

Patents Registry
Intellectual Property Department
Hong Kong SAR Government
Patents Examination Guidelines

Section 6: Specification

6.1 Under section 2 of the Ordinance, specification is defined as the description, claims and drawings contained in an application for a patent under the Ordinance, a designated patent application or an international application. The following guidelines for specification apply, where appropriate, to a standard patent (O) application or a short-term patent application.

Presentation of specification

6.2 The terminology and the signs must be consistent throughout the specification of a patent application (sections 31Q(11) (for standard patent (O) applications) and 62(12) (for short-term patent applications) of the Rules).

6.3 In general, technical terms, signs and symbols generally accepted in the field in question must be used (sections 31Q(9)(d) (for standard patent (O) applications) and 62(10)(d) (for short-term patent applications) of the Rules).

6.4 Where the specification contains reference to weights and measures, these physical values must be expressed in metric units (sections 31Q(9)(a) (for standard patent (O) applications) and 62(10)(a) (for short-term patent applications) of the Rules).

6.5 The other physical values must be expressed in the units recognized in international practice (sections 31Q(9)(b) (for standard patent (O) applications) and 62(10)(b) (for short-term patent applications) of the Rules).

- 6.6 The description and claims may contain chemical or mathematical formulae but not drawings (see sections 31Q(4)(a)&(b) (for standard patent (O) application) and 62(9)(a)&(b) (for short-term patent application) of the Rules). In stating mathematical or chemical formulae, the symbols, atomic weights and molecular formulae in general use must be employed (sections 31Q(9)(c) (for standard patent (O) applications) and 62(10)(c) (for short-term patent applications) of the Rules).

Description – General

- 6.7 Description of a specification must provide a sufficient explanation of the invention so as to facilitate the understanding of the invention by a person skilled in the art.
- 6.8 For specifications in Chinese, use of non-Chinese technical terms therein should be annotated with Chinese translation or explained in Chinese as far as possible unless the terms are well known in the art such as “CPU” which stands for central processing unit. Citation of non-Chinese sources should be made in the original language, followed by the Chinese translation in parenthesis.
- 6.9 The requirements of description are set out in sections 31N (for standard patent (O) applications) and 59 (for short-term patent applications) of the Rules. The description must contain the following parts where appropriate¹:
- (a) Technical field
 - (b) Background art
 - (c) Disclosure of the invention
 - (d) Description of the figures in the drawings
 - (e) Specific way(s) for carrying out the invention
 - (f) Industrial application

¹ The manner and order of presentation of the description should be that specified in section 31N(2) of the Rules (for standard patent (O) applications) or section 59(1) of the Rules (for short-term patent applications) unless not doing so is conducive to a better understanding of the invention because of its nature and a more economical presentation.

Description – Technical field

6.10 The description must specify the technical field to which the invention relates (see sections 31N(2)(a) (for standard patent (O) applications) and 59(1)(a) (for short-term patent applications) of the Rules). An applicant may specify the technical field of an invention by reproducing the prior art portion of the independent claims in full or in substance or by simply referring to it. Generally, the specific technical field relates to the lowest hierarchical level at which the invention may be classified according to the International Patent Classification.

Description – Background art

6.11 The description must indicate the background art that, as far as known to the applicant, can be regarded as useful for understanding the invention (see sections 31N(2)(b) (for standard patent (O) applications) and 59(1)(b) (for short-term patent applications) of the Rules). Essentially, the background art is useful for understanding the invention and its relationship to the prior art. Whenever possible, there should be citation of the documents reflecting the closest prior art or the prior art corresponding to the preamble of the independent claim (see the definition of preamble in section 6.28 below; see also sections 31N(2)(c) (for standard patent (O) applications) and 59(1)(b) (for short-term patent applications) of the Rules).

6.12 The documents typically cited in the section about background art may be either patent documents or non-patent literature, such as periodicals, magazines and books. In citing documents or inserting references, applicants may use the format and codes as recommended in WIPO Standard ST.14 (Recommendation for the Inclusion of References Cited in Patent Documents), WIPO Standard ST.3 (Recommended Standard on Two-Letter Codes for the Representation of States, Other Entities and Intergovernmental Organizations) and WIPO Standard ST. 16 (Recommended Standard

Code for the Identification of Different Kinds of Patent Documents). In any event, the citation should fulfill the following requirements:

- (a) Where a patent document is cited, at least the country of origin and the publication number, and preferably the publication date, of the patent document should be clearly indicated.
- (b) Where a non-patent document is cited, the title and the detailed source of the document shall be clearly indicated.

6.13 Background art is considered as prior art disclosed by the applicant. Care should be taken in not disclosing the applicant's own invention in the background art section.

Description – Disclosure of invention

6.14 The description must disclose the invention in such terms that the technical problem (even if not expressly stated) and the solution of the problem can be understood, and state any advantageous effects of the invention with reference to the background art (see sections 31N(2)(d)&(e) (for standard patent (O) applications) and 59(1)(c) (for short-term patent applications) of the Rules).

- (a) The technical problem may be addressed by referring to the deficiency or defect in the prior art without disparaging any particular prior art or making any misleading statement.
- (b) The requirement of disclosing the solution of the problem can be met by reproducing the substance of the features of the solution according to the relevant claims. It is common for applicants to repeat or to refer to the body or characterizing portion of the independent claims in this part of the description (see parts of a claim in section 6.28 below).

Description – Description of figures in drawings

6.15 The description must briefly describe the figures in the drawings referred to in the description, if any (see sections 31N(2)(f) (for standard patent (O) applications) and 59(1)(d) (for short-term patent applications) of the Rules).

For example, reference in the description to drawings may be made as follows:

Figure 1 is a front view of the energy-saving system for coal-fired boiler;

Figure 2 is a side view of the energy-saving system in Figure 1;

Figure 3 is a view looking in the direction of the arrow A of Figure 2;

Figure 4 is a cross-section taken through the line A-A of Figure 1.

Description – Specific way(s) for carrying out invention

6.16 The description must describe in detail at least one way of carrying out the invention, using examples where appropriate and referring to the drawings, if any (see sections 31N(2)(g) (for standard patent (O) applications) and 59(1)(e) (for short-term patent applications) of the Rules). Where the claims cover a broad field, the description may need to give a number of examples to satisfy the requirement of sufficiency of disclosure (see sufficiency of disclosure in section 9 for further details). If the part of description concerning the technical solution has disclosed any feature essential for carrying out the invention in sufficient detail, it will not be necessary to repeat the explanation in this part of the description.

Description – Industrial application

6.17 The description must indicate the way in which the invention is industrially applicable, if it is not obvious from the description or nature of the invention (see sections 31N(2)(h) (for standard patent (O) applications) and 59(1)(f) (for short-term patent applications) of the Rules). The way in which the invention is industrially applicable is self-evident in most cases, thereby not requiring any explicit description on this point. On the other hand, given that the industrial application of a sequence or a partial sequence of a gene

may not be self-evident, the industrial application of such invention should be disclosed in the description.

Sequence listings

- 6.18 For applications which involve nucleotide and amino acid sequences, the sequence listing is considered to form part of the description (see sections 31ZX(1) (for standard patent (O) applications) and 73A(1) (for short-term patent applications) of the Rules). This listing should be inserted at the end of the patent application and be numbered consecutively in a separate part of the description in accordance with the requirements and standards adopted under the Patent Cooperation Treaty² for the presentation of sequence listings in patent applications (see sections 31ZX(2)(a) (for standard patent (O) applications) and 73A(2)(a) (for short-term patent applications) of the Rules).
- 6.19 The applicant may be requested by the Registrar to file a copy of the sequence listing in electronic form in text (txt) file format (see sections 31ZX(2)(b)(ii) (for standard patent (O) applications) and 73A(2)(b)(ii) (for short-term patent applications) of the Rules).
- 6.20 A sequence listing filed after the date of filing of the application must be accompanied by a statement made by the applicant confirming to the satisfaction of the Registrar that the listing does not contain matter extending beyond the sequence disclosed in the application (see sections 31ZX(4) (for standard patent (O) applications) and 73A(4) (for short-term patent applications) of the Rules).

Drawings

- 6.21 Drawings, including flow sheets and diagrams, are good visual supporting materials describing the invention. Where possible, the drawings should identify an invention's settings and explain the invention in sufficient detail. Any drawing(s) referred to in the

² The existing PCT Standard ST. 25 is found in <http://www.wipo.int/export/sites/www/standards/en/pdf/03-25-01.pdf>

description or the claim(s) should be included (see sections 37L(2)(b)(iii) (for standard patent (O) applications) and 113(1A)(b)(iii) (for short-term patent applications) of the Ordinance).

- 6.22 The drawings and its general layout, and the paper used must comply with the requirements stated in sections 31O (for standard patent (O) applications) and 60 (for short-term patent applications) of the Rules).

Claims of inventions

- 6.23 The claims of an invention must define the matter for which protection is sought or given in terms of the technical features of the invention (see section 78(1)(a) of the Ordinance; sections 31S(2) (for standard patent (O) applications) and 64(1) (for short-term patent applications) of the Rules). In this connection, the claims should not contain any statement relating to commercial advantages or any other non-technical matter. Nonetheless, statements that assist in defining the invention by pointing out how its technical features differ from those of a commercial product in the prior art would be allowed.

- 6.24 In respect of the number of claims in a specification—

(a) (for standard patent (O) applications), the specification must contain at least one claim (see section 37L(2)(b)(ii) of the Ordinance and section 31M(2)(b)(ii) of the Rules);

(b) (for short-term patent application), the specification must contain one or more claims but not exceeding 2 independent claims (see section 113(1A)(b)(ii) of the Ordinance and section 58(2)(b) of the Rules);

(c) subject to the aforesaid statutory requirements, the number of the claims in a patent application must be reasonable having regard to the nature of the invention claimed (sections 31S(7) (for standard patent (O) applications) and 64(4) (for short-term patent applications) of the Rules); and

- (d) the Registrar may raise an objection if there is a multiplicity of claims of a trivial nature (see also section 8.10 of the Guidelines).
- 6.25 If there are two or more claims, they must be numbered consecutively in Arabic numerals (see sections 31S(8) (for standard patent (O) applications) and 64(4) (for short-term patent application) of the Rules). Our examiners will raise an objection if the claim numbers are not Arabic whole numbers (for example, 1a, 1b, i, ii, a, b, etc.). On the other hand, no numbering is required for a single claim.
- 6.26 The claims may contain tables but only if their subject-matter makes the use of tables desirable (see sections 31Q(5) (for standard patent (O) application) and 62(9A) (for short-term patent application) of the Rules).
- 6.27 If there are drawings and the technical features of the claims would be rendered more intelligible or easier to understand by relating those features to the corresponding features of the drawings, this should preferably be done by placing the appropriate reference signs in parentheses after the features in the claims; these reference signs are not, however, to be construed as limiting the scope of a claim (see sections 31S(10) and 31S(11) of the Rules (for standard patent (O) application), and section 64(6) of the Rules (for short-term patent application)).

Parts of a claim

- 6.28 Under sections 31S(3) (for standard patent (O) applications) and 64(1) (for short-term patent applications) of the Rules, a claim must, where appropriate, be in the two-part form comprising the following—
- (a) the ***preamble*** as the statement of the prior art indicating the general technical class of the invention;
 - (b) the ***characterizing portion***, preceded by the transitional phrase, such as “characterized in that” or “characterized by” or the equivalent Chinese characters, as the body that states the novel

technical features of the invention sought to be protected by the claims.

An example of a two-part claim is as follows:

*A pencil having an eraser, characterized in that a light is attached to the pencil.**

("A pencil having an eraser" is the relevant known prior art whereas the claimed improvement is the "light attached to the pencil".)*

6.29 For the **preamble**—

- (a) it is only required for independent claims and not dependent claims;
- (b) it does not have to refer to all features of the prior art if such features are not relevant to the invention.

For example, if the invention relates to a camera but only the shutter is relevant to the invention, it is not necessary for the preamble of the claim to also refer to the other known features of a camera such as the lens.

6.30 The **characterizing portion** should state the technical features that, in combination with the features referred to in the preamble, the claims seek to protect (see sections 31S(3)(b) (for standard patent (O) application) and 64(1)(b) (for short-term patent application) of the Rules). If it is revealed upon substantive examination that one or more features in the body of the claim in combination with the features in the preamble have been known, our examiners may require that such known feature(s) be transferred to the **preamble**.

6.31 In some cases, the peculiar nature of an invention may render presentation of its claims in a two-part form unsuitable, such as when the invention is a new chemical compound or group of compounds. For reference, the EPO Guidelines for Examination exemplify the following kinds of inventions which may require a different presentation:

- (a) the combination of known integers of equal status, the inventive step lying solely in the combination;

- (b) the modification of, as distinct from addition to, a known chemical process e.g. by omitting one substance or substituting one substance for another; and
- (c) complex system of functionally inter-related parts, the inventive step concerning changes in several of these or in their inter-relationships.