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## **Examination Guidelines for Patent Applications**

Block I - Title, Specification, Claim Chart,  
Drawings and Abstract

This text is an integral part of the Patent Application Examination Guidelines. The Guidelines set out the current understanding of the Brazilian IP Statute on the content of patent applications. Other inherent exam topics are listed and discussed in the general guidelines.

Patent Division - December 4, 2013

FEDERAL CIVIL SERVICE

MINISTRY FOR DEVELOPMENT, INDUSTRY AND FOREIGN TRADE

BRAZILIAN PATENTS AND TRADEMARKS OFFICE

## **EXAMINATION GUIDELINES FOR PATENT APPLICATIONS**

### **BLOCK I**

#### **TITLE, SPECIFICATION, LIST OF CLAIMS, DRAWINGS AND SUMMARY**

Project for Resolving Patent Backlog Presidential Rule #262  
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## SUMMARY

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## CONTENTS OF PATENT APPLICATION

### CHAPTER I. TITLE

**1.01** The title of the Application must define the technical scope of the invention in a concise, clear and accurate manner, and must be the same for the request, the Specification, the summary and the sequence listings, if any. The Examiner must assess whether the title adequately represents the different claim categories. There is no need for all independent claims in the same category to be represented in the title.

**Example:** *If an application requests more than one alternative for the same independent claim category, such alternatives may be represented together.*

**1.02** If the claims are subject to alterations in category, the Examiner must ascertain whether the title requests the corresponding alteration. In an examination opinion issuing a request for the title, the Examiner may suggest a new title.

### CHAPTER II. SPECIFICATION

#### PRESENTATION MODE

**2.01** The Examiner must ascertain whether the presentation mode of the Specification complies with the following requirements:

- a. be initiated by the title;
- b. be referred to a single invention or a group of inter-related inventions that constitute a single inventive concept;
- c. have specified the technical field to which the invention is related;
- d. have indicated the state of the art deemed relevant by the applicant for understanding the invention;
- e. have disclosed the invention as claimed, in a manner whereby the technical problem and its solution may be understood, establishing any advantageous effects of the invention in terms of the relevant state of the art;
- f. have clearly expressed its novelty and have presented the technical effect attained;
- g. have listed the figures presented in the drawings, specifying their graphic representations, such as views, cross-sections, circuit layouts, block diagrams, flowcharts, graphs, etcetera;
- h. have described the invention in a consistent, accurate, clear and sufficient manner, whereby a person skilled in the art may implement it, making mention to the reference signs shown in the drawings, if any and, when appropriate, using examples and/or comparative tables, relating them to the state of the art;
- i. when appropriate, have stressed the best way of implementing the invention known by the applicant on the filing date, or the priority date, if any. The best mode of execution applies to all elements considered essential to the invention even the unclaimed ones.

**Example:** *An invention addresses an elastomer seal and the respective treatment methods for the fabrication of this seal. Although not claimed, this method is deemed essential to achieving the specific characteristics presented by the seal, and must be described in the specification as, without a description of the method, the claimed seal cannot be implemented.*

- j. have indicated, in an explicit manner, if this is not inherent to the description or nature of the invention, whereby the invention may be used or produced by any type of industry.

**2.02** The Examiner may allow a presentation other than the manner specified above, only when this allows a better understanding of the invention.

### **STATE OF THE ART**

**2.03** The Specification must include the state of the art pertinent to the invention, which may be useful for understanding the invention, as well as the search and the examination of the invention.

**2.04** The documents mentioned as representative of the state of the art must be identified, whether found in patent or non-patent literature.

**2.05** As a result of the examination, the Examiner may request the applicant to include documents on the state of the art in the Specification of the application, such as documents found during the search, for example, considering that the content of these documents does not extend beyond the original disclosure of the invention addressed in the application as originally filed.

### **TECHNICAL PROBLEM TO BE SOLVED BY THE INVENTION AND PROOF OF THE TECHNICAL EFFECT ATTAINED**

**2.06** The invention must be described in a manner that allows the technical problem to be understood, as well as the proposed solution. In order to comply with this condition, only details considered necessary for elucidating the invention should be included.

**2.07** Pursuant to Rule #127/97 [item 15.1.2(e)], it is necessary for the invention to resolve technical problems, offering a solution to such problems and be endowed with a technical effect [item 15.1.2(f)]. It is thus necessary to clearly present the technical nature of the problem to be resolved, the proposed solution and the effect attained, in order to constitute an invention.

**2.08** A patent application should not necessarily describe the best possible solution to the problem in question. The expression “technical problem” must be construed in a broad-ranging manner: This expression does not necessarily imply that a technical solution constitutes an advance on the state of the art. Thus, the problem may simply be seeking an alternative that could achieve the same outcomes through different technical paths.

**2.09** Documents related to the state of the art, identified subsequent to filing, that is, during the search or displayed on subsidies exam, may mean that the technical problem addressed by the Application must be reformulated. In this case, provided that such reformulation could be deduced by a person skilled in the art and is inherent to the matter initially disclosed, based on the application as filed, such documents may be included in the specification, in order to underscore the contribution of the invention to the state of the art.

**2.10** The word “inherent” requires that the matter not described is necessarily implicit in the application as filed, and that this would be recognized by a person skilled in the art. This characteristic of being inherent may not be established through probabilities or possibilities. The mere fact that something may result from a given set of circumstances is not sufficient.

**2.11** The reformulation of the technical problem as addressed in the previous ¶ may not be included in the claim chart.

## **INDUSTRIAL APPLICATION**

**2.12** The specification must explicitly indicate the manner in which the invention could be used by industry, should this not be inherent to the specification or the nature of the invention.

## **TITLE I. SUFFICIENCY OF DISCLOSURE**

**2.13** Sufficiency of disclosure must be assessed on the basis of the specification, which must present the invention in a sufficiently clear and accurate manner, to the point that it could be reproduced by a person skilled in the art. The specification must contain sufficient conditions that ensure the materialization of the claimed invention.

**2.14** The “person skilled in the art” for this purpose is deemed to be a person who is knowledgeable not only about the presentation of the invention as such, and its references, but is also endowed with general knowledge of the technique at the time when the application was filed. It is assumed that this person has the means available and the abilities required for routine work and experimentation usual in the technical field in question. There may be cases where it would be more appropriate to think in terms of a group of people, such as a production or research team. This may apply particularly to certain advanced technologies, such as computers and nanotechnology.

**2.15** In this context, it is necessary to ensure that the application contains sufficient technical information that would allow a person skilled in the art to:

- i. put the invention into practice as claimed, without improper experimentation; and
- ii. understand the contribution made by the invention to the state of the art to which it belongs.

**2.16** The description of the theoretical basis justifying the functioning and outcomes attained by the invention must be presented in the specification as a way of better understanding the invention, although this is not a determining factor for ensuring sufficiency of disclosure, as this criterion requires only the presentation of the description allowing the implementation of the invention by a person skilled in the art. In cases where this description is deemed essential for the search and analysis of the application, as well as for a better understanding of the invention, it must always be presented.

## **§I. BIOLOGICAL MATERIAL FILING**

**2.17** When the application addresses biological material that is essential for the practical materialization of the application, which cannot be described in the manner set forth in article 24 of the Brazilian IP Statute, and when not accessible to the public, the specification must be supplemented, even after the examination of the application, through filing the material at an institution authorized by the Brazilian IP Statute, or indicated in an international agreement.

**2.18** Should there be no institution in Brazil that is authorized by the Brazilian IP Statute or indicated in an international agreement effective in Brazil, the applicant may file a biological material with any of the international filing authorities acknowledged by the Treaty of Budapest, necessarily doing so by the patent application filing date, and this data must be mentioned in the specification of the patent application.

## **§II. SEQUENCE OF LISTINGS**

**2.19** The applicant presenting a patent application whose purpose encompasses one or more sequences of

nucleotides and/or amino acids that are fundamental for the description of the invention must represent them in a sequence of listings in order to allow an evaluation of the sufficiency of disclosure addressed by Article 24 of the Brazilian IP Statute. Brazilian IP Statute Resolution 228/09 establishes the procedures for the presentation of the sequence of listings on electronic media, substituting item 16.3 of Rule #27/97.

## **MATTER INITIALLY DISCLOSED IN THE SPECIFICATION**

**2.20** Article 32 of the Brazilian IP Statute establishes that for better clarification or definition of the Patent Application, the applicant may introduce alterations up to the request for examination, provided that they are limited to the matter initially disclosed in the application.

**2.21** There is nothing preventing the applicant from introducing amendments to the specification, providing a better description of the state of the art, as well as eliminating incoherent aspects of the text, at any time.

**2.22** The inclusion of data, parameters or characteristics of the invention not encompassed by the application originally filed constitute additional matter and, as such, may not be accepted.

**Example<sup>1</sup>:** *In a patent application addressing a chemical composition containing several ingredients, an additional ingredient added to this composition would be deemed to constitute an improper addition to the matter. Similarly, a patent application for an invention describing a bicycle frame without specifying the type of material would imply an addition of matter, if the applicant request an amendment describing such material as being aluminum, which is essential for the invention. In case of such amendment represent only the state of the art, it would be accepted.*

**Example<sup>2</sup>:** *In an invention addressing a type of rubber without explicitly disclosing at any time, for example, that the rubber is elastic, an amendment to the specification mentioning this characteristic could be accepted without this constituting an addition of matter, as this characteristic is inherent to any rubber, for a person skilled in the art, at the time of filing.*

**2.23** Amendments to the specification resulting from receipt of an examination opinion drawn up by the Brazilian IP Statute must be examined. Should the applicant present voluntary amendments to the specification on this occasion, not arising directly from the examination, they must also be examined and will be accepted, provided that they are limited to the matter initially disclosed in the application.

**2.24** After the request for examination, voluntary amendments to the specification must be accepted, provided that they are limited to the matter initially disclosed in the Application.

## **USE OF PROPER NAMES, REGISTERED TRADEMARKS OR TRADE NAMES**

**2.25** The use of proper names, registered trademarks, trade names or similar words is not permitted, when such words merely refer to the origin or a set of different products. If such a word is used, the product must be sufficiently identified, whereby the invention may be implemented by a person skilled in the art, based on the information disclosed at the time of filing.

**2.26** Exceptions occur when such words are accepted as standardized descriptive terms, having acquired a specific meaning, such as nylon or Teflon layer. In this case, such words are permitted with no need for supplementary identification, in terms of the product to which they are related.

## REFERENCE SIGNS

**2.27** The reference signs used in the drawings must be mentioned in the specification and, if applicable, in the claim chart.

**2.28** The specification and the drawings must be consistent among themselves, and the reference signs must be defined in the specification.

**2.29** The reference signs must be uniform throughout the application.

## TERMINOLOGY

**2.30** The specification must be clear, necessarily using terms acknowledged at the state of the art. Technical terms that are rarely used or specially formulated may be accepted, provided that they are adequately defined and there is no equivalent acknowledged at the state of the art.

**2.31** The adoption of this criterion must be extended to encompass foreign terms, when there are no equivalent terms in Portuguese. Terms that have already an established meaning may not be used to meaning something different, in order to avoid confusion.

**2.32** Terminology must be uniform throughout the application.

## PHYSICAL VALUES AND UNITS

**2.33** When properties are used for characterization of the material, the relevant units must be specified, if quantitative considerations are involved. Should this be addressed through an established standard (for example, standard mesh sizes) and a set of initials or some similar abbreviation is used to refer to such standard, this information must be properly presented in the specification.

**2.34** Units of weight and measure must be expressed through the International System of Units, with their multiples and sub-multiples, except for terms that are firmly established in specific technical areas such as: Btu, mesh, barrel, inches. When the unit used differs from the practice established for the sector and the International System of Units, the applicant must present the respective conversion to the International System of Units.

**2.35** For geometrical, mechanical, electrical, magnetic, thermal, optical and radioactive indications, compliance is required with the provisions set forth in the current General Measurement Units Table established by the competent Brazilian entity.

**2.36** Chemical formulas and/or mathematical equations, as well as symbols, atomic weights, specific units and nomenclature not addressed in the General Measurement Units Table established by the competent Brazilian entity must comply with established practice in the sector.

**2.37** The terminology, symbols and unit system adopted must be uniform throughout the entire application.

## GENERIC STATEMENTS

**2.38** Generic statements in the specification implying that the extension of the matter submitted to the protection

may be expanded in a vague and not precisely defined manner constitutes an irregularity, under Article 24 of the Brazilian IP Statute.

**2.39** More specifically, objections must be raised to any statement that refers to the extension of the protection in order to encompass the “spirit” of the invention. Objections must also be raised to a “combination of characteristics” or any statement implying that the invention addresses not only the combination as a whole, but also the individual characteristics or their sub-combinations.

## REFERENCE DOCUMENTS

**2.40** Documents mentioned as references in the patent application may be related to the state of the art or to a part of the disclosure of the invention. Reference documents from patent or non-patent literature related to the state of the art may be present in the application originally filed, or may be introduced at a subsequent date (see item 2.03).

**2.41** When the reference document is related to the invention, the Examiner must initially consider whether the contents of the reference document are really essential for the implementation of the invention, as understood through article 24 of the Brazilian IP Statute:

- a. if not essential, the commonplace phrase “that is included here for reference purposes” or any expression of this type may be maintained in the specification; and
- b. Should the matter addressed in the reference document be essential to ensuring sufficiency of disclosure, the Examiner must request the suppression of the above-mentioned phrase, requiring the matter to be specifically included in the specification, as the specification of the application must be self-sufficient, meaning that it can be understood in terms of the essential characteristics of the invention with no reference to any other document.

**2.42** This inclusion of essential matter or essential characteristics is nevertheless subject to the constraints established by article 32 of the Brazilian IP Statute, namely:

- a. Protection was initially claimed for such characteristics, in a manner compliant with article 25 of the Brazilian IP Statute;
- b. Such characteristics contribute to solving the technical problem underlying the invention;
- c. Such characteristics clearly belong to the description of the invention presented in the application and thus to the content of the application as filed; and
- d. Such characteristics are defined in an accurate and identifiable manner in all the technical information found in the reference document.

**2.43** Should the reference document be essential for the implementation of the invention, and should it not be available to the public on the application filing date, it may be accepted as a reference only if available to the public by the application publication date. Should it not be available, the Examiner must query the sufficiency of disclosure of the application, under article 24 of the Brazilian IP Statute.

**2.44** On an exceptional basis, should the application mention a document that has been published but is not accessible to the Examiner, and should the document be deemed essential for a correct understanding of the invention, whereby it would not be possible to conduct a meaningful search without being aware of the contents

of this document, the Examiner must issue a request for the applicant to present the document. In this case, should this reference document be written in a foreign language, this reference document must be accompanied by a translation into Portuguese.

**2.45** Should the copy of this document not be presented promptly as required for compliance with this request, and should the applicant fail to convince the Examiner that the document is not essential to conducting a meaningful search, the Examiner must issue an examination opinion, under the insufficiency of disclosure of the application resulting from the non-availability of this document, pursuant to article 24 of the Brazilian IP Statute.

**2.46** Should a document be mentioned in an application as originally filed, the relevant contents of the reference document must be deemed to form part of the content of the application, for the purpose of confirming prior filing against subsequent applications.

## **CHAPTER III. CLAIM CHART - CLAIMS**

### **GENERAL**

**3.01** The application must contain one or more claims that must:

- i. define the matter for which protection is requested;
- ii. be clear and precise; and
- iii. be under the Specification.

**3.02** Based on the matters set forth above, the number of independent and dependent claims must be sufficient to correctly define the object of the application.

### **NUMBERING**

**3.03** The claims must be numbered consecutively, in arabic numerals.

### **TITLE I. FORM, CONTENT AND TYPES OF CLAIM**

#### **PREAMBLE, CHARACTERIZING EXPRESSION AND CHARACTERIZING PART**

**3.04** As an invention generally consists of characteristics that are already known and new characteristics, in order to ensure easier understanding of what the invention represents, an independent claim must consist of:

- i. An initial part that corresponds to the title or part of the title corresponding to its respective category;
- ii. When necessary, a preamble presenting the characteristics already encompassed by the state of the art; and
- iii. Necessarily, the expression “characterized by,” followed by a characterizing part presenting the specific characteristics of the invention.

**3.05** This separation between known elements and new elements is intended merely to facilitate this distinction, as it does not alter the range or scope of the claim, which will always be defined on the basis of the sum of the characteristics presented in the preamble and the characterizing part.

**3.06** Attention must be paid to the fact that the novelty of the characteristics presented after the expression “characterized by” must always be established in relation to the set of characteristics taken as known and defined in the preamble.

**3.07** Should the preamble define characteristics A and B as being associated, and the characterizing part define characteristics C and D, it does not matter whether C and/or D are known per se, but rather whether they are known in association with A and B, meaning not only with A or only with B, but with both of them. For instance, a machine with four distinct elements, A, B, C and D, and they are all known from the state of the art. This machine that is an association of these four elements, may present novelty and inventive step.

**3.08** The formulation of the preamble may not be appropriate in a series of situations, when the invention addresses:

- i. a specific combination of known components;
- ii. Modification of known processes through the omission or substitution of a stage, in contrast to the addition of a stage;
- iii. Modification of known products through the omission or substitution of an element, in contrast to the addition of an element; and
- iv. A complex system of parts that are functionally inter-related, with the essence of the invention under this inter-relationship.

**3.09** For the specific case of process patents, the set of sequential steps is what correctly defines the request. Thus, if some of the steps in this process form part of the state of the art, it is possible that it would not be feasible to transfer them individually to the preamble without burdening the claimed process with disorder and a lack of logic. In this case, the correct positioning of the expression “characterized by” must be noted.

## TECHNICAL CHARACTERISTICS

**3.10** Claims must be worded as a function of the “technical characteristics of the invention,” which means that claims may not contain characteristics associated with commercial advantages or other non-technical aspects.

**Example:** A claim describing a sneaker with a sole and means for attaching the sole must present in the specification the means that could be used for this purpose, such as buttons, Velcro etcetera.

**3.11** In a “means plus function” type of claim, the patent application must present in its specification at least one type of materialization that presents the structural elements used to attain such functions.

**3.12** It is not necessary for each of the characteristics of the invention to be expressed only in terms of their structural elements, as functional characteristics may also be included, provided that a person skilled in the art would have no difficulty in arranging such elements in order to perform the function, at the time of the invention.

**3.13** Item 15.1.3.2(k) of Rule #127/97 establishes that claims are not accepted with segments that explain the functioning, advantages and simple use of the object. Consequently, merely explanatory segments must be distinguished from relevant functional characteristics.

**3.14** Claims addressing the use of the invention, meaning its technical application as set forth in the specification, are permitted.

## FORMULAS AND TABLES

**3.15** Claims and their specifications may contain chemical or mathematical formulas, but not drawings. Claims may contain tables, when the use thereof clarifies the matter addressed by the application.

## TYPES OF CLAIMS

**3.16** There are only two types of claims: “product claims,” which address a physical entity, and “process claims,” which encompass all activities in which some material product is needed to perform the process. The activity may involve material products, electricity and/or other processes, such as control processes.

**3.17** Examples of the “product claims” categories are: product, device, object, article, item of equipment, machine, apparatus, cooperative equipment system, compound, composition and kit; and “process claims”: process, use and method.

**3.18** For all effects, process and method are synonymous.

**3.19** A single application may present claims in one or more categories, provided that they are linked by a single inventive concept.

## TITLE II. FORMULATION OF CLAIMS

**3.20** The formulation of claims must:

- a. Begin with the title or part of the title corresponding to its respective category, containing the expression “characterized by” only once;
- b. Define clearly and accurately, in a positive manner, the technical characteristics to be protected thereby;
- c. Be fully grounded in the specification;
- d. Except when absolutely necessary, no references should be made to the specification or the drawings when describing the characteristics of the invention, such as “as set forth in the specification” or “as shown in the drawings”;
- e. When the application contains drawings of its technical characteristics, this must be accompanied by the respective reference indicators in brackets as shown in the drawings, if deemed necessary for a proper understanding thereof, noting that such reference indicators impose no constraints on the claims;
- f. Be worded with no bullet point interruptions;
- g. Have no segments explaining the functioning, advantages and simple use of the object, as this will not be accepted.

## §I. INDEPENDENT CLAIMS

**3.21** Independent claims are intended to protect specific essential technical characteristics of the invention, in its comprehensive conceptualization.

**3.22** There must be at least one independent claim for each claim category.

**3.23** The Examiner must bear in mind that the presence of claims of several categories worded differently, but

apparently with similar effects, is an option of protection for the applicant that the Examiner may not oppose through a rigorous approach, but should rather focus on an unnecessary proliferation of independent claims.

**3.24** Each independent claim must correspond to a specific set of characteristics that are essential to the materialization of the invention and only will be allowed more than one independent claim in the same category if such claims define different sets of features and essential alternatives to the invention, linked by the same inventive concept.

**3.25** Inter-related independent claims in different categories that are linked by the same inventive concept, where one of the categories is specially adapted to another, must be drawn up in a manner that clearly presents their interconnection, meaning that phrases are used in the initial part of the claim such as: “device for performing the process defined in Claim...,” “Process for obtaining the product defined in Claim...”

**3.26** Examples of inter-related claims are:

- i. Plug and socket, for interconnection;
- ii. Transmitter and its respective receivers;
- iii. Intermediate and end chemical products;
- iv. Gene, gene construction, host, protein and medication; and
- v. Product and product use.

**3.27** Between their initial part and the expression “characterized by,” independent claims must contain a preamble, when necessary, describing the characteristics that are essential for to defining the claimed matter and that are already encompassed by the state of the art (see item 3.04).

**3.28** After the expression “characterized by,” the essential and specific technical characteristics must be defined for which protection is desired, together with the aspects addressed in the Preamble (see item 3.04).

**3.29** Independent claims may underpin one or more dependent claims, being grouped in the order corresponding to the title of the application.

## **§II. DEPENDENT CLAIMS**

**3.30** Dependent claims are those that include all the characteristics of other prior claim(s), and define detailed descriptions of these characteristics and/or additional characteristics that are not deemed to constitute the essential characteristics of the invention, necessarily containing an indication of the dependence to these claim(s) and the expression “characterized by”;

**3.31** Dependent claims may not extend beyond the boundaries of the characteristics encompassed by the claim(s) to which they refer;

**3.32** Dependent claims must define, their links of dependence accurately and comprehensively, with no wordings being accepted such as “in compliance with one or more claims...,” “in compliance with the preceding claims ...” Wording such as “compliance with any one of the previous claims” and “in compliance with one of the previous claims” is accepted;

**3.33** Any dependent claim that refers to more than one claim, meaning a multiple dependence claim, must be linked to

these claims in an alternative or cumulative manner, provided that the links of dependence for the claims are structured in a manner that allows an immediate understanding of the possible combinations resulting from such dependence;

**3.34** Multiple dependence claims, whether alternative or cumulative, may underpin any other multiple dependents claim, provided that the links of dependence for the claims are structured in a manner that allows an immediate understanding of the possible combinations resulting from such dependence.

**3.35** All dependent claims referring to one or more previous claims must be grouped in a manner that ensures a concise structure for the claim chart.

### **TITLE III. CLARITY AND INTERPRETATION OF CLAIMS**

#### **GENERAL**

**3.36** The condition that claims must be clear is applicable to individual claims as well as to the claim chart as a whole. The clarity of the claims is of the utmost importance, as they define the matter to be addressed by the protection. Thus, the meaning of the terms in the claims must be clear to a person skilled in the art, based on the wording of the claim and under the specification and the drawings, if any. In view of the differences in the scope of the protection attained by various claim categories, the Examiner must ensure that the wording of the claim is clear for the category it represents.

**3.37** Claims are interpreted on the basis of the specification and drawings (and sequence listings, if any), as well as in the general knowledge of a person skilled in the art, on the filing date. When the specification defines any particular term that appears in the claim, this definition is used to interpret the claim. Claims may not be limited to what is explicitly stated in the specification and shown in the drawings, and neither may claims be bound by the scope of the examples of the claimed invention presented in the specification, compliance with the limits imposed by article 25 of the Brazilian IP Statute.

**3.38** For Markush-type claims, the Examiner must ensure that the processes for obtaining the object as described in the specification materially underpin the preparation of all the claimed compounds, meaning that the examples must be representative of all claimed compound classes.

**3.39** For cases in which a person skilled in the art, is not be able to materialize the invention as claimed, or should this require improper experimentation efforts, generic claims must be limited to the forms of implementation mentioned in the specification.

#### **INCONSISTENCIES - UNDER THE SPECIFICATION AND DRAWINGS**

**3.40** Any inconsistencies noted between the specification on the claim chart must be avoided, as this throws doubt on the extent of the protection and indicates that the claim chart is not clear, or is not properly under the specification. Such inconsistency can be one of the following types:

- i. Simple verbal inconsistency – When the specification is necessarily limited to a specific characteristic, but the claims fail to comply with this constraint, the inconsistency may be remedied through adapting the claim chart to the specification, thus curtailing its scope, pursuant to article 25 of the Brazilian IP Statute, with special

attention to article 32 of the Brazilian IP Statute. Should the specification refer to a specific characteristic, such as screws, for example, and should the claim chart mention means of fixation in general, and should the Examiner find that the invention is necessarily not limited to screws, it will be understood that there is an inconsistency between the specification and the claim chart. Another situation occurs when the claim presents a constraint, but the report fails to lay any particular stress on this characteristic. In this case, there is no inconsistency between the specification and the claim chart.

ii. Inconsistency related to apparently essential characteristics - Should it be generally known at the state of the art or constitutes established expertise, or is implicit in the invention, that a certain technical characteristic in the specification is considered as essential for the materialization of the invention, but this is not mentioned in an independent claim, this claim must not be allowed by the Examiner, under article 25 of the Brazilian IP Statute.

## GENERIC STATEMENTS

**3.41** Generic statements in the specification, as well as in the claim chart, implying that the scope of the protection may be extended in a vague manner that is not precisely defined, constitute an irregularity, pursuant to article 25 of Brazilian IP Statute. More specifically, objections must be raised to any statement referring to the scope of the protection being extended in a manner that encompasses the “spirit” of the invention. Objections must also be raised to claims addressing a combination of characteristics, for any statement that seems to imply that the protection claimed covers not only the combination as a whole, but also individual characteristics or their sub-combinations.

## ESSENTIAL CHARACTERISTICS

**3.42** An independent claim must explicitly specify all the essential characteristics needed to define the invention, unless such characteristics are implicit through the generic terms used. In other words, “bicycle” need not mention the presence of wheels.

**3.43** Should the claim refer to a process for obtaining a product of the invention, the process as claimed must ensure that, when implemented in a manner deemed reasonable for a person skilled in the art, its final outcome must necessarily be that specific product. Otherwise, there would be an internal inconsistency and consequently a lack of clarity in the claim.

**3.44** Should a claim address a product where type is well known, and the invention lies in the modification of certain aspects, it is sufficient for the claim to identify the product clearly, specifying where it is modified and in what manner this occurs. Similar remarks are applicable to claims for a device.

**3.45** The patentability of the invention depends on the technical effect obtained, whereby claims must be drawn up in a manner that includes all the technical characteristics that are considered as essential to attaining the technical effect, contained in the specification.

## USE OF RELATIVE AND/OR IMPRECISE TERMS

**3.46** The use of relative terms such as “large,” “broad,” “strong,” among others is not permitted in a claim, except for meanings that are well established in a specific technique, such as “high-frequency” for an amplifier, when this is the intended meaning. Any relative term that does not have this meaning must be replaced by a more precise term or by another that has already been described in the specification, as filed.

**3.47** Imprecise words or expressions, such as “about,” “substantially,” “approximately” among others are not permitted in the claim, regardless of whether they are deemed essential to the invention.

**3.48** Should relative terms or imprecise phrases be used in the claim, the Examiner must declare lack of clarity. Counter-arguments presented by the applicant alleging that elements missing from the text are part of the state of the art will not be accepted, as problems related to a lack of clarity will remain. Furthermore, the inclusion of these elements in the text is considered additional matter and is consequently not permitted.

### **“CONSISTING OF” VERSUS “COMPRISING”**

**3.49** The terms “comprising” and “consisting of” as well as derivatives thereof, are considered closed terms of definition for the invention. Thus, if the claim addresses a “chemical composition comprised of components A, B and C,” the presence of any additional components is excluded.

**3.50** The terms “comprehend,” “contain,” “encompass” and “include,” together with their derivatives, are considered open terms of definition for the invention, meaning that in the above example, the phrase “comprehends components A, B and C” is not limited to only these elements, and may be accepted, provided that such elements are essential for the materialization of the invention.

### **OPTIONAL CHARACTERISTICS**

**3.51** Expressions such as “preferably,” “for example,” “such as” and “more particularly,” among others must be examined with special attention in order to ensure that they do not introduce any ambiguity. These expressions do not impose a limited effect on the scope of a claim, meaning that the characteristic following any expressions such as these must be considered as fully optional.

**Example:** *In a process claim mentioning a temperature parameter “... In a range of 80°C – 120°C, preferably 100°C,” the word “preferably” does not introduce any ambiguity to this claim.*

### **REGISTERED TRADEMARKS**

**3.52** Registered trademarks or similar expressions should not be permitted in claims, as there are no guarantees that the product or characteristic associated with a trademark or similar might not be modified during the validity of the patent. On an exceptional basis, they may be authorized if the use thereof is unavoidable, and if they are generally recognized as having a specific meaning.

### **DEFINITION OF THE MATTER PRESENTED FOR PROTECTION IN TERMS OF THE OUTCOMES TO BE ATTAINED**

**3.53** As a general rule, claims that define an invention through the outcomes to be attained should not be permitted, particularly if they refer only to claiming the technical problem involved. However, they may be permitted if the invention can be defined only in such terms, or if it cannot be defined more precisely without improperly curtailing the scope of the claims, and if the outcome can be directly and positively checked through tests and procedures that are properly specified in the specification or that are known to a person skilled in the art, requiring no improper experimentation.

**3.54** A claim addressing a material that would be able to extinguish cigarette flames and where specification

presents a chemical composition for this material would not be accepted, as the material could consist of its chemical composition, rather than the outcomes to be attained by the invention, mentioned as an example.

**3.55** It must be noted that the requirements set forth above for defining the matter presented for protection in terms of the outcomes to be attained differs from those for the definition of the matter presented for protection in terms of functional characteristics (see item 3.97).

### **DEFINITION OF THE MATTER PRESENTED FOR PROTECTION IN TERMS OF PARAMETERS**

**3.56** Parameters are characteristic values that may be directly measurable properties, such as the melting point of the substance, the resistance to bending of steel, the resistance of an electrical conductor, or maybe defined as mathematical combinations containing assorted variables set forth in formulas.

**3.57** The characterization of a product through its parameters may be permitted only in cases where the invention cannot be adequately defined in any other manner, and provided that these parameters can be clearly and reliably determined, through either the indications presented in the specification or through objective procedures that are commonplace at the state of the art. This also applies to a process-related characteristic that is defined through parameters.

**3.58** Due to the possibility of the formation of different crystal networks, the polymorphs of a single chemical substance may have different physicochemical properties, such as melting points, chemical reactivity, apparent solubility, dissolving rate, mechanical and optical properties, vapor pressure and others. Consequently, they must always be defined through their physical and chemical characteristics, mentioned as an example.

**3.59** Cases in which uncommon parameters are used, even if sufficiently described, are not acceptable at first sight, due to a lack of clarity, as no significant comparison with the previous technology can be drawn. In these cases, applicant must prove, in the specification, the balance between these uncommon parameter(s) as used, and that or those used at the state of the art, which does not constitute additional matter.

**3.60** Cases in which the method and means of measurement used for the parameters must also be presented in the claim are addressed in item 3.61.

### **METHODS AND MEANS OF MEASUREMENT FOR PARAMETERS MENTIONED IN THE CLAIMS**

**3.61** The invention must be fully defined in the claim. In principle, the method of measurement is necessary for a clear definition of the parameter. Nevertheless, the methods and means of measurement for the parameter values are not necessary in the claims, when:

- i. the description of the method is so long that its inclusion would undermine the clarity of the claim due to a lack of concision or would make it hard to understand;
- ii. a person skilled in the art, would know which method to use, because there is only one method, for example, or because a specific method is used routinely; or
- iii. all known methods achieve the same results, within the measurement accuracy limits.

**3.62** However, in all other cases, the methods and means of measurement must be included in the claims, as they define the matter for which protection is sought.

## PRODUCT CLAIMS BY PROCESS

**3.63** Product claims defined in terms of a manufacturing process are permitted only if the products comply with patentability requirements, meaning that they are new and inventive, and provided that the product cannot be described in any other way. A product is not deemed to be new simply because it is produced through a new process. With regard to the analysis of novelty, a claim for product X obtained through process Y lacks novelty when a prior filing for this same product X is found, regardless of how it is obtained.

**3.64** A claim defining a product in terms of the process must be construed as a product claim. For example, the claim may be presented as “product X characterized by being obtained through process Y.” Regardless of whether the words “obtain,” “obtained,” “obtained directly,” or an equivalent expression are used in the product claim by process, the claim is still focused on the product as such, conferring full protection on the product. This type of claim may be accepted only when it is not possible to define the product per se in an adequate manner, but only through the manufacturing process.

**3.65** Consider a case in which a compound material is prepared that includes a new sintering step, and the resulting product is endowed with notable characteristics consisting of greater mechanical resistance, compared to the state of the art for materials with the same nominal composition, although the applicant is unable to describe the material per se. In this case, the product may be described in terms of the product obtained through the process.

## DEFINITION THROUGH REFERENCE TO USE OR ANOTHER OBJECT

**3.66** When a product claim (see item 3.16) defines the invention through reference to characteristics related to the use thereof, this may result in a lack of clarity.

**3.67** Consider a case in which the claim does not define just the actual product, but also specifies its relationship to a second product that is not part of the claimed product.

**Example:** *The head of an engine, in which the former is defined by the characteristics of its location on the latter.*

**3.68** Before considering a constraint on the combination of the two products, it must be recalled that the applicant has the right to independent protection for the first product.

**Example:** *A claim for a “head connected to an engine” may not be modified to a “head connectable to an engine,” nor for the head alone, as this is deemed to breach Article 32 of the Brazilian IP Statute, although this change is supported in the specification initially disclosed.*

**3.69** On the other hand, as the first product may often be produced and sold without the second product, a claim for a “head connectable to an engine” initially requested, may be modified to a “head connected to an engine” or for the head itself. Should it not be possible to provide a clear definition of the first product alone, then the claim must address a combination of the first and second products: “head connected to an engine” or “engine with a head.”

**3.70** Defining the dimensions and/or the shape of a first object in an Independent Claim may also be permitted, through general reference to the dimensions and/or shape of a second object that is not part of the first entity claimed, that is related to it through use. This is applicable especially when the size of the second object is standardized in some way.

**Example:** *In the case of a support rack for a vehicle number plate, where the support frame and the fixation elements are defined in terms of the external shape of the plate.*

**3.71** However, references to second entities that cannot be viewed as standardized may also be sufficiently clear in cases where a person skilled in the art, would have little difficulty in inferring the constraint resulting from the field of protection for the first object.

**Example:** *In the case of a roof for a circular farm stall, where the length and width of the roof are defined on the basis of the dimensions of the stall.*

**3.72** There is no need for such claims to contain the exact dimensions of the second entity, nor to refer to a combination of the first and second entities. Specifying the length, width and/or height of the first entity, with no reference to the second entity, would lead to an improper constraint on the scope of the protection.

### THE WORD “IN” OR “ON” (“EM” IN PORTUGUESE)

**3.73** In order to avoid ambiguity, the word “in” or “on” (“em” in Portuguese) must be examined with special attention in claims where it defines relationships among different physical entities (product, equipment) or among entities and activities (process, use) or among different activities. Examples of claims using the word “in” or “on” (“em” in Portuguese) in this context are:

- i. Engine head “in” a four stroke engine, comprised of...;
- ii. Tone dialing detector “in” a telephone with an automatic dialer, with the tone dialing detector comprised of...;
- iii. Method for controlling current and voltage “on” a process using means to power an electrode for an arc welding item of equipment, comprised of the following stages:...; or
- iv. Fine-tuning X... “on” a process/system/item of equipment etcetera, comprised of...

**3.74** For claims of the type indicated by examples (i) to (iii), the emphasis is on the full functionality of the sub-units, namely: “engine head, tone dialing detector, method for controlling arc welding current and voltage” instead of a complete unit within which the sub-unit is contained: four-stroke engine, telephone, welding process. This may constitute a lack of clarity, if the requested protection is limited to the sub-unit alone, or if the unit as a whole must be protected.

**3.75** As a matter of clarity, claims of this type must address either “a unit with” or “comprised of a sub-unit,” namely the “four-stroke engine with a head” or just for the sub-unit, specifying its purpose: “head for a four-stroke engine.”

**3.76** In claims of the type indicated through example (iv), the use of the word “in” or “on” does not clearly indicate whether protection is required only for the improvement, or for all the characteristics defined in the claim. Here also, it is essential to ensure that the wording is clear. However, claims such as: “use of the substance X comprised of being a composition of paint or varnish” are acceptable when based on a second use.

### USE CLAIMS

**3.77** For examination purposes, a “use” claim as expressed in “use of substance X as an insecticide,” must be deemed equivalent to a “process” claim, such as “a process for killing insects using substance X” or also “use

of an alloy X to manufacture a specific part.” Thus, a claim in the indicated manner may not be construed as directed to substance X, which is known, but rather to its intended use as defined, namely as an insecticide, or for manufacturing a specific part. However, a claim addressing the use of a process is equivalent to a claim addressing the same process.

**3.78** Independent claims such as a “product characterized by use” whether product is already known at the state of the art, are not accepted due to a lack of novelty. Should a product not be known at the state of the art, such wording of a claim is not accepted due to a lack of clarity, pursuant to article 25 of the Brazilian IP Statute, as the product must be defined in terms of its technical characteristics (see item 3.10).

**3.79** In the pharmaceutical area, claims involving the use of chemical and/or pharmaceutical products for the treatment of a new disease use a format that is conventionally called the Swiss formula:

*“Use of a formula X compound, comprised of being for the preparation of a medication to treat disease Y.”*

**3.80** It is stressed that this type of claim confers protection for use, but does not confer protection on the method of treatment, which is not considered an invention, pursuant to item VIII of article 10 of the Brazilian IP Statute. Claims of the “useful treatment,” “process/method for treatment,” “administration for treatment,” or their equivalents, constitute treatment method claims and are consequently not considered inventions, pursuant to item VIII of article 10 of the Brazilian IP Statute.

## REFERENCES TO THE SPECIFICATION OR DRAWINGS

**3.81** With regard to the technical characteristics of the invention, claims may not refer to the specification or drawings, such as “as described in part... of the specification” or “as illustrated in Figure 2 of the drawings.”

## REFERENCE SIGNS

**3.82** When the application contains drawings, the technical characteristics defined in the claims must be accompanied by the respective reference signs, shown in brackets, as presented in the drawings, should this be deemed necessary for a proper comprehension thereof, on the understanding that such reference signs impose no constraints on the claims. Should there be a large number of alternatives for a single characteristic, only the reference signs needed to understand the claim should be included.

**3.83** Reference signs, numbers and/or letters must be included not only in the characterizing part, but also in the preamble of the claims, provided that they accurately identify the elements in the drawings to which reference is made.

**3.84** Texts associated with reference signs in the claims are not accepted in brackets. Phrases such as “means of fixation (screws 13, nail 14)” or “valve assembly (valve seat 23, valve element 27, valve seat 28)” are special characteristics to which the concept of reference signs is not applicable. Consequently, it is not clear whether the characteristics added to the reference signs impose constraints. Along these lines, the correct mention must be, for example: “the hose (4) is connected to the valve (10)” instead of “the hose is connected to the valve” or “4 is connected to 10.”

**3.85** The lack of clarity also arises through phrases in brackets that do not include reference signs, such as: “brick

(concrete), molded.” In contrast, phrases in brackets with a generally accepted meaning are acceptable, such as: “(meta)acrylate,” which is a known form that encompasses acrylate and meta-acrylate. The use of brackets in chemical or mathematical formulas is also acceptable.

**3.86** However, the opposite may be permitted, meaning that the drawings may present more reference signs than those contained in the claim chart.

## **NEGATIVE LIMITATIONS**

**3.87** Each claim must define in a clear, accurate and positive manner the technical characteristics to be protected thereby, avoiding expressions that result in a lack of definition for the claim.

**3.88** However, negative constraints may be used only if the addition of positive characteristics in the claim does not clearly and concisely define the object for which protection is requested, or if such addition unduly curtails the scope of the application.

**Example<sup>1</sup>:** *Process for the production of expandable polystyrene (EPS) in the shape of beads through the polymerization of styrene in aqueous suspension in the presence of suspension stabilizers and polymerization starters soluble in conventional styrene ... characterized by the fact that the polymerization is conducted in the absence of a chain transfer agent.*

**Example<sup>2</sup>:** Formula 1 compound, characterized by R1 being halogen, with the exception of R1 being chlorine.

## **§I. GROUNDS IN THE SPECIFICATION - ARTICLE 25 OF THE BRAZILIAN IP STATUTE**

### **GENERAL REMARKS**

**3.89** Article 25 of the Brazilian IP Statute stipulates that claims must be under the specification, describing the specific characteristics of the application and also defining in a clear and accurate manner the matter for which protection is requested. This means that the matter addressed by each claim must be under the specification, with the scope of the claims not extending beyond the contents of the specification and drawings, if any, based on the contribution to the state of the art.

### **LEVEL OF GENERALIZATION IN A CLAIM**

**3.90** The appropriate wording of a claim must comply with the condition of precision stipulated in article 25 of the Brazilian IP Statute. Most claims are generalizations of one or more specific examples. The level of generalization permitted is an issue that must be analyzed by the Examiner in each case, in the light of the pertinent state of the art.

**3.91** An invention opening up an entirely new field has the right to more generalities in the claim than another addressing advances in a technology that is already known.

### **OBJECTION TO THE LACK OF GROUNDS**

**3.92** A claim presented in a generic manner, meaning that it addresses an entire class, such as for materials or

machines, may be accepted despite its broad range, if there are any grounds related thereto in the specification. Whenever the information provided does not seem sufficient to allow a person skilled in the art, to implement the matter claimed using routine experimentation or analysis methods, the Examiner must raise an objection, requesting the applicant to present arguments showing that the invention may in fact be promptly applied on the basis of the information presented in the specification or, in the absence thereof, limit the claim in this manner.

**3.93** Once the Examiner has established that a broad-ranging claim is not supported by the specification, the burden of demonstrating the contrary falls on the applicant. In this case, the Examiner may seek support in a published document in order to provide grounds for his reasoning.

**3.94** The issue of grounds is illustrated by the following examples:

- i. A claim addresses a process for treating all plant seedlings species by subjecting them to a controlled cold shock, in order to produce specific outcomes, while in the specification, this process is applied only to a single plant species. As it is well known that plants vary widely in their characteristics, there are well-founded reasons to believe that the process is not applicable to all plant seedlings. Unless the applicant supplies convincing evidence that the process is nevertheless suitable for general use, it must limit the claim chart in the application to the plant species mentioned in the specification. Merely stating that the process is applicable to all plant seedlings is not sufficient;
- ii. A claim refers to a specific method for treating “synthetic resin moulds” in order to obtain certain changes in the physical characteristics of the resin. All the examples described are related to thermoplastic resins, and the method seems to be inadequate for thermofixed resins. Unless the applicant can demonstrate that the method is nevertheless applicable to thermofixed resins, it must limit its claim to thermoplastic resins; and
- iii. A claim refers to fuel oil compositions that have a specific desired property. The specification provides grounds for a manner of obtaining fuel oils with this property, achieved through the presence of defined quantities of a specific additive. No other way of obtaining the fuel oils with the desired properties is described in the Report. The claim makes no mention of the additive. In this case, the claim is not fully under the specification.

## **LACK OF GROUNDS VERSUS INSUFFICIENCY OF DISCLOSURE**

**3.95** It must be noted that, despite an objection based on a lack of grounds constituting an objection under article 25 of the Brazilian IP Statute, it may often be deemed to constitute an objection based on insufficiency of disclosure of the invention, pursuant to article 24 of the Brazilian IP Statute (see item 2.13), as shown in the examples presented in item 3.92. In this context, the objection lies in the fact that the patent application as disclosed is insufficient to allow a person skilled in the art to implement the “invention” throughout the entire field claimed, although sufficient for a more restricted “invention.” Compliance with both conditions is required in order to validate the principle that the wording of the claim must be supported on the specification of the patent application.

**3.96** It has to be observed that the sufficiency of disclosure of the invention must be ascertained only in the specification, while article 25 refers to the grounds for the claim chart in the specification.

## **DEFINITION IN TERMS OF FUNCTION**

**3.97** A claim may define a characteristic broadly, in terms of its function, meaning as a functional characteristic, even when only one example of the characteristic is given in the specification, if a person skilled in the art feels that other means may be used for the same function (see also item 3.10 and 3.53).

**3.98** The phrase “means of detecting the terminal position” in a claim may be provided with grounds through a single example that is comprised of a cut-off switch, as it is clear to a person skilled in the art that a photo-electric cell or an extensometer may also be used.

**3.99** However, if the entire content of the application conveys the impression that a function must be performed in a certain manner, with no indications that alternative means are foreseen, and the claim is worded in such a way that it encompasses other means, or all means, of performing a function, then such claim is not acceptable. In this case, the specification does not offer support for the claim chart when it merely affirms in vague terms that other means may be used, if there is no clear definition of what they might be or how they might be used, thus breaching article 25. It is thus necessary to reword the claim, in order to limit its scope.

### **SUBJECT MATTER PRESENTED IN THE CLAIM CHART AND NOT MENTIONED IN THE SPECIFICATION**

**3.100** When a subject matter , object of protection is clearly disclosed in a claim submitted in the application as filed, but is not mentioned in any part of the specification, such subject matter may be included in the specification, provided that the contents thereof comply with article 24 of the Brazilian IP Statute.

**3.101** The opposite situation, when a subject matter is contained in the specification and is not claimed up to the request for examination of the application, it may not then be claimed, except for restricting the claim chart.

## **§II. UNITY OF INVENTION - ARTICLE 22 OF THE BRAZILIAN IP STATUTE**

### **GENERAL REMARKS**

**3.102** The patent application must refer to a single invention or a group of inventions that are inter-related in a manner that constitutes a single inventive concept. When a patent application refers to a group of inventions that are inter-related in a manner that constitutes a single inventive concept, this may give rise to a plurality of independent claims in the same category, provided that they define different sets of alternative characteristics that are essential to the implementation of the invention (see item 3.21).

**3.103** A single inventive concept or the unity of the invention is understood as consisting of several claimed inventions that present a technical relationship among themselves, represented by one or more special technical characteristics that are the same or corresponding for the claimed inventions.

**3.104** The expression “special technical characteristics” refers to the technical characteristics that constitute a contribution to the state of the art and that are common or correlated to each of the claimed inventions. Once the special technical characteristics have been identified for each of the inventions, it must be determined whether or not there is a technical relationship among the inventions conferred by the above-mentioned special technical characteristics.

**3.105** It must be stressed that, in an initial analysis, the unity of the invention must be considered among the independent claims presented in the patent application.

**3.106** Should there be a lack of novelty or inventive step in an independent claim, the other dependent claims must be analyzed not only in terms of merit, but also for the existence of a common inventive concept (see also item 3.135).

**3.107** Whenever an application fails to present the unity of the invention, the Examiner must raise an objection based on article 22 of the Brazilian IP Statute.

### **SPECIAL TECHNICAL CHARACTERISTICS**

**3.108** The inter-relationship among the inventions stipulated by article 22 of the Brazilian IP Statute must be a technical relationship, that is expressed in the claims in terms of the same or corresponding special technical characteristics. In any claim, the expression “special technical characteristics” means one or more characteristics that define a contribution made by the claimed intervention as a whole to the state of the art, construed on the basis of the specification and the drawings, if any. With the specific technical characteristics of each invention identified, it is necessary to determine whether or not there is a technical relationship among the inventions, and whether this relationship involves these special technical characteristics or not. There is no need for the special technical characteristics of each invention to be the same. The required inter-relationship may be found among corresponding special technical characteristics.

**Example:** *In a specific claim, the special technical characteristic that provides resilience is a metal spring, while in another claim, it is a rubber block.*

**3.109** Inter-related elements must be specially adapted to each other. Should these elements have other applications, and if the above-mentioned relationship is merely one among several possibilities, it is felt that this does not constitute the inter-relationship needed to underpin the unity of the invention.

**Example:** *A claim addressing non-slip artificial grass is presented together with another claim for a soccer ball made from a material that is particularly suitable for this type of pitch, which may also be used on other types of grass or pitches. In this case, it is felt that there is no unity of invention, despite the ball presents a better performance on the specific pitch as mentioned.*

**3.110** A plurality of independent claims in different categories may constitute a group of inventions that are inter-related among themselves in a manner that forms a single inventive concept. The following combinations of claims in different categories are permitted in a single application, as shown in the following examples:

- i. an Independent claim for a specific product, an independent claim for a process specially adapted for the fabrication of the product in question, and an independent claim for a use of the product in question; or
- ii. an independent claim for a specific process and an independent claim for a device or means specifically designed to implement the process in question; or
- iii. an independent claim for a specific product, an independent claim for a process specially adapted for the fabrication of the product in question, and an independent claim for a device or means specifically designed to perform this process.

**3.111** In a claim of the type indicated by example (i), the process especially adapted for the fabrication of the product, if the process results in the claimed product, meaning that if the process is really appropriate for attaining the claimed product and consequently defines a special technical characteristic between the claimed product and process. A fabrication process and its product may not be deemed to lack unity of invention due solely to the fact that the fabrication process is not limited to the fabrication of the claimed product.

**3.112** For a claim of the type mentioned in example (ii), the device or means are specifically designed to perform

the process, the device or means is appropriate to perform the process and thus defines a special technical characteristic between the claimed device or means and the claimed process. On the other hand, it is irrelevant whether the device or means can or cannot be used for performing another process, or whether the process can also be performed using alternative devices or means.

**3.113** Unity of invention may be found in an application presenting claims in one or more different technical fields, provided that there is a common or corresponding “special technical characteristic” between these claims.

**Example:** *An application presents an independent claim for a polymer G, as well as another independent claim for a type of artificial grass made from the polymer G, for use on soccer pitches. In this case, although involving different technical fields, there is a unity of invention in the application, as the polymer G is a “special technical characteristic” that is common to these claims.*

**3.114** An application may contain more than one independent claim in the same category only if the subject matter presented for protection involves one of the following situations:

- i. a plurality of inter-related products;
- ii. different uses for a product or item of equipment; or
- iii. different sets of alternative characteristics that are essential for the implementation of the invention, connected through the same inventive concept.

**3.115** Furthermore, it is essential that a single general inventive concept interconnects the claims in various categories. The presence in each claim of expression such as “specially adapted” or “specially designed” does not necessarily imply that a single general inventive concept is present.

#### **LACK OF UNITY OF INVENTION, A PRIORI OR POSTERIORI**

**3.116** The lack of unity of invention may be evident directly a priori, meaning considering the claims with no search for prior art documents, or may appear only a posteriori, meaning after the state of the art has been taken into consideration, consisting of documents that may be presented in the application, as well as those found during the search.

**3.117** In a posteriori analysis of the unity of invention, if one or more documents constituting the state of the art pertinent to the invention show that the special technical characteristic is known, the independent claims must be analyzed for the existence of some other special technical characteristic that is common among them (see also item 3.135 for dependent claims).

**3.118** A processing flowchart illustrating the analysis of the unity of an invention is presented in Appendix I of these Guidelines.

**3.119** Should an application be deemed to lack unity of invention a priori, this must be reported by the Examiner through a notification in an examination opinion, with remarks on how to clearly and accurately identify the different unities of invention found in the application, or unified and interconnected groups of inventions, notifying the applicant of the need to exclude claims extending beyond the unity of the invention and/or the division of the application, rather than article 22 of the Brazilian IP Statute [item (i) of the flowchart]. In this case, a search

report must be issued on the basis of the first unity of invention claimed. The Examiner must await a reply from the applicant, after which he may:

- i. reject the application due to a lack of unity and the absence of technical grounds provided by the applicant to justify the existence of the unity of invention and the application with no modifications; or
- ii. continue with an examination of the application, should the applicant present convincing arguments for the existence of unity of invention, or should the claim chart have been limited to a single inventive concept.

**3.120** Having considered the existence of unity of invention a priori through identifying the special technical characteristic found among the claims, the Examiner must proceed with the search for this characteristic among the independent claims [item (ii) of the flowchart]. Should this characteristic not be known at the state of the art, the application presents unity of invention a posteriori, with the Examiner necessarily supplementing the search for the entire claim chart [item (iii) of the flowchart], and then undertaking an examination of the merit of the application [item (iv) of the flowchart]. Should this characteristic be known at the state of the art, the Examiner must decide whether the search conducted was sufficient to encompass all the claimed subject matters addressed in the claim chart [item (v) of the flowchart]. If not, the application does not present unity of invention a posteriori, with the Examiner notifying the applicant as stipulated in article 22 of the Brazilian IP Statute [item (vi) of the flowchart] and presenting a search report, proceeding in the same manner as for a lack of unity of invention a priori, conducting the search [item (i) of the flowchart].

**3.121** The lack of unity of invention may not be raised nor pursued on the basis of a narrow, literal academic approach. This is particularly valid in cases in which the Examiner notes that additional efforts allocated to the application search are limited [item (iv) of the flowchart].

**3.122** An application presenting several classifications for its independent claims does not necessarily indicate a lack of unity of invention. A practical and broad-ranging analysis must be conducted of the level of inter-dependence among the inventions presented, compared to the state of the art disclosed by the search report.

## INTERMEDIATE AND END PRODUCTS

**3.123** The status of unity of invention must be deemed to be present within the context of intermediate and end products, where:

- i. the intermediate and end products have the same essential structural elements, meaning that their basic chemical structures are the same or their chemical structures are closely inter-related in technical terms, with the intermediate product including a structural element that is essential in the end product; and
- ii. the intermediate and end products are technically inter-related, meaning that the end product is produced directly from the intermediate product or is separated therefrom by a small number of intermediate products, all containing the same essential structural element.

**3.124** Unity of invention may also be present among intermediate and end products whose structures are not known, between an intermediate product with a known structure and an end product with an unknown structure, or between an intermediate product with an unknown structure and an end product with an unknown structure, mentioned as examples. In these cases, there must be sufficient evidence to conclude that the intermediate and end products are closely inter-related in technical terms, when the intermediate product contains the same essential element as the end product or embodies an essential element in the end product, mentioned as examples.

**3.125** Different intermediate products used in different processes for the preparation of the end product may be claimed, provided that they have the same essential structural element. Intermediate and end products may not be separated in the process leading from one to the other, by an intermediate product that is not new, which represents the special technical characteristic conferring unity of invention on the intermediate and end products. When different intermediate products for different structural parts of the end product are claimed, unity is not present among the intermediate products. If the intermediate and end products are families of compounds, each intermediate compound must correspond to a compound claimed in the end products family. However, some end products may not have a compound corresponding to the intermediate product family, meaning that these two families need not be completely congruent.

**3.126** The simple fact that, in addition to the capability of being used to produce end products, the intermediate products also present other possible effects or properties may not adversely affect the unity of the invention.

**3.127** Intermediate products are illustrated in the following examples:

**Example<sup>1</sup>:** *Claim 1: New product with structure A - intermediate compound*

Claim 2: Product prepared through the reaction between the intermediate compound with structure A and a compound X - end product

**Example<sup>2</sup>:** *Claim 1: Product of the reaction between A and B - intermediate*

Claim 2: Product prepared through the reaction between the intermediate compound and substances X and Y - end product

**3.128** For the types indicated in examples 1 and 2, the chemical structures of the intermediate and/or end products are not known. In example 1, the structure of the product addressed by Claim 2 – end product – is not known. In example 2, the structures of the products addressed by Claim 1 – intermediate and Claim 2 – end product – are unknown.

**3.129** There is unity of invention if there is evidence leading to the conclusion that the characteristic of the end product that is an inventive characteristic, depending on the characteristics of the intermediate product, if the purpose of using the intermediate products in the types shown in examples 1 and 2 is to modify certain properties of the end product. The evidence may lie in the data presented in the specification, showing the effects of the intermediate product on the end product. If there is no such evidence, then there is no unity of invention based on the relationship between the intermediate and end products.

## **ALTERNATIVES (“MARKUSH GROUPINGS”)**

**3.130** When a Markush grouping addresses alternatives for chemical compounds, they will be considered as being similar in nature, provided that the following criteria are met:

- i. all the alternatives have a property or activity in common; and
- ii. there is a common structure, meaning that a significant structural element is shared by all the alternatives or, in cases where the common structure cannot be the only criterion for establishing the unity of the invention, all the alternatives belonging to an acknowledged class of chemical compounds at the state of the art, to which the invention belongs.

**3.131** Verifying whether a group of inventions is interconnected in a manner that constitutes a single general inventive concept must be conducted separately if the inventions are addressed by separate claims or through the alternatives presented in a single claim.

**3.132** Alternative forms of an invention may be claimed through a plurality of independent claims, as indicated in item 3.108, or in a single claim. An independent or dependent claim may address alternatives, provided that the number and presentation of the alternatives in a single claim does not make it obscure or hard to understand, and provided that the claim presents unity of invention, for example: a motor characterized by gearing A fabricated with material X or Y or Z. For a single claim, the presence of two alternatives as independent forms may not be immediately evident. However, in both cases, the same criteria must be deployed in order to decide whether or not there is unity of invention, and the lack of unity of invention may also exist within a single claim.

### INDIVIDUAL CHARACTERISTICS IN A CLAIM

**3.133** Unity of invention is present in a claim that consists of a combination of individual characteristics, where these characteristics present a technical inter-relationship.

**3.134** In cases where this technical inter-relationship does not exist, but what occurs is a mere juxtaposition of elements, there are no grounds for alleging a lack of unity for the invention.

### DEPENDENT CLAIMS

**3.135** No objection raised over a lack of unity of invention a priori is justifiable for a dependent claim, based on the general concept that what they have in common is the object of the independent claim, which is also contained in the dependent claim.

**Example:** Assume that Claim 1 addresses a turbine rotor blade in a specified manner, while Claim 2 addresses a “turbine rotor blade as described in Claim 1, comprised of alloy Z.”. The special technical characteristics linking the dependent claim to the independent claim for the turbine rotor is the “turbine rotor blade shaped in a specific manner.”

**3.136** When an independent claim is not patentable, the unity of invention among its dependent claims must be given careful consideration. The other remaining dependent claims must be assessed to see whether they present the “special technical characteristics” required to endow the claim chart with unity of invention.

### DIVISIONAL APPLICATION ANALYSIS

**3.137** For the purposes of article 26 of the Brazilian IP Statute, the “original application” is deemed to be the first application filed, which may be divided only through to the end of the initial examination. Further divisional applications that have already been divided will not be accepted. Decisions must be taken simultaneously on the original application and its divisionals.

**3.138** The issue related to the analysis of the claims, as well as the patentability requirements, breaching article 32 of the Brazilian IP Statute by extending the scope addressed in the original application, and seeking dual protection, is a matter that must be explored in the substantive examination, meaning after the divisional application notification is published in the Brazilian IP Statute Official Gazette under dispatch code 2.4.

**3.139** Furthermore, during the substantive examination of the divisional application, with notification under dispatch code 2.4 published in the BRPTO Official Gazette, the Examiner must analyze item II of article 26 of the Brazilian IP Statute, verifying whether the matter addressed by the divisional application exceeds that disclosed in the original application. Having complied with this criterion, the examination will continue. Otherwise, the divisional application will be dismissed, through an announcement published under dispatch code 11.12 in the Brazilian IP Statute Official Gazette, indicating the reasons why it was dismissed. Should the matter addressed by the application exceed the matter disclosed in the original application, the Examiner must indicate one or more segments where the added matter was noted.

**3.140** As stipulated in item 6.1 of Rule #127/97: “The patent application may be divided into two or more applications up to the end of the examination:

- a. At the request of the applicant, even when the application presents a group of inventions that are inter-related through the same inventive concept; (*Wording to be added to the version in effect of Rule #127/97*);
- b. Pursuant to the examination opinion, when the technical examination shows that the application contains a group of inventions that comprise more than one inventive concept or more than one utility model. (*Wording to be added to the version in effect of Rule #127/97*)

**3.141** Should a divisional application be generated from a matter that has already been examined and did not present the merit needed for patentability, this must be rejected, with the same objections remaining valid on such merit.

## UNITY OF INVENTION AND DUAL PROTECTION

**3.142** The procedure for dividing a patent application must consist of the removal of part of the matter claimed presented in the original application, in order to constitute the divisional application(s). Merely replicating part of the matter claimed in the original application in order to constitute a divisional application, in fact, results in a multiplication of the application, rather than a division.

**3.143** During the substantive examination of the divisional application, should there be any increase in the scope claimed, compared to the original application, the examiner must issue an examination opinion based on article 32 of the Brazilian IP Statute, as alterations to the claim chart may be introduced only through to the time of the examination of the original application.

**3.144** In its item 6.1.1., Rule #127/97 stipulates that divisional applications may not imply dual protection for the invention or utility model. Article 6 of the Brazilian IP Statute states that the author of an invention or utility model will be assured the right to obtain the patent assuring ownership thereof. For a better understanding of this Article, two patents may not be awarded for a single invention or utility model.

**3.145** The existence of dual protection in a divisional application must be analyzed through comparing its claim chart with the claim chart in the original application, and with the claim charts in the other divisional applications, if any. In this case, the divisional application must be rejected, for failing to comply with the provisions set forth in article 6 of the Brazilian IP Statute.

**3.146** Should a divisional application address a matter more specific than that covered by the original application from which it derives, the technical examination of this divisional application must be rejected for failure to comply

with the provisions set forth in article 6 of the Brazilian IP Statute, as this implies dual protection, because the broader matter addressed in the original application already encompasses the more detailed matter is addressed in the divisional application.

**3.147** A claim considered to constitute an alternative implementation of the invention and included in the claim chart presented in the original application may be withdrawn from the original application and addressed by a divisional application, at the decision of the applicant, even if such claim falls within the scope of the inventive concept claimed in the original application.

## CHAPTER IV. DRAWINGS

**4.01** Should drawings be presented, they must be listed in the specification, by specifying their graphic representations, such as: views, cross-sections, perspectives and electric circuit diagrams. When the specification mentions an element in the drawing(s), such element must be accompanied by its reference sign in brackets, such as: “the hose (4) is connected to the valve (10).”

**4.02** It is noted that the terminology and the symbols must be uniform throughout the entire application.

**4.03** If the quality of the drawings presented is not good enough for proper visualization, the Examiner must issue a request, under article 24 of the Brazilian IP Statute and with attention to article 32 of the Brazilian IP Statute.

**4.04** The drawings must preferably comply with the matters established in the Brazilian standards for technical drawings. Along these lines, the Examiner may issue a requirement, in the case of drawings prepared by hand, for example.

**4.05** The presentation of reproductions of photographs instead of figures will be accepted only in cases when this is the only possible way of graphically representing the object addressed by the applications, such as metallographic structures, and provided that such reproductions are clear enough to allow the visualization of all the details of the object.

**4.06** Color photographs are accepted only when this is the sole possible way of graphically representing the object addressed by the application. Should the quality of the presented photographs not be good enough for proper visualization, the Examiner may not issue a request for the presentation of better quality photographs, due to the risk of adding matter. The material initially presented must be accepted for examination.

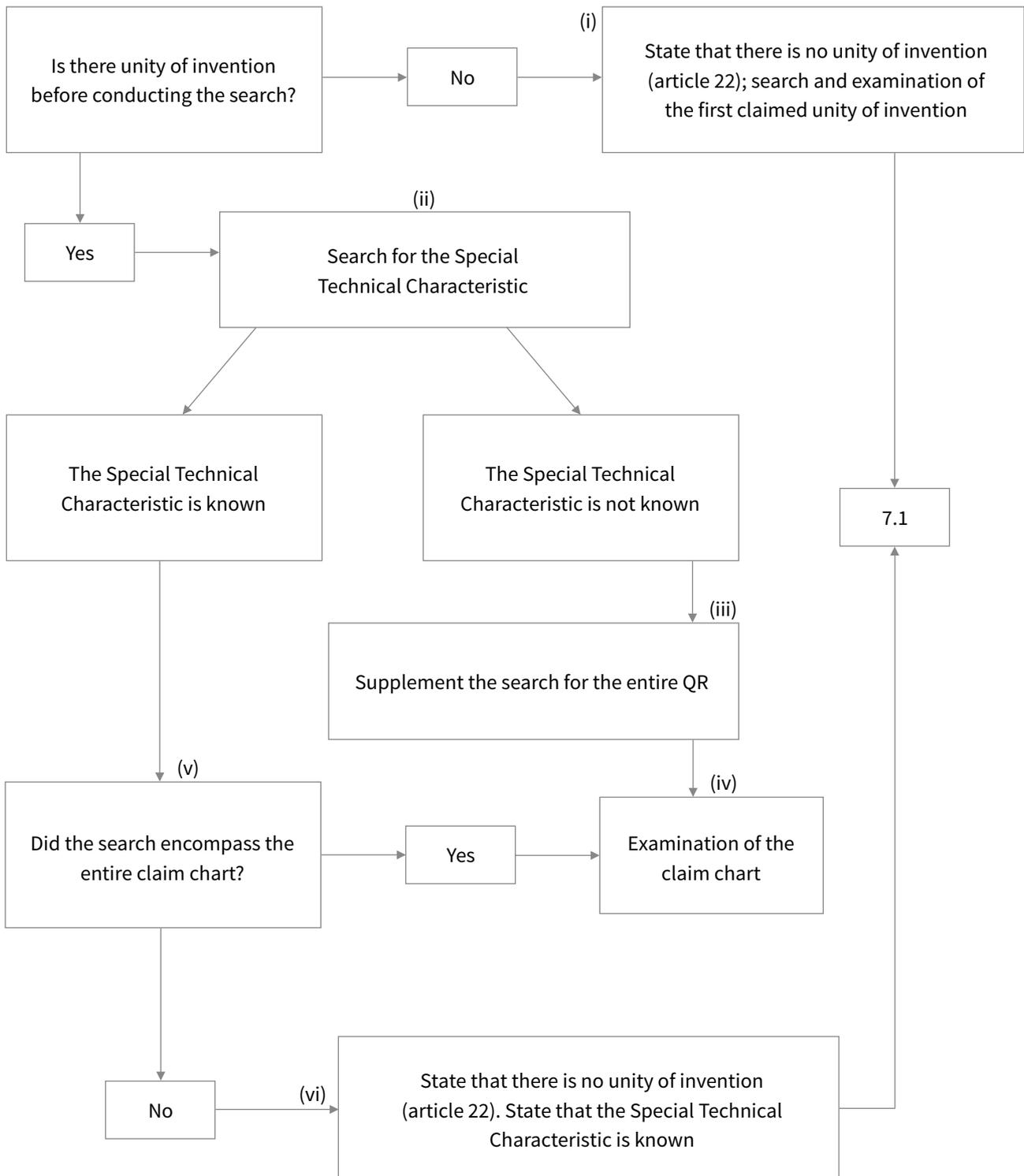
## CHAPTER V. ABSTRACT

**5.01** As many databases are used, consulting only summaries and titles, the abstract must contain key words for easy retrieval. This is due to the need for the correct dissemination of the technology encompassed by the invention to society as a whole.

**5.02** Furthermore, bearing in mind that users consult the contents of the abstract in order to decide whether to read the document in full, this must provide a concise description with an indication of the technical field of the invention, a technical explanation of the invention as such, and possibly also its main application.

## APPENDIX I

### UNITY OF INVENTION ANALYSIS PROCESSING FLOWCHART



## APPENDIX II

### MODIFICATIONS TO RULE #127/97

#### 6. DIVISIONAL APPLICATIONS

**6.1** The patent application may be divide into two or more segments through to the end of the examination:

- a. By an applicant request, even when the application presents a group of inventions that are inter-related through the same inventive concept; *(Wording to be added to the version in effect of Rule #127/97)*
- b. Pursuant to an examination opinion, when the technical examination shows that the application contains a group of inventions that comprise more than one inventive concept or more than one utility model; *(Wording to be added to the version in effect of Rule #127/97)*

**7.5 End of Examination** – For the purposes of articles 26 and 31 of the Brazilian IP Statute, the end of the initial stage of the examination is deemed to occur on the date of the conclusive examination opinion on patentability, or the 30th day prior to the publication of the decision on the approval, rejection or definitive dismissing of the application, whichever occurs later. *(Wording to be added to the version in effect of Rule #127/97)*

#### 15.1.3.2 WORDING OF CLAIMS

- a. Claims must begin with the title or the part of the title corresponding to the respective category, and may contain the phrase “characterized by” once only; *(Wording to be added to the version in effect of Rule #127/97)*
- b. Each claim must clearly and precisely define in a positive manner the technical characteristics to be protected thereby; *(Wording to be added to the version in effect of Rule #127/97)*
- c. With regard to the characteristics of the invention, claims may not contain references to the specification or the drawings such as “as described in part... of the specification” or “as represented by the drawings”; *(Wording to be added to the version in effect of Rule #127/97)*
- d. Claims will not be accepted with explanatory segments addressing the functioning, advantages and simple use of the object; *(Wording to be added to the version in effect of Rule #127/97)*

#### 15.1.3.2.1 INDEPENDENT CLAIMS

- a. Such claims are intended to protect the specific technical characteristics that are essential to the invention as a whole, with each category of claim having the right to at least one independent claim; *(Wording to be added to the version in effect of Rule #127/97)*
- b. Independent claims in different categories that are linked together by the same inventive concept, in which one of the categories is especially adapted to another must be worded in a manner that clearly shows such interconnection, using phrases in the initial part of the claim such as, for example: “device for performing the process defined in claim...,” “Process for obtaining the product defined in claim...”; *(Wording to be added to the version in effect of Rule #127/97)*
- c. Independent claims may serve as the basis for one or more dependent claims, being grouped in the order corresponding to the title of the application. *(Wording to be added to the version in effect of Rule #127/97)*

### 15.1.3.2.2 DEPENDENT CLAIMS

- a. With unity of invention maintained, these are claims that include all the characteristics of other prior claim(s) and define the details of such characteristics and/or additional characteristics that are not deemed to constitute essential characteristics of the invention, necessarily containing an indication of the dependence of such claim(s) and the expression “characterized by”; *(Wording to be added to the version in effect of Rule #127/97)*
- b. The relationships of dependence must be defined precisely and comprehensively for dependent claims, not accepting wording such as “pursuant to one or more of the claims...,” “pursuant to the preceding claims...,” “pursuant to any of the prior claims,” or similar. Wording such as “pursuant to any one of the prior claims” and “pursuant to one of the prior claims” is accepted; *(Wording to be added to the version in effect of Rule #127/97)*
- c. Any dependent claim addressing more than one claim (multiple dependence claim) must refer to these claims in an alternative or cumulative manner (worded as additions), with only one of the wordings – either alternative or cumulative – being permitted for all multiple dependence claims, provided that the relationships of dependence of the claims are structured in a manner that allows an immediate understanding of the possible combinations resulting from such dependences; *(Wording to be added to the version in effect of Rule #127/97)*
- d. Whether alternative or cumulative, multiple dependence claims may serve as the basis for any other multiple dependence claim, provided that the relationships of dependence of the claims are structured in a manner that allows an immediate understanding of the possible combinations resulting from these dependences. *(Wording to be added to the version in effect of Rule #127/97)*
- e. All dependent claims referring to one or more prior claims must be grouped in a manner that ensures a concise structure for the claim chart. *(Wording to be added to the version in effect of Rule #127/97).*

**15.3.2.1** Units of weight and measurement must be expressed through the International System of Units, their multiples and sub-multiples, except for terms established in specific technical areas, such as; Btu, mesh, barrel, inches. *(Wording to be added to the version in effect of Rule #127/97)*



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