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8 **Chapter 9 - Descriptions**

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13 **DRAFT**  
14 (for public consultation)  
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19 08-10-2009  
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23 This document is a draft of a revised chapter of the MOPOP. The Commissioner of  
24 Patents has authorized that this draft be released for public review until December 30,  
25 2009, subsequent to which the chapter, in its present or an amended form, may be  
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27

28 Pending formal approval of this chapter by the Commissioner of Patents, readers  
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32

33 During the review period, the public is invited to submit any comments pertaining to the  
34 content of the draft. Comments may be submitted electronically or in writing, using the  
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## Chapter 9 Descriptions

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## Chapter 9 Descriptions

### 9.01 Scope of this chapter

The description, together with the claims, form the specification of an application.<sup>1</sup> Although the claims play a prominent role in the patent system, in that they define the scope of the exclusive privilege conferred by a patent, a proper description is fundamental to a valid patent. As was noted by the Supreme Court, “[d]isclosure is the *quid pro quo* for valuable proprietary rights to exclusivity which are entirely the statutory creature of the *Patent Act*”.<sup>2</sup>

The present chapter discusses the various requirements for proper disclosure under section 27(3) of the *Patent Act* as well as the various requirements as to the form and content of a description under the *Patent Rules*.

### 9.02 General requirements of disclosure

The description must provide a clear and complete disclosure of the invention such that the person skilled in the art:

- (1) can unambiguously identify what has been invented; and
- (2) is enabled to practice this invention.<sup>3</sup>

In *Consolboard Inc. v. Macmillan Bloedel (Saskatchewan) Ltd.*, Dickson J. noted that “the inventor must, in return for the grant of a patent, give to the public an adequate description of the invention with sufficiently complete and accurate details as will enable a workman, skilled in the art to which the invention relates, to construct or use that invention when the period of the monopoly has expired”.<sup>4</sup> The description must be able to answer the questions “What is your invention?: How does it work?”<sup>5</sup> such that “when the period of the monopoly has expired the public will be able, having only the specification, to make the same successful use of the invention as the inventor could at the time of his application”.<sup>6</sup>

It is beyond doubt that the “public” referred to in the foregoing quote takes the form of the person skilled in the art.

#### 9.02.01 Proper disclosure

The statutory requirements of proper disclosure are set out in subsection 27(3) of the *Patent Act*, which requires that:

1 The specification of an invention must

2  
3 (a) correctly and fully describe the invention and its operation or use as  
4 contemplated by the inventor;

5  
6 (b) set out clearly the various steps in a process, or the method of  
7 constructing, making, compounding or using a machine, manufacture or  
8 composition of matter, in such full, clear, concise and exact terms as to  
9 enable any person skilled in the art or science to which it pertains, or with  
10 which it is most closely connected, to make, construct, compound or use  
11 it;

12  
13 (c) in the case of a machine, explain the principle of the machine and the  
14 best mode in which the inventor has contemplated the application of that  
15 principle; and

16  
17 (d) in the case of a process, explain the necessary sequence, if any, of  
18 the various steps, so as to distinguish the invention from other inventions.

19  
20 Thorson P. summarized the foregoing requirements in *Minerals Separation North*  
21 *American Corp. v. Noranda Mines, Ltd.*,<sup>7</sup> and later described the “onus of disclosure” as  
22 “a heavy and exacting one”.<sup>8</sup>

23  
24 The description must be correct; this means that it must be both clear and  
25 accurate. It must be free from avoidable obscurity or ambiguity and must  
26 be as simple and distinct as the difficulty of description permits. It must  
27 not contain erroneous or misleading statements calculated to deceive or  
28 mislead the persons to whom the specification is addressed and render it  
29 difficult for them without trial and experiment to comprehend in what  
30 manner the invention is to be performed. It must not, for example, direct  
31 the use of alternative methods of putting it into effect if only one is  
32 practicable, even if persons skilled in the art would be likely to choose the  
33 practicable method. The description of the invention must also be full; this  
34 means that its ambit must be defined, for nothing that has not been  
35 described may be validly claimed. The description must also give all  
36 information that is necessary for successful operation or use of the  
37 invention, without leaving such result to the chance of successful  
38 experiment, and if warnings are required in order to avert failure such  
39 warnings must be given. Moreover, the inventor must act *uberrima fide*  
40 and give all information known to him that will enable the invention to be  
41 carried out to its best effect as contemplated by him.<sup>9</sup>

42  
43 The foregoing touches on both aspects of a sufficient disclosure: that it set out in clear

1 and precise terms what the invention is (i.e. a correct and full description), and that it  
2 provide sufficient instructions to the person skilled in the art so that this person is  
3 enabled to reproduce and successfully operate the invention.  
4

### 5 **9.02.02 Addressee is the person skilled in the art**

6  
7 The specification of an invention is directed to a person skilled in the art or science to  
8 which it pertains, or with which it is most closely connected.<sup>10</sup> Whether or not a  
9 description is sufficient depends on the interpretation it would be given by the person  
10 skilled in the art, who must interpret it with a mind willing to understand<sup>11</sup> and desirous  
11 of success.<sup>12</sup>  
12

13 The person skilled in the art is competent, and represents an average, logical but  
14 unimaginative worker in the field.<sup>13</sup> This person is neither a dull-witted incompetent nor  
15 a creative, intuitive expert,<sup>14</sup> albeit that in a highly technical field the person skilled in the  
16 art may be presumed to have expert-level knowledge and skills.<sup>15</sup> Furthermore, the  
17 person skilled in the art is reasonably diligent in keeping up with advances in the field or  
18 fields of technology of relevance to the invention,<sup>16</sup> and has the advantage of being  
19 multilingual and thereby being able to comprehend prior art in any language.<sup>17</sup>  
20

21 In addition, the person skilled in the art need not be an actual individual; they are a  
22 fictitious construct and can represent a team of individuals whose conjoint knowledge is  
23 relevant to the invention in suit.<sup>18</sup>  
24

25 In order to properly assess whether a correct and full description of the invention has  
26 been provided, it is necessary to determine the particular nature of the person skilled in  
27 the art to which the application is directed.  
28

29 In accordance with paragraph 80(1)(b) and 80(1)(d) of the *Patent Rules*, the description  
30 must indicate the technical field of the invention and must allow an understanding of the  
31 technical problem being addressed and the solution to that problem through the  
32 invention.<sup>19</sup> The person skilled in the art will be competent in the field or fields of  
33 technology of relevance to the invention.  
34

35 A complexity arising from the nature of the person skilled in the art is that, as a general  
36 rule, neither the inventors nor the examiner may be directly equated to this person.  
37 Examiners and inventors, for example, are not free of creativity and intuition. They may  
38 have knowledge that surpasses that expected of the person skilled in the art in a given  
39 field, but again may not be as skilled in other fields of the invention as this person.  
40 During examination, an examiner must attempt to interpret the application and the prior  
41 art using the appropriate knowledge that the person skilled in the art would have  
42 possessed at the relevant date. This may be particularly challenging where knowledge  
43 in the field at the date of examination has significantly developed since the relevant

1 date, and particularly where certain views held at the relevant date have subsequently  
2 been found to be incorrect.<sup>20</sup>

### 4 **9.02.03 Description supplemented by common knowledge**

5  
6 A description sufficient to allow the person skilled in the art to practice the invention with  
7 the same success as the inventor is said to be enabling. Since the person skilled in the  
8 art is the addressee of the description, it is not necessary for common knowledge to be  
9 comprehensively disclosed nor to teach to the person skilled in the art things that would  
10 be plainly obvious to them.<sup>21</sup>

11  
12 The date at which the person skilled in the art brings their knowledge to bear on the  
13 application is the date on which the application came into their possession; that is to  
14 say, the publication date.<sup>22</sup>

15  
16 Since the common general knowledge may develop between the filing date and the  
17 publication date, this theoretically means that a specification that was not enabling as  
18 filed could nevertheless, on the basis of more extensive common general knowledge,  
19 be enabling by the publication date. However, the invention must still be fully described  
20 as of the filing date, and the utility of the invention must have been established no later  
21 than at this date [see 9.04].

### 22 23 **9.02.04 Misleading or erroneous statements**

24  
25 The person skilled in the art will read a description with a mind willing to understand and  
26 desirous of success. They will use their common general knowledge to supplement the  
27 description in order to successfully operate the invention, and will overlook obvious  
28 errors or omissions that can be readily corrected.<sup>23</sup>

29  
30 Where, however, a description includes statements that direct the person skilled in the  
31 art to attempt to practice the invention in a manner contrary to their common general  
32 knowledge, the person skilled in the art will nevertheless follow these explicit  
33 instructions. Where the manner of operation so disclosed will in fact not work to  
34 achieve the promise of the invention, the description does not comply with subsection  
35 27(3) of the *Patent Act*.<sup>24</sup>

36  
37 [For guidance regarding misleading definitions in the description, see 9.05.03.]

### 38 39 **9.02.05 Addressee not to be presented with problems to solve**

40  
41 The person skilled in the art can be called upon to perform routine experiments to  
42 ensure proper operation of an invention, but must be able to practice the full scope of  
43 the invention without undue burden or the need to exercise their inventive ingenuity.

1 If the person skilled in the art is called on to solve problems in such a manner that  
2 undue burden or an inventive step could be acknowledged, the description is  
3 insufficient (and the attendant claims are unsupported).<sup>25</sup> The obligation of the  
4 patentee for proper disclosure in this sense was described in *Rice v. Christiani &*  
5 *Nielsen* as:

6  
7 [h]e must so draft his specification, that a person having a competent  
8 knowledge of the industry concerned [...] will be able readily to ascertain  
9 from it the relation the invention bears to the existing knowledge in the  
10 industry, and so that one should not be called upon to do experimental  
11 work in order to discover how the invention may be made operative.  
12 There must be an open exposition by the patentee of everything that is  
13 necessary for the easy and certain procurement of the commodity for  
14 which the patent was granted. The patentee is not to tell a man to make  
15 an experiment but to tell him how to do the thing.<sup>26</sup>

16  
17 H.G. Fox later described the relationship between the specification and the person  
18 skilled in the art as follows:

19  
20 The person to whom the specification is addressed is presumed to  
21 possess all the existing knowledge common to the art to which the  
22 invention relates; this knowledge he must bring to bear in interpreting the  
23 specification. But he is not required to exercise or to be possessed of  
24 more, and, if the specification contains something that necessitates the  
25 working out of a problem, the patent cannot be supported.

26  
27 Where a specification describes an invention sufficiently clearly to enable  
28 a reasonably skilled workman to make use of it, even though some  
29 experiments are necessary, the patent will be good so long as those  
30 experiments do not require any exercise of the inventive faculty.<sup>27</sup>

31  
32 In certain arts, it is common to describe an invention as relying on materials having  
33 certain required properties (a metal with a certain ductility; an insulator with a certain  
34 dielectric value, a molecule with a certain dipole moment), rather than by naming the  
35 materials explicitly. This is permissible as long as identifying those materials that have  
36 the required property does not require undue burden or inventive effort.

37  
38 It can be useful, when inquiring into whether any work the person skilled in the art was  
39 called on to perform was either undue or inventive, to consider whether the solution to  
40 any problem faced was unobvious. If the solution to a problem is unobvious, then  
41 arriving at that solution is the result of an inventive step. Conversely, if the solution was  
42 obvious, arriving at it would not require inventive effort.

1 In this regard, the Courts have noted in the context of obviousness that a solution to a  
2 problem may be obvious even if, to identify that solution, it is necessary to engage in  
3 “routine testing to determine characteristics of known compounds, not undertaken for  
4 the purpose of ‘searching for something novel’, but rather for the purpose of verifying  
5 the actual attributes of already known compounds”.<sup>28</sup>  
6

7 While verifying the predicted or predictable properties of known compounds is  
8 considered to be routine,<sup>29</sup> “verification” means “confirmation” and determining the  
9 unexpected and unpredictable properties of new compounds is therefore not  
10 “verification”.<sup>30</sup>  
11

12 This reasoning can be extended to disciplines other than the chemical arts by  
13 formulating the statement as: a certain amount of routine testing is permitted in order to  
14 identify suitable materials for operating an invention, presuming the person skilled in the  
15 art knows or has been taught the necessary properties, how to determine them, and  
16 broadly what existing materials are likely to possess them.  
17

18 *Examples:*  
19

- 20 1. An invention describes a particular type of flange for connecting a plumbing  
21 fixture to a pipe, wherein it is necessary to construct the flange using a metal  
22 whose ductility is within a certain range. Identifying this operative ductility range  
23 is the discovery underlying the invention. Several metals having the necessary  
24 ductility are identified, and general teachings are given as to what types of  
25 metals are likely to have the necessary property. Testing ductility is within the  
26 common general knowledge of the person skilled in the art, and is routine.  
27

28 *Claim:*

- 29 1. A flexible flange for connecting a plumbing fixture to a pipe, said flange  
30 comprising a metal having ductility in the range x-y and [...]  
31

32 *Analysis:* The claim is given breadth by defining the flange in terms of a metal having  
33 ductility in the defined range, rather than in terms of specific operative metals. Whether  
34 or not the claim as defined is enabled depends on whether it can be operated without  
35 placing undue burden on the person skilled in the art. This depends on whether the  
36 person skilled in the art can readily identify suitable metals. Given that the person  
37 skilled in the art can test a given metal to determine whether or not it has the necessary  
38 ductility, that for many metals this data is already available in published references, and  
39 that the description suggests which metals are likely to be suitable, there is no invention  
40 in identifying metals that have the necessary property. Verifying the properties of  
41 known metals is “routine”, and the person skilled in the art has not improperly been  
42 presented with problems to solve.  
43

- 1 2. An applicant asserts as their invention drug compositions having very uniform  
2 release profiles for the active ingredient. Certain embodiments are disclosed  
3 based on particular salts of protected cyclic amines, but the invention is claimed  
4 in terms of drug compositions having the beneficial release profile, and not in  
5 terms of drug compositions of the particular family of salts.  
6

7 Claim:

- 8 1. A medicament having a release profile characterised by [description of the  
9 profile]  
10

11 Analysis: consider that the release profile achieved is an unexpected and very  
12 beneficial property of the specific salts disclosed. The description does not disclose  
13 what chemical properties of the salt led to the defined release profile, nor does it guide  
14 the person skilled in the art as to what other compounds may provide a similar result.  
15 In order to operate the full scope of the claim, the person skilled in the art would have to  
16 solve the problem of identifying all the other salts that would lead to the same release  
17 profile. Since the identity of these other salts (presuming some may exist) is unobvious,  
18 an inventive step is associated with their identification. The description is insufficient to  
19 support the invention as broadly asserted.  
20

### 21 **9.02.06 Theory of the invention**

22  
23 As a general proposition, it is not necessary for the description to provide a theory as to  
24 why the invention operates as it does.<sup>31</sup> The requirement is, simply, that the description  
25 teaches the person skilled in the art what the invention is and how to make it operate to  
26 provide the promised benefits.  
27

28 This general proposition, however, has to be understood in an appropriate context. If  
29 the utility of the invention is predicated on a sound prediction [see 12.08.04], and the  
30 line of reasoning depends on an understanding of the theory as to why the invention  
31 works, it may not be possible to properly express the line of reasoning unless this  
32 theory is disclosed.<sup>32</sup>  
33

### 34 **9.03 Disclosing a solution to a practical problem**

35  
36 As was noted by the Supreme Court in *Apotex v. Wellcome*, the granting of patents is  
37 “a method by which inventive solutions to practical problems are coaxed into the public  
38 domain”.<sup>33</sup> Being a solution to a practical problem is what provides to the invention the  
39 practical utility necessary for patentability.  
40

41 The description must put the person skilled in the art in a position to appreciate the  
42 nature of the problem being solved and the solution provided by the invention. For  
43 applications filed on or after October 1, 1996, this requirement is explicitly provided for

1 by paragraph 80(1)(d) of the *Patent Rules*.

2  
3 In order to solve a practical problem, the solution must be in a form that can interact  
4 directly with the physical world and, hence, that will itself enable a person skilled in the  
5 art to obtain the intended result or benefit. That is, a patent is given for “the means by  
6 which a result is obtained ... rather than the result itself”.<sup>34</sup> These means must consist  
7 of one or several elements, where an element in this sense could be either a physical  
8 object (a machine, article of manufacture or composition of matter) or a physical step in  
9 an art or process.

10  
11 The group of elements that are made use of to obtain the benefit of the invention may,  
12 in combination, be referred to as the “practical form” of the invention (i.e. the form in  
13 which the invention may be practised). The practical form includes all the elements  
14 required to provide the promised utility of the invention.

### 15 16 **9.03.01 Essential elements**

17  
18 Those elements required in order for the invention to provide a solution to the practical  
19 problem addressed by the inventor may be called its “essential elements” (also referred  
20 to as “critical elements” or “critical features” in some jurisprudence<sup>35</sup>). The present  
21 section discusses “essential elements” in a general sense, while section 9.03.02  
22 discusses the associated disclosure requirements more particularly.

23  
24 Identifying the “essential elements” of an invention during examination is performed by  
25 relating the matter of a claim to the teachings of the description, recognizing that the  
26 subject-matter of each claim should achieve at least one object of the invention, and  
27 that if this is not the case in respect of a claim, that claim is not properly supported by  
28 the description.

29  
30 To identify the “essential elements”, each claim is interpreted in light of the specification  
31 as a whole, through the eyes of a person skilled in the art reading the specification with  
32 a mind willing to understand and desirous of success [see 9.02.02]. The context for  
33 identifying the essential elements of a claimed invention during examination  
34 consequently resembles that used by the Courts in placing a legal construction on a  
35 claim. It is important, however, to recognize that important differences exist between  
36 the analysis performed by an examiner during prosecution of an application and the  
37 analysis of the Courts in placing a legal construction on the claims of a patent. The two  
38 should not be directly equated.

39  
40 During legal construction of a claim, the Courts will apply the rules established in *Free*  
41 *World Trust*, and will consider an element to be essential if it is required for the  
42 invention to work as contemplated and claimed by the inventor and to be non-essential  
43 if it may be substituted or omitted without having a material effect on either the structure

1 or operation of the invention defined in the claims.<sup>36</sup> Limitations viewed by the inventor  
2 as being essential may be construed as essential by the Courts even where the person  
3 skilled in the art would not consider them to be so.<sup>37</sup>  
4

5 During examination, the perspective is somewhat different. An element will be  
6 considered “essential” during examination if, in view of the specification as a whole, the  
7 person skilled in the art would understand it to be necessary for the invention defined in  
8 a given claim to solve the problem addressed by the inventor.  
9

10 An examiner will identify the “essential elements” of a claimed invention when  
11 evaluating whether it fulfills the promise of the invention. The essential elements also  
12 form the basis for the comparison of the claimed invention to the prior art when  
13 evaluating novelty and obviousness.  
14

15 Identifying the essential elements of the invention generally requires the description to  
16 be considered, since even where a claim is properly supported not every element in a  
17 claim must necessarily be considered to be essential.  
18

19 Where the description requires that the invention comprise a given element, that  
20 element must appear in each claim to that invention in order that the claim not be  
21 broader than the description. This is so regardless of whether the person skilled in the  
22 art would view the element as “essential”. The applicant, furthermore, may choose to  
23 frame even their broadest independent claims more narrowly than is strictly required by  
24 the broadest teachings of the description, e.g. by adding in optional limitations or  
25 features that would not be considered “essential” by the person skilled in the art.  
26

27 Where a dependent claim is being considered, whether or not the additional feature or  
28 features of that claim are “essential elements” of a narrower invention depends on  
29 whether their presence would be understood by the person skilled in the art, in view of  
30 their common general knowledge and the teachings of the description, as leading to a  
31 specific technological effect related to the objects of the invention. A description can,  
32 for example, set forth preferred embodiments that provide specific advantages over  
33 broader embodiments of the invention. The additional feature that provides such a  
34 preferred embodiment is an essential element of the narrower invention.  
35

36 Where, e.g., a claim has been limited to one member of a family of equivalents and the  
37 person skilled in the art would recognize that any member of the family could be  
38 substituted without affecting the operation of the invention, that specific member is not  
39 “essential” to the invention in comparison with other members of the class. In contrast,  
40 if that one member had been associated in the description with a particular advantage  
41 over the family in general, it would be an essential element where the claimed invention  
42 is to provide that advantage.  
43

1 Where a claim includes an element that could be omitted without materially affecting  
2 the operation of the invention, that element is non-essential and is treated as such  
3 when assessing novelty and ingenuity.  
4

### 5 **9.03.02 Describing the practical form**

6  
7 A practical form necessarily includes all the “essential elements” of the invention. In  
8 order for the description to properly disclose the practical form, it must supplement the  
9 common general knowledge of the person skilled in the art such as to put the invention  
10 into the hands of this person.  
11

12 Any novel element must therefore be fully described, as it was necessarily not  
13 previously known. Also, those elements (new or old) the person skilled in the art would  
14 not have known to use in combination to achieve the objects of the invention must be  
15 described, not only individually but in the appropriate combination.  
16

17 For the description to disclose a patentable invention, it must describe (and the claims  
18 define) all the elements necessary to provide the useful result in a novel and inventive  
19 manner, and without which elements the solution would cease to be inventive.<sup>38</sup>  
20

21 It is also necessary that the description provide such instructions as are necessary for  
22 the person skilled in the art to understand, where applicable, the interrelationship of the  
23 essential elements necessary to provide the practical form of the invention. The  
24 invention must be described so that, colloquially speaking, “the wheels will go round”,<sup>39</sup>  
25 and must not require that the person skilled in the art perform modifications to the  
26 invention described in order to make it work.<sup>40</sup>  
27

28 Although external documents may be referred to in the description, the invention must  
29 be described and enabled by the description alone as interpreted by the person skilled  
30 in the art in view of their common general knowledge. Specific prior art knowledge may  
31 be considered not to be “common general knowledge”, and in such cases those specific  
32 teachings from the prior art necessary to describe or enable the invention must be  
33 included in the description in order to provide a full and complete disclosure.  
34

35 It is not necessary to supplement a description of the foregoing with a description of  
36 those elements that would be self-evidently necessary to operate the invention, and  
37 whose use in the context of the invention as described would be obvious to the person  
38 skilled in the art.<sup>41</sup>  
39

### 40 **9.04 Establishing utility**

41  
42 As noted in 17.03.03 of this manual, an applicant must be in a position to establish the  
43 utility of their invention, by demonstration or sound prediction, no later than at the filing

1 date of their application.<sup>42</sup>

2  
3 As a general proposition, where the utility of an invention is to be established by  
4 demonstration, the factual basis that constitutes the demonstration must have existed  
5 at the filing date but need not have been included in the description.

6  
7 Where it is not evident from the description that the utility of an invention was  
8 established by demonstration, an examiner must presume that the applicant is relying  
9 on a sound prediction for this purpose. In such cases, an examiner may object to a  
10 lack of established utility if no factual basis was disclosed upon which it could be  
11 concluded that utility had been properly established. If the utility of the invention had  
12 been established by demonstration, the applicant can establish this by submitting the  
13 relevant factual basis by way of affidavit.

14  
15 The utility of an invention, particularly where the essence of the invention is to provide  
16 something having new or improved utility, may be interrelated with the inventive step of  
17 the invention.

18  
19 During prosecution, amendment to the claims may appear to alter the nature of the  
20 invention. Care must be taken to ensure that the inventor was, no later than the filing  
21 date, in possession of the invention asserted in the amended claims. Inventive  
22 ingenuity can not post-date filing.<sup>43</sup> This is particularly relevant where features clearly  
23 identified in the original specification as being optional in nature are subsequently  
24 included in the claims and asserted as rendering the amended claims non-obvious in  
25 view of prior art disclosures.

#### 26 27 **9.04.01 Sound prediction**

28  
29 The doctrine of sound prediction was given specific form by the Supreme Court, which  
30 noted that a sound prediction consists of three elements [see section 17.03.02 of this  
31 manual]:<sup>44</sup>

- 32  
33 (i) a factual basis for the prediction;  
34 (ii) an articulable and “sound” line of reasoning from which the desired result  
35 can be inferred from the factual basis; and  
36 (iii) proper disclosure.

37  
38 The aspect of “proper disclosure” means that the description, when read in view of the  
39 relevant common general knowledge, must be sufficient to make the sound line of  
40 reasoning clear to the person skilled in the art.<sup>45</sup>

1  
2 **9.04.01a Disclosure of the factual basis**  
3

4 The factual basis needed to render the line of reasoning sound must be clearly  
5 identified. If some or all of the facts being relied on are found in another publicly  
6 available document, this document must be properly identified.<sup>46</sup> Any necessary facts  
7 that are not otherwise publicly available must be included in the description.<sup>47</sup>  
8

9 A factual basis does not by necessity mean only experimental data.<sup>48</sup> Established  
10 principles and laws are also “factual”, and to the extent that these form part of the  
11 sound line of reasoning the foregoing considerations for proper disclosure apply.  
12

13 The term “factual basis” implies support and proof. Simple, unsubstantiated statements  
14 in the description suggesting that the invention will work are not considered to be  
15 factual.<sup>49</sup> Similarly, while an applicant can include “prophetic examples” in their  
16 application, they have little value in providing support. A prophetic example is  
17 necessarily a statement of what might be, rather than what is, and is therefore not  
18 “factual”.  
19

20 Evaluating what will be a sufficient factual basis for a sound prediction must be  
21 conducted on a case-by-case basis, and will depend on such factors as:  
22

- 23 (i) the scope of the claims;
- 24 (ii) the state of the art;
- 25 (iii) the nature of the invention and its predictability; and
- 26 (iv) the extent to which the applicant has explored the area claimed, for  
27 example by conducting experiments which provide factual support for the  
28 utility asserted.  
29

30 Looking at criteria (i) and (ii), for example, a broad claim in an emerging field will  
31 generally require significantly more support than a narrow claim in a developed field.  
32

33 **9.04.01b Disclosure of the sound line of reasoning**  
34

35 The person skilled in the art must also appreciate the sound line of reasoning that  
36 connects the factual basis to the conclusion that the invention has the promised utility.<sup>50</sup>  
37

38 Here again, the description must provide any explanation necessary to supplement the  
39 common general knowledge of the person skilled in the art such that they would have a  
40 reasonable expectation, on the factual basis provided, that the invention will have the  
41 utility proposed.  
42

43 The sound line of reasoning will usually involve an understanding at some level of the

1 theory of the invention, and may depend e.g. on structure-activity relationships or  
2 accepted scientific principles or laws. The extent to which the sound line of reasoning  
3 must be described can only be evaluated on a case-by-case basis, and will depend on  
4 similar factors to those related to the factual basis.

5  
6 Note that the sound line of reasoning must be based on what the person skilled in the  
7 art would understand and not on expert or proprietary knowledge possessed by the  
8 inventors themselves.

9  
10 As a disclosure requirement, the sound line of reasoning cannot be provided post-filing.  
11 Explanations during prosecution as to the nature of the sound line of reasoning can  
12 only be considered to the extent they explain why the person skilled in the art would  
13 have appreciated the sound line of reasoning on the basis of the description as filed.

#### 14 15 **9.04.02 Selections**

16  
17 Selections are inventions based on the identification, from a prior teaching, of certain  
18 previously unrecognized advantages possessed by some sub-set of the prior teaching.

19  
20 The accepted requirements of a selection are that:<sup>51</sup>

- 21  
22 (i) the selection be based on some substantial advantage;  
23 (ii) the whole of the selection must possess the advantage; and  
24 (iii) the advantage must be in respect of a special quality or character  
25 common to the whole selection.

26  
27 It is important to note that the advantage must be in comparison to the entire group  
28 from which the selection has been made, and not simply with respect to a few isolated  
29 members of that group.<sup>52</sup>

30  
31 The newly discovered and unexpected advantage is what provides to the selection the  
32 utility and inventive step upon which its patentability rests.<sup>53</sup> Its novelty rests on the fact  
33 that the selected aspects of the prior teaching had not previously been made: per  
34 Maughan J. in *I.G. Farbenindustrie*, “[i]t must be remembered, of course, that the  
35 selected compounds have not been made before, or the patent would fail for want of  
36 novelty”.<sup>54</sup>

37  
38 Although there is no special or higher disclosure burden for a selection by comparison  
39 with any other type of invention, the advantage (and, if unclear, the new utility arising  
40 from the advantage) must be properly disclosed for there to be an invention.<sup>55</sup> If there  
41 is no way to assess the purported “advantage”, there is no way for the person skilled in  
42 the art to appreciate that an invention has been “correctly and fully” described. Again  
43 from *I.G. Farbenindustrie*, an inventor “has in truth disclosed no invention whatever if he

1 merely says that the selected group possesses advantages. Apart altogether from the  
2 question of what is called sufficiency, he must disclose an invention; he fails to do this  
3 in the case of a selection for special characteristics, if he does not adequately define  
4 them".<sup>56</sup>

5  
6 A purported selection whose utility has not been established, by demonstration or  
7 sound prediction, is necessarily not an invention. Establishing that there is, in fact, an  
8 advantage requires that some point of reference be disclosed. Mere statements that a  
9 certain embodiment of an identified group is "preferred" or possesses an otherwise  
10 unspecified advantage or benefit or improved property is not sufficient to meet the  
11 requirements of an inventive selection.<sup>57</sup>

### 12 13 **9.04.03 Combinations**

14  
15 A combination, in the sense the term is used herein, is an assemblage of parts (often of  
16 known parts) whose conjoint use leads to a result that is "different from the sum of the  
17 results of the elements" that make it up and "that is not attributable to any of the  
18 elements but flows from the combination itself and would not be possible without it".<sup>58</sup>  
19 Such a result may conveniently be termed a "unitary" result.<sup>59</sup>

20  
21 A patentable combination has been explained in the following way:

22  
23 it is accepted as sound law that a mere placing side by side of old integers  
24 so that each performs its own proper function independently of any of the  
25 others is not a patentable combination, but that where the old integers  
26 when placed together have some working inter-relation producing a new  
27 or improved result then there is patentable subject matter in the idea of  
28 the working inter-relation brought about by the collocation of the  
29 integers.<sup>60</sup>

30  
31 Where several parts are used together, each providing its expected result and the  
32 whole not leading to a unitary result, the assemblage is referred to as a "mere  
33 aggregation",<sup>61</sup> or simply as an "aggregation", to distinguish it from a true combination.

34  
35 The utility of a combination is the unitary result it provides, and it is this result that must  
36 be established by demonstration or sound prediction.

37  
38 Where, having described the structure of the combination, it would not be clear to the  
39 person skilled in the art what unitary result it achieves, a correct and full description of  
40 the result itself may be necessary to show that the combination is useful and inventive  
41 and to distinguish it from a mere aggregation.

1  
2 **9.04.04 Chemical combinations and synergy**  
3

4 In the chemical arts, different compounds or products are often combined in order to  
5 realize new results. The concept of combinations applies equally to chemical  
6 inventions as to any other.  
7

8 A chemical combination refers to a physical, as opposed to chemical, combination of  
9 compounds or products. Generally, implementing the physical acts of mixing or  
10 physically combining different compounds or products does not require inventive  
11 activity. The inventive step in a chemical combination, by consequence, is typically  
12 closely associated with the utility of the combination, and generally arises from a  
13 recognition that the combination (as opposed to its individual components)  
14 unexpectedly provides a specific unitary result.  
15

16 Where the combination leads to a new unitary result or one that is different from what  
17 the person skilled in the art would have expected the combination to be suitable for, it is  
18 only necessary to establish that the combination works to produce that result.  
19

20 In certain combinations, however, compounds having known activity are combined and  
21 jointly applied to their known purpose in order to achieve a synergistic result. That is,  
22 the activity or effect of the combination as a whole is greater or otherwise better than  
23 the expected additive result of its individual components. In order to establish that a  
24 synergistic effect has been produced, it is necessary for the person skilled in the art to  
25 be aware of the point of reference (the additive result of the individual components),  
26 either by virtue of their common general knowledge or in view of the description. The  
27 need for a point of reference in such cases is analogous to the need for a point of  
28 reference when making an inventive selection [see 9.04.02].  
29

30 **9.05 Special topics**  
31

32 The following sections set out practice in respect of certain specific topics which give  
33 rise to particular considerations with respect to proper disclosure.  
34

35 **9.05.01 Functional limitations**  
36

37 In certain cases, applicants may wish to describe or define an invention using functional  
38 language. The use of functional language, whether in a claim or in the description, is  
39 not *per se* objectionable. Such language, however, is generally used to provide breadth  
40 and must be carefully considered from the perspective of proper support.  
41

42 Functional limitations must always be considered from the perspective of the person  
43 skilled in the art, with the question to be asked being: “can the person skilled in the art

1 practice, in view of the description, the full breadth of the claimed invention without  
2 recourse to undue experimentation or inventive ingenuity?” [see 9.02.05]. If the means  
3 to effect the defined function are common general knowledge, the functional limitation  
4 is unlikely to be objectionable. Where few or only one means is known to effect the  
5 function, however, broad functional language would direct the invention to be practised  
6 in ways that have not been fully described or enabled and consequently would be  
7 objectionable.

8  
9 Typically, the inquiry into the appropriateness of functional language is driven by the  
10 language of the claims. Where an invention is defined in terms of an overly broad  
11 functional limitation, the claim seeks to monopolize speculative embodiments that the  
12 inventors have not adequately described. The corollary is that the description is not  
13 sufficient to support the invention as claimed.

14  
15 To paraphrase *Free World Trust v. Électro Santé Inc.*, it is not legitimate to invent a  
16 particular composition that grows hair on bald men and thereafter claim all  
17 compositions that grow hair on bald men.<sup>62</sup> Thus, a claim to “a composition comprising  
18 a hair-growth activating compound in a pharmaceutically acceptable carrier”, where only  
19 compound X is known to provide the function, would be too broad. The limitation “hair-  
20 growth activating” is a functional limitation to the scope of the compounds found in the  
21 composition, but does not serve to make the scope of the claim clear to the person  
22 skilled in the art. Identifying all the compounds that would have this activity would  
23 require extensive inventive experimentation amounting to invention [see 9.02.05]. The  
24 description, therefore, is not sufficient to describe and enable the invention asserted in  
25 the claim, and is objectionable under subsection 27(3) of the *Patent Act*.

26  
27 In contrast, where it has been discovered that the combination of a particular drug with  
28 any non-steroidal anti-inflammatory (NSAID) compound leads to unexpected  
29 advantages, functionally limiting the scope of the second component of the composition  
30 by the limitation “NSAID” would not be problematic. The scope of the term “NSAID” (or  
31 “NSAID compound”) would be immediately apparent to the person skilled in the art.

### 32 33 **9.05.02 Disclosure of biotechnological inventions**

34  
35 Specific disclosure requirements exist for some inventions in the fields of biotechnology.  
36 In brief, it may be necessary for a sequence listing of a nucleotide or amino acid  
37 sequence to be included with the description or for a deposit of biological material to be  
38 made with an International Depository Authority in order for the description of a  
39 biotechnology invention to be considered to be sufficient.

40  
41 Details on the requirements for providing sequence listings or deposits of biological  
42 material are provided in sections 17.04.01 and 17.04.02, respectively, of this manual.

1  
2 **9.05.03 The applicant as their own lexicographer**  
3

4 It has long been understood that the language of the claims is to be construed in view  
5 of the specification as a whole, and that the applicant can serve as their own  
6 lexicographer.  
7

8 Their Lordships do not doubt that it is possible for a patentee to make his  
9 own dictionary in this way. If he has put something in the earlier part of  
10 the specification which plainly tells the reader that for the purpose of the  
11 specification he is using a particular word with a meaning which he sets  
12 out, then the reader knows that when he comes to the claims he must  
13 read that word as having that meaning. But this is an awkward method of  
14 drafting and is very undesirable where a simpler method could easily be  
15 adopted and it is in all cases incumbent on a patentee who chooses to  
16 adopt this method to make his intention plain to those who read the  
17 specification.<sup>63</sup>  
18

19 During examination, the language of the claims is interpreted by giving each term its  
20 plain and usual meaning in the art to which the invention pertains, unless it is clear from  
21 the description that a term in the claims is to be given a different meaning.  
22

23 In the context of proper disclosure, it is to be noted that where an applicant, in  
24 attempting to act as their own lexicographer, creates a definition for a term of art that is  
25 contrary to the usual meaning of the term, that is liable to cause confusion or ambiguity,  
26 or that is unnecessary in that other plain language could as easily provide the same  
27 information, the definition is objectionable. Recall in this context the requirement  
28 discussed in 9.02.01 that “[t]he description must be correct; this means that it must be  
29 both clear and accurate. It must be free from avoidable obscurity or ambiguity and  
30 must be as simple and distinct as the difficulty of description permits”.  
31

32 For example, where the description teaches that, for the purposes of the invention, the  
33 symbol P (phosphorus) designates nitrogen (elemental symbol N), this definition is only  
34 liable to cause confusion and is objectionable under subsection 27(3) of the *Patent Act*.  
35 The symbol is recognized in chemistry as designating phosphorus, and could readily be  
36 replaced by the appropriate symbol, N, to designate nitrogen.  
37

38 In contrast, a definition is acceptable if, for the purposes of expediency and without  
39 sacrificing clarity, it narrows the scope of a term of art. It would be acceptable, for  
40 example, to define that the term “ethylene polymer” means “a non-crosslinked polymer  
41 comprising at least 80 mol% ethylene, with up to 20% C<sub>3-8</sub> alkene comonomer”.  
42 Providing the longer definition at multiple instances would be unnecessarily  
43 cumbersome, and the definition provided unambiguously restricts the broader term.

1       **9.05.04       Disclosure of trade-marked products**

2  
3       An invention may be operated by way of trade-marked products. Simply naming a  
4       trade-marked product is not, however, equivalent to describing the composition of that  
5       product.

6  
7       Further, simply knowing what components are included in a trade-marked product does  
8       not identify which of those components is an essential element of the invention (i.e.  
9       which component or components are necessary to fulfill the trade-marked product's role  
10      in the invention). Thus, even though a person skilled in the art may, depending on the  
11      state of the art, be able to reverse engineer a trade-marked product and identify its  
12      components, this will not by necessity put them in possession of the invention.

13  
14      Therefore, where an invention is described only in terms of a trade-marked product, the  
15      question of proper support must be carefully considered. If it is not clear which  
16      component of the product is responsible for the product's role in the invention, the  
17      invention cannot be operated other than by the trade-marked product itself.

18  
19      If the composition of the trade-marked product is not known, and the product is not  
20      commercially available, the invention is not enabled.

21  
22      Where an invention is described in terms of specific components (e.g. chemical  
23      compounds), but is supported by examples that rely on trade-marked products of  
24      undisclosed composition, no presumption exists that the examples embody the  
25      invention described. The applicant must establish that they were aware of the  
26      composition of the trade-marked product no later than at the filing date.

27  
28      Where the composition of a trade-marked product did not form part of the prior art as of  
29      the filing date, its composition cannot subsequently be added to the application [see  
30      9.08].

31  
32      [For requirements regarding the identification of trade-marks, see 9.07.03.]

33  
34      **9.05.05       Description by reference to the claims**

35  
36      The invention must be “correctly and fully” described in the description, which according  
37      to section 2 of the *Patent Rules* is “that part of the specification other than the claims”.  
38      Furthermore, in accordance with section 84 of the *Patent Rules*, the claims shall be fully  
39      supported by the description.

40  
41      It is consequently improper for the description to state the nature of the invention by  
42      reference to the claims. Such statements suggest that the description does not  
43      “correctly and fully” disclose the invention and does not comply with subsection 27(3) of

1 the *Patent Act*.

2  
3 Therefore, where the description teaches in some fashion that the invention is  
4 “according to the claims”, the statement must be removed or replaced by an explicit  
5 description of the invention.  
6

7 By way of example, statements such as “the problem of premature ignition in the  
8 combustion chamber is overcome through the method of claim 1” or “the compositions  
9 as instantly claimed exhibit superior insecticidal properties” fail to set forth explicitly  
10 what the invention in question is, but suggest instead that the invention is whatever  
11 might be claimed at any given moment in time.  
12

### 13 **9.05.06 Statements expanding the scope of the claims**

14  
15 Since the claims of a patent must be supported by the description, any statement that  
16 the claims are to be viewed as broader than the teachings of the description is incorrect  
17 and must be removed. Such statements suggest that the description does not  
18 “correctly and fully” disclose the invention and does not comply with subsection 27(3) of  
19 the *Patent Act*.  
20

21 A statement such as “the description should be understood as illustrative of the  
22 invention, but should not be considered as limiting on the claims appended hereto”,  
23 which suggests that the description merely sets out certain preferred aspects of the  
24 invention and is therefore not limiting of the claims, causes a lack of clarity as to the  
25 intended scope of the claims and must be removed.  
26

27 An indication that the claims encompass or must be interpreted having regard to the  
28 “spirit of the invention” is also an attempt to expand the scope of the claims in a vague  
29 and undefined way, and must be removed.<sup>64</sup>  
30

31 In contrast, a statement such as “the scope of the claims should not be limited by the  
32 preferred embodiments set forth in the examples, but should be given the broadest  
33 interpretation consistent with the description as a whole”, which simply notes that the  
34 claims are not to be limited to the preferred or exemplified embodiments of the  
35 invention, is permissible.  
36

### 37 **9.05.07 References to foreign practice or law**

38  
39 Where an application includes a statement whose correctness is dependent on foreign  
40 patent prosecution practices or laws, such a statement may be misleading or incorrect  
41 in the context of Canadian law. Where this is the case, the statement must be removed  
42 in order that the description be “correct” and comply with subsection 27(3) of the *Patent*  
43 *Act*.

1 An indication that the application is a continuation-in-part or a divisional of a foreign  
2 patent document, for example, is not correct in the context of the Canadian *Patent Act*  
3 and should be removed.

4  
5 Statements regarding the rights of foreign governments to the invention may also be  
6 misleading, and should be removed.

## 8 **9.06 Form of the description**

9  
10 The form a description should take is set out in section 80 of the *Patent Rules*.<sup>65</sup> Thus,

11 (1) The description shall

12  
13 (a) state the title of the invention, which shall be short and precise and  
14 shall not include any trade-mark, coined word or personal name;

15  
16 (b) specify the technical field to which the invention relates;

17  
18 (c) describe the background art that, as far as is known to the applicant,  
19 can be regarded as important for the understanding, searching and  
20 examination of the invention;

21  
22 (d) describe the invention in terms that allow the understanding of the  
23 technical problem, even if not expressly stated as such, and its solution;

24  
25 (e) briefly describe the figures in the drawings, if any;

26  
27 (f) set forth at least one mode contemplated by the inventor for carrying  
28 out the invention in terms of examples, where appropriate, and with  
29 reference to the drawings, if any; and

30  
31 (g) contain a sequence listing where required by subsection 111(1).

32  
33 (2) The description shall be presented in the manner and order specified  
34 in subsection (1) unless, because of the nature of the invention, a different  
35 manner or a different order would afford a better understanding or a more  
36 economical presentation.

37  
38  
39 The provisions of subsection 80(2) of the *Patent Rules* would allow, for example, that  
40 drawings associated with the prior art be described with the background art, prior to the  
41 brief description of the figures in any remaining drawings.

42  
43 The title of the invention should be descriptive of the invention in suit, and not merely of

1 the field of technology to which the invention pertains. A title such as “flame-retardant  
2 rigid polyurethane foam” is acceptable, whereas “foam” is not.<sup>66</sup>

3  
4 In accordance with paragraph 80(1)(a) of the *Patent Rules*, the Office considers the title  
5 provided in the description to be the correct title of the invention. Where, for any  
6 reason, the title ascribed to the invention in the Office’s electronic database differs from  
7 the title provided in the description, the electronic database will be updated at the time  
8 of grant to reflect the title set out in the description.<sup>67</sup>

9  
10 Disagreement between the title in the description and the title in the Office’s electronic  
11 database is not a defect in the application. An examiner may note the existence of  
12 such a disagreement, in order to apprise the applicant of the situation and provide them  
13 with an opportunity to address the matter. Such a disagreement may also be brought  
14 to the applicant’s attention subsequent to allowance, by way of an Office letter.

15  
16 Paragraph 80(1)(c) of the *Patent Rules* requires that the applicant describe the  
17 background art that, as far as is known to them, is important for the understanding,  
18 searching and examination of the invention. Where relevant background art is  
19 identified during prosecution, an applicant may, within the limitations imposed by  
20 section 38.2 of the *Patent Act* [see 9.08], introduce to the description references to and  
21 descriptions of the contents of prior art documents where these are clearly admitted to  
22 be prior art with respect to the application. Examiners should, in general, not raise an  
23 objection simply because the description has not been amended to identify background  
24 art brought to the applicant’s attention subsequent to filing.

25  
26 Paragraph 80(1)(f) of the *Patent Rules* provides that, “where appropriate”, the applicant  
27 must set forth in terms of examples, at least one mode contemplated by the inventor for  
28 carrying out the invention. The use of the wording “where appropriate” in this rule  
29 reflects that an exemplary basis may or may not be necessary depending on the case  
30 at hand. The language “where appropriate” does not merely mean “if the applicant  
31 deems it appropriate”, and does not provide any exception to the disclosure  
32 requirements of subsection 27(3) of the *Patent Act*.

33  
34 It is not necessary for the description to present the information required by section 80  
35 of the *Patent Rules* in sections bearing headings corresponding to the paragraphs of  
36 subsection 80(1), although an applicant may choose to do so for the sake of clarity.

37  
38 Headings such as “Summary of the Invention”, “Detailed Description of the Invention”  
39 and “Detailed Description of the Preferred Embodiments” are permitted in Canadian  
40 practice. It is worth noting, however, that where a heading such as “Detailed  
41 Description of the Preferred Embodiments” is used, support for claims broader than  
42 these embodiments must be found in other parts of the description which must satisfy  
43 the requirements of subsection 27(3) of the *Patent Act*, including enablement and

1 support for any sound prediction, in respect of the invention as broadly claimed.  
2

### 3 **9.07 Formalities requirements of the description** 4

5 The description is subject to many formalities requirements dealing with various aspects  
6 of its contents and presentation. These are summarized in the following sections.  
7

#### 8 **9.07.01 Pages of the description** 9

10 In accordance with subsection 73(1) of the *Patent Rules* the description must be on  
11 consecutively numbered pages,<sup>68</sup> and in accordance with section 72 of the *Patent Rules*  
12 no page of the description may contain anything belonging to another part of the  
13 application.<sup>69</sup>  
14

#### 15 **9.07.02 Drawings, graphics and tables** 16

17 In accordance with section 74 of the *Patent Rules*, the description shall not contain  
18 drawings<sup>70</sup> but may contain chemical or mathematical formulae or the like.<sup>71</sup> For greater  
19 clarity, a chemical formula may be presented in the description in graphical form (i.e. as  
20 a structure).<sup>72</sup> The description may also contain information presented in tables. In  
21 accordance with subsection 75(2) of the *Patent Rules*, any formula or table may, where  
22 it aids presentation, be presented sideways (i.e. in landscape format) with the top of the  
23 formula or table at the left side of the sheet.<sup>73</sup> Otherwise, subsection 75(1) of the  
24 *Patent Rules* provides that pages of the description must be used upright (i.e. in portrait  
25 format).<sup>74</sup>  
26

27 Graphical representations of data, such as graphs, histograms, pie charts, and spectra,  
28 are not considered to be drawings and should be included in the description.  
29 Schematics that illustrate a process, such as flow-charts, are considered to be  
30 drawings.  
31

32 Where the application contains drawings, subsection 82(9) of the *Patent Rules* requires  
33 that any reference characters appearing on any figures in the drawings, and only these  
34 reference characters, be mentioned in the description.<sup>75</sup> Further, where features are  
35 identified by reference characters, subsection 82(10) of the *Patent Rules* requires that  
36 the same reference characters must be used throughout the description to refer to  
37 those features, and may not be used to refer to any other features.<sup>76</sup>  
38

#### 39 **9.07.03 Identification of trade-marks** 40

41 In accordance with section 76 of the *Patent Rules*, any trade-mark mentioned in the  
42 application shall be identified as such.<sup>77</sup> The Office requires that each trade-mark be  
43 identified in an appropriate manner at least once, preferably at its first appearance.

1 Use of the words “trade-mark” in parentheses, of the designation “™”, or of an indicator  
2 such as an asterisk (\*) linked to a footnote denoting that the asterisk designates a  
3 trade-mark are all examples of appropriate manners for identifying a trade-mark in an  
4 application.

#### 5 6 **9.07.04 Identification of documents**

7  
8 In accordance with section 81 of the *Patent Rules*, a document referred to in the  
9 description must be available to the public and be fully identified, and shall not be  
10 incorporated by reference.<sup>78</sup>

11  
12 The Office considers a patent document to be properly identified when the country or  
13 office code is provided along with a number under which the published version of the  
14 document can be found. Thus, the number provided can be that given to a granted  
15 patent, or be either the application number or publication number of a published  
16 application.

17  
18 WO 96/937212, US 5,410,288, and EP 1 004 793 are examples of patent documents  
19 properly identified by a publication or patent number.

20  
21 PCT CA2006/001,285 and U.S.S.N. 11/421,399 are examples of application numbers  
22 which are acceptable if the identified application has been published.

23  
24 PCT applications, and US applications filed after November 28, 2000, will generally be  
25 published unless the application has been withdrawn (or, in the case of US  
26 applications, abandoned) prior to the publication date. Under 35 U.S.C. 122, a US  
27 application may also be kept confidential (i.e. will not be published) if the applicant  
28 certifies that they will not file an application for the disclosed invention in any other  
29 country. Where a US application is relied on as a priority document, this provision does  
30 not apply. US provisional applications, applications for design patents, and applications  
31 in series 09 or earlier are typically not published and may not be referred to by their  
32 application numbers.<sup>79</sup>

33  
34 For non-patent documents, the requirement is that the document be sufficiently well  
35 identified to permit it to be obtained by an interested party.

36  
37 For a journal article, textbook, or the like, the document should be identified by the  
38 names of the author and the publication, the year of publication, the volume and/or  
39 issue number(s) if applicable, and the page numbers of the article, number of the  
40 chapter or the like. Preferably, the title of an article or title of a chapter should be  
41 provided. Additional information, such as the name of the publisher, may be included.  
42 Where a unique document identifier such as an ISBN code is provided, this does not  
43 replace any of the foregoing requirements.

1 References to internet pages present a particular difficulty in that neither the URL nor  
2 the content of such pages is necessarily fixed. Examiners will object to the  
3 identification of a document by way of a URL where it is not clear that the URL refers to  
4 a reliable source that can reasonably be expected to ensure the information in question  
5 is of fixed content and will be more or less permanently retrievable.  
6

## 7 **9.08 Amendments to the description**

8  
9 In accordance with subsection 38.2(1) of the *Patent Act*, the description is subject to  
10 amendment before grant. Under subsection 38.2(2) of the *Patent Act*, any such  
11 amendment may not introduce “matter not reasonably to be inferred from the  
12 specification or drawings as originally filed, except in so far as it is admitted in the  
13 specification that the matter is prior art with respect to the application” (for convenience,  
14 such matter may be referred to simply as “new matter”).  
15

16 General guidance regarding the amendment of applications is provided in chapter 19 of  
17 the manual.  
18

19 As regards the description, particular attention must be given to amendments that  
20 replace restrictive language with permissive language. Where an application teaches  
21 that the invention “must be” or “is” (or the like) operated in a certain way, amendment of  
22 this language to indicate that the invention “preferably” or “optionally” (or the like) is  
23 operated in that way enlarges the scope of the invention and may be seen as the  
24 addition of new matter.  
25

26 Similarly, it is possible for the deletion of text to amount to the addition of new matter. If  
27 a passage in the description teaches that an invention is inoperative under certain  
28 conditions, an amendment to remove this guidance could be viewed as introducing new  
29 matter by expanding the scope of the operable invention.  
30

31 Where a description included both permissive and restrictive language regarding a  
32 certain limitation, amending the description to make it self-consistent throughout will  
33 generally not be seen as the addition of new matter.  
34

35 An invention requires an inventive step, and the presence of this inventive step must be  
36 evaluated in view of the specification as filed. Amendments that appear to introduce  
37 new aspects of “inventiveness” to the application introduce new matter.  
38

39 Remembering that an invention is a solution to a practical problem, it can be  
40 understood that amendments that tend to transform the invention as originally disclosed  
41 into a new invention - that is to say, into a new solution to the same or a different  
42 problem - constitute the addition of new matter.  
43

1 Such amendments shift the point of invention and have the effect of causing a different  
2 invention to be disclosed than that in the specification as originally filed.

3  
4 The description may be amended to make reference to prior art documents. Where the  
5 amendment is merely to clarify the state of the art, this will generally not be considered  
6 to introduce new matter. Where, however, an amendment introduces information from  
7 a prior art document, these amendments may, depending on the circumstances,  
8 introduce new matter.

9  
10 Where specific teachings in a prior art document are required in order to enable the  
11 invention to be operated, or in order to support a sound prediction of utility, and it would  
12 not have been clear to the person skilled in the art, as of the claim date, which  
13 teachings in the prior art document were necessary for this purpose, identifying or  
14 including the specific teachings constitutes the addition of new matter.

### 15 16 **9.09 Office actions on the description**

17  
18 Objections dealing with substantive issues of sufficiency are presented under  
19 subsection 27(3) of the *Patent Act*, or a specific paragraph of that subsection where this  
20 precision may be helpful in underlining the basis of the objection.

21  
22 As is the case with objections under subsection 27(4) of the *Patent Act*, however, the  
23 defects being objected to under subsection 27(3) can range from significant issues of  
24 sufficiency to fairly minor defects of clarity. The presence of a subsection 27(3)  
25 objection is not by necessity an indication of any un-remediable defect relating to  
26 sufficiency.

27  
28 Nevertheless, wherever a more specific authority exists on which to base the objection  
29 being made, this authority should be used in place of subsection 27(3) of the *Patent*  
30 *Act*. For example, if a reference character has been included in the drawings but is not  
31 mentioned in the description, this defect should be presented under subsection 82(9) of  
32 the *Patent Rules* rather than under subsection 27(3) of the *Patent Act*.

33  
34 Objections to formatting or other minor problems are presented under authority of  
35 whichever section relates to the defect under consideration [see 9.07 and the related  
36 endnotes].

37  
38 Non-compliance with the formatting requirements set out in sections 68, 69 and 70 of  
39 the *Patent Rules* [see section 5.03 of this manual] can be identified by an examiner in  
40 order to inform applicants of any defects and expedite advancing the application to  
41 allowance. It is not, however, required for an examiner to do so, since correction of  
42 these defects can also be requisitioned by examination support staff. It is noted that  
43 the Canadian requirements as to formatting are based on those required under the

Descriptions

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- 1 Patent Cooperation Treaty, and requisitioning compliance with the Canadian
- 2 requirements is therefore permissible under Article 27, PCT.
- 3

1 Endnotes for chapter 9  
2  
3

1. See the definitions of “description” and “claims” in section 2 of the *Patent Rules*.
2. *Apotex Inc. v. Wellcome Foundation Ltd.* [2002] SCC 77 [(2002), 21 C.P.R. (4<sup>th</sup>), 499 (S.C.C.)] at paragraph 37
3. *Leithiser v. Pengo Hydra-Pull of Canada Ltd.* [(1974), 17 C.P.R. (2<sup>nd</sup>), 110 (F.C.A.)] at pages 113 and 114. This view appears to have been confirmed indirectly in *Apotex Inc. v. Sanofi-Synthelabo Canada Inc.* [2008] SCC 61, e.g. at paragraph 26. Note that the Supreme Court was here discussing prior disclosure requirements for the purposes of anticipation, rather than of sufficiency of description.
4. *Consolboard Inc. v. Macmillan Bloedel (Saskatchewan) Ltd.* [(1981), 56 C.P.R. (2<sup>nd</sup>), 145 (S.C.C.)] at pages 154-155, Dickson J. quoting H.G. Fox from his *Canadian Law and Practice Relating to Letters Patent for Inventions* [(1969), 4<sup>th</sup> Ed.]
5. *Consolboard* (supra at 4) at page 157
6. *Minerals Separation North American Corp. v. Noranda Mines, Ltd.* [(1947), 12 C.P.R. (1<sup>st</sup>), 102 (Ex.Ct.)] at page 111
7. *Minerals Separation* (supra at 6)
8. *Radio Corporation of America v. Raytheon Manufacturing Co.* [(1957), 27 C.P.R. (1<sup>st</sup>), 1 (Ex.Ct.)] at page 14
9. *Minerals Separation* (supra at 6) at pages 111-112, with these points being reasserted by Thurlow J. in *Société des Usines Chimiques Rhone-Poulenc et al. v. Jules R. Gilbert Ltd. et al.* [(1968), 55 C.P.R. (1<sup>st</sup>), 207 (S.C.C.)] at pages 225-226; *Wandscheer et al. v. Sicard Limitée* [(1947), 8 C.P.R. (1<sup>st</sup>), 35 (S.C.C.)] at pages 39-40.
10. This position has been adopted by the courts so often that it has become axiomatic. See, e.g., *Whirlpool Corp. v. Camco Inc.* [2000] SCC 67 [(2000), 9 C.P.R. (4<sup>th</sup>), 129 (S.C.C.)] at paragraph 53; *Consolboard* (supra at 4) at page 160
11. *Free World Trust v. Électro Santé Inc.* [2000] SCC 66 [(2000), 9 C.P.R. (4<sup>th</sup>), 168 (S.C.C.)] at paragraph 44, quoting H.G. Fox from his *Canadian Law and Practice Relating to Letters Patent for Inventions* [(1969), 4<sup>th</sup> Ed.] at page 184; *Whirlpool* (supra at 10) at paragraph 49, citing *Lister v. Norton Brothers and Co.* [(1986), 3 R.P.C. 199 (Ch.D.)] at page 203

12. *Free World Trust* (supra at 11) at paragraph 44
13. From *Beloit Canada Ltd. v. Valmet Oy* [(1986), 8 C.P.R. (3<sup>rd</sup>), 289 (F.C.A.)] at page 294 we know them to be a “paragon of deduction” and from *Whirlpool* (supra at 10 at paragraph 74) we know them to be “reasonably diligent in keeping up with advances in the field to which the patent relates”. See also the comments on point in *Janssen-Ortho Inc. v. Novopharm Limited* [2006] FC 1234 at paragraph 113.
14. *Bayer Aktiengesellschaft v. Apotex Inc.* [(1995), 60 C.P.R. (3<sup>rd</sup>), 58 (On.Ct.G.D.)] at page 79
15. *Servier Canada Inc. v. Apotex* [2008] FC 825 at paragraph 99
16. *Servier Canada Inc. v. Apotex* [2008] FC 825 at paragraph 254
17. *Axcan Pharma Inc. v. Pharmascience Inc.* [2006] FC 527 at paragraph 38
18. *Bayer AG* (supra at 14) at page 79; *Johnson & Johnson Inc. v. Boston Scientific Ltd.* [2008] FC 552 at paragraph 97; *Lundbeck Canada Inc v. Minister of Health* [2009] FC 146 at paragraph 36
19. In respect of applications filed on or after October 1, 1996.
20. The comments in *GlaxoSmithKline Inc. v. Pharmascience Inc.* [2008] FC 593 at paragraph 35, while they relate to expert witnesses at trial and not to examiners and inventors/applicants during examination, are illustrative.
21. see, e.g., *Apotex v. Sanofi-Synthelabo* (supra at 3) at paragraph 37; *Burton Parsons Chemical Inc. v. Hewlett-Packard (Canada) Ltd.* [(1976), 17 C.P.R. (2<sup>nd</sup>), 97 (S.C.C.)] at page 105
22. *Free World Trust* (supra at 11) at paragraph 54. Note that the Supreme Court was here concerned with claim construction, and not enablement.
23. *Apotex v. Sanofi-Synthelabo* (supra at 3) at paragraph 37. During examination, such obvious errors should be corrected whenever identified.
24. *TRW Inc. v. Walbar of Canada Inc.* [(1991), 39 C.P.R. (3<sup>rd</sup>), 176 (F.C.A.)] at page 197
25. *Procter & Gamble Co. v. Bristol-Myers Canada Ltd.* [(1978), 39 C.P.R. (2<sup>nd</sup>), 145 (F.C.T.D.)] at pages 159-160, aff'd [(1979), 42 C.P.R. (2<sup>nd</sup>), 33 (F.C.A.)]; see also *Apotex v. Sanofi-Synthelabo* (supra at 3) at paragraphs 33-37

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26. *Rice v. Christiani & Nielsen* [1929] Ex.C.R. 111 at paragraph 9, rev'd on other grounds
27. H.G. Fox, *Canadian Law and Practice Relating to Letters Patent for Inventions* [(1969), 4<sup>th</sup> Ed.]
28. *Janssen-Ortho Inc. v. Novopharm Ltd.* [2004] FC 1631 [(2004), 35 C.P.R. (4<sup>th</sup>), 353 (F.C.)] at paragraph 54; quoted in *Bristol-Myers Squibb Canada Co. v. Novopharm Ltd.* [2005] FC 1458 at paragraph 71, *Aventis Pharma Inc. v. Apotex Inc.* [2005] FC 1504 at paragraph 126
29. *Pfizer Canada Inc. v. Canada (Minister of Health)* [2006] FCA 214 [(2006), 52 C.P.R. (4<sup>th</sup>), 241 (F.C.A.)] at paragraph 24
30. *Janssen-Ortho Inc. v. Apotex Inc.* [2008] FC 744 at paragraph 111
31. *Apotex* (supra at 2) at paragraph 70
32. *Apotex* (supra at 2) at paragraph 70
33. *Apotex* (supra at 2) at paragraph 37
34. *Norac Systems International Inc. v. Prairie Systems & Equipment Ltd.* [(2002), 19 C.P.R. (4<sup>th</sup>), 360 (F.C.T.D.)] at paragraph 16, rev'd in part on other grounds [2003] FCA 187 [(2002), 25 C.P.R. (4<sup>th</sup>), 1 (F.C.A.)]
35. see, e.g., *Halford v. Seed Hawk Inc.* 2004 FC 88 and *Jules R. Gilbert Ltd. v. Sandoz Patents Ltd.* [(1970), 64 C.P.R. (1<sup>st</sup>), 14 (Ex.Ct.)]
36. *Halford v. Seed Hawk Inc.* 2006 FCA 275 [(2006), 54 C.P.R. (4<sup>th</sup>), 130 (F.C.A.)] at paragraph 14, referring to *Free World Trust* (supra at 11) at paragraph 20
37. *Free World Trust* (supra at 11) at paragraphs 55 to 59
38. *Dimplex North America Ltd. v. CFM Corp.* [2006] FC 586 [(2006), 54 C.P.R. (4<sup>th</sup>), 435 (F.C.)] at paragraph 80, aff'd [2007] FCA 278 [(2007), 60 C.P.R. (4<sup>th</sup>), 277 (F.C.A.)]; citing *Norac Systems* (supra at 34)
39. Fox (supra at 27) citing at pages 150-151 *Mullard Radio Valve Company Ltd. v. Philco Radio and Television Corporation of Great Britain Ltd.* [(1935), 52 R.P.C. 261] at page 287; quoted in *Eli Lilly Canada Inc. v. Novopharm Ltd.* [2007] FC 596 [(2007), 58 C.P.R. (4<sup>th</sup>), 214 (F.C.)] at paragraph 188 and in *Consolboard Inc. v. Macmillan Bloedel (Saskatchewan) Ltd.* [(1978), 39 C.P.R. (2<sup>nd</sup>), 191 F.C.T.D.] at page 216

40. *Norac Systems* (supra at 34) at paragraph 41; *Almecon Industries Ltd. v. Anchortek Ltd.* [(2001), 17 C.P.R. (4<sup>th</sup>), 74 (F.C.T.D.)] at paragraph 45, aff'd [(2003), 25 C.P.R. (4<sup>th</sup>), 129 (F.C.A.)], citing *Consolboard* (supra at 39) at page 216
41. *Metalliflex Ltd. v. Rodi & Wienenberger Aktiengesellschaft* [(1960), 35 C.P.R. (1<sup>st</sup>), 49 (S.C.C.)] at pages 53-54
42. *Apotex* (supra at 2) at paragraph 46
43. see, e.g., *Pfizer Canada Inc. v. The Minister of Health* [2008] FC 13 at paragraphs 99 and 118
44. *Apotex* (supra at 2) at paragraph 70
45. *Eli Lilly Canada Inc. v. Apotex Inc.* [2009] FCA 97 at paragraphs 10-18; *Eli Lilly Canada Inc. v. Novopharm Limited* [2009] FC 235 at paragraph 102
46. *Eli Lilly Canada Inc. v. Apotex Inc.* [2008] FC 142 at paragraphs 163-164; *Eli Lilly v. Apotex* (supra at 45) at paragraph 12
47. *Eli Lilly v. Apotex* (supra at 45) at paragraph 18; this requirement extends equally to any factual basis needed to support a sound prediction of an advantage possessed by a selection from a broader group, see *Pfizer Canada Inc. v. Canada (Minister of Health)* [2008] FC 500 at paragraph 97 and *GlaxoSmithKline Inc. v. Pharmascience Inc.* [2008] FC 593 at paragraph 71
48. *Apotex* (supra at 2) at paragraph 70; *Pfizer Canada Inc. v. Canada (Minister of Health)* [2007] FCA 209 at paragraph 152
49. *Pfizer Canada Inc. v. Apotex Inc.* [2007] FC 26 [(2007), 59 C.P.R. (4<sup>th</sup>), 183 (F.C.)] at paragraphs 66-70; aff'd [2007] FCA 195 [(2007), 60 C.P.R. (4<sup>th</sup>), 177 (F.C.A.)] - the Court concluded its observations on the patent in suit by noting that "[u]tility and sound prediction are questions of fact and must obviously be supported by evidence."
50. *Servier Canada Inc. v. Apotex* [2008] FC 825 at paragraph 379; *Eli Lilly v. Apotex* (supra at 45) at paragraph 18; *Eli Lilly v. Novopharm* (supra at 45) at paragraphs 101 and 107; *Merck & Co. v. Apotex Inc.* 2005 FC 755 at paragraphs 125-126
51. *I.G. Farbenindustrie A.G.'s Patents* [(1930), 47 R.P.C. 289] at pages 322 to 323; these criteria appear to have been endorsed in Canada at least as early as 1947 in *Minerals Separation* (supra at 6 at pages 163-164). They were endorsed by

- the Supreme Court in *Apotex v. Sanofi-Synthelabo* (supra at 3) at paragraph 10.
52. *GlaxoSmithKline* (supra at 47) citing at paragraph 51 *Dreyfus and Others Application* [(1945), 62 R.P.C. 125 (H.L.)] at page 133; *Farbenindustrie* (supra at 51) at page 327
  53. *Pfizer Canada Inc. v. Canada* 2006 FCA 214 at paragraph 4
  54. *Apotex v. Sanofi-Synthelabo* (supra at 3) at paragraph 9; *I.G. Farbenindustrie* (supra at 51) at page 321
  55. *Pfizer Canada Inc. v. Ranbaxy Laboratories Limited* [2008] FCA 108 at paragraph 59; *Eli Lilly Canada Inc. v. Apotex Inc.* [2007] FC 455 at paragraph 89
  56. *Farbenindustrie* (supra at 51) at page 323
  57. see, e.g., *Eli Lilly Canada Inc. v. Novopharm Ltd.* (supra at 39) at paragraph 162, *Pfizer Canada Inc. v. The Minister of Health* (supra at 43) at paragraphs 115-116; note the similarity to the comments rendered in *Pfizer v. Apotex* (supra at 49) at paragraphs 66 and 69
  58. *The King v. American Optical Co.* [(1950), 13 C.P.R. (1<sup>st</sup>), 87 (Ex.Ct.)] at page 98
  59. *The King v. American Optical* (supra at 58)
  60. *Lester v. Commissioner of Patents* [(1946), 6 C.P.R. (1<sup>st</sup>), 2 (Ex.Ct.)] citing at page 3 *British Celanese Ltd. v. Courtaulds Ltd.* [1935] 52 R.P.C. 171 at page 193
  61. *Solvay Pharma Inc. v. Apotex Inc.* [2008] FC 308 at paragraph 128; *Bergeon v. De Kermor Electric Heating Co.* [1927] Ex. C.R. 181 at paragraphs 29 and 81
  62. *Free World Trust* (supra at 11) at paragraph 32
  63. *Minerals Separation North American Corp. v. Noranda Mines, Ltd.* [(1952), 15 C.P.R. (1<sup>st</sup>), 133 (P.C.)] at pages 144-145
  64. *Free World Trust* (supra at 11) at paragraph 31
  65. Section 80 of the *Patent Rules* applies to applications filed after October 1, 1996. There is no equivalent to this rule for earlier-filed applications.
  66. Note that, for applications filed prior to October 1, 1996 and October 1, 1989, respectively, the requirement that an invention have a title are governed by sections 134 and 170 of the *Patent Rules*.

67. This practice was first communicated in the practice notice *Title of Invention* [C.P.O.R. Vol. 137, No. 4, January 27, 2009].
68. This requirement is governed by subsection 135(4) of the *Patent Rules* for applications filed before October 1, 1996 and by subsection 171(4) of the *Patent Rules* for applications filed before October 1, 1989.
69. There is no such requirement in the *Patent Rules* governing applications filed prior to October 1, 1996.
70. This requirement is explicitly governed by subsection 74(1) of the *Patent Rules* for applications filed on or after October 1, 1996, by subsection 135(3) of the *Patent Rules* for applications filed before October 1, 1996 and by subsection 171(3) of the *Patent Rules* for applications filed before October 1, 1989.
71. The permissibility of chemical and mathematical formulae, and the like, is provided by subsection 74(2) of the *Patent Rules* for applications filed on or after October 1, 1996; for applications filed prior to October 1, 1996 this may only be implied by the lack of any proscription to formulae *per se*.
72. The permissibility of such presentation in applications filed on or after October 1, 1996 is implied from subsection 74(2) of the *Patent Rules*. Explicit permission for such presentation is provided by subsection 135(3) of the *Patent Rules* for applications filed before October 1, 1996 and by subsection 171(3) of the *Patent Rules* for applications filed before October 1, 1989.
73. This requirement is governed by subsection 135(2) of the *Patent Rules* for applications filed before October 1, 1996 and by subsection 171(2) of the *Patent Rules* for applications filed before October 1, 1989.
74. This requirement is governed by subsection 135(2) of the *Patent Rules* for applications filed before October 1, 1996 and by subsection 171(2) of the *Patent Rules* for applications filed before October 1, 1989.
75. No such explicit provision exists for applications filed prior to October 1, 1996.
76. This requirement is governed by paragraphs 141(1)(g) of the *Patent Rules* for applications filed before October 1, 1996 and by paragraph 177(1)(g) of the *Patent Rules* for applications filed before October 1, 1989.
77. This requirement is governed by section 140 of the *Patent Rules* for applications filed before October 1, 1996 and by section 176 of the *Patent Rules* for applications filed before October 1, 1989.

78. These requirements are governed by section 137 of the *Patent Rules* for applications filed before October 1, 1996 and by section 173 of the *Patent Rules* for applications filed before October 1, 1989.
79. Information regarding the publication of US patent documents is provided based on an interpretation of US practice as expressed in the USPTO's *Manual of Patent Examining Procedure*, 8<sup>th</sup> Ed. (August 2001) as revised July 2008. See, e.g., sections 101 and 103.