearing related to the specific non-obviousness of the proposed claims in comparison with those on file.

[62] Therefore, for the reasons set out above, we conclude that the proposed claims would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*. As such, they do not overcome the defect under obviousness for the claims on file and are therefore not "necessary" for compliance with the *Patent Act* and *Patent Rules* as required by subsection 30(6.3) of the *Patent Rules*.

CONCLUSIONS

[63] We have determined that claims 1, 7, 12 and 16 on file are indefinite and therefore non-compliant with subsection 27(4) of the *Patent Act*. We have also determined that claims 1-17 on file would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*. Further, we have determined that while the proposed claims overcome the indefiniteness defect, they do not overcome the obviousness defect and therefore the introduction of these claims does not constitute a specific amendment that is “necessary” pursuant to subsection 30(6.3) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

[64] In view of the above, the Panel recommends that the application be refused on the grounds that claims 1, 7, 12 and 16 on file are indefinite and therefore non-compliant with subsection 27(4) of the *Patent Act* and that claims 1-17 on file would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*.

[65] Further, the proposed claims do not overcome the obviousness defect and therefore the Panel declines to recommend the introduction of these claims since they do not constitute a specific amendment that is “necessary” pursuant to subsection 30(6.3) of the *Patent Rules*.

Stephen MacNeil
Member

Paul Fitzner
Member

Andrew Strong
Member

DECISION

[66] I concur with the conclusions and recommendation of the Board that the application be refused on the grounds that claims 1, 7, 12 and 16 on file are indefinite and therefore non-compliant with subsection 27(4) of the *Patent Act* and that claims 1-17 on file would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*.

[67] 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 18th day of March , 2019.