Unity of Invention and Protest Procedure

Lack of unity of invention before ISA (Rule 40)

1. The unity of invention criteria are set in Rule 13 and Annex B to the Administrative Instructions (see also Section 206 of the Instructions).
2. Where there are several inventions, the first claimed invention ("main invention") is always searched; further inventions are searched only if additional search fees are paid.
3. The ISA will invite the applicant to pay additional search fees. (ISA/EP will send the results of a partial search on the main invention together with the invitation)
4. The applicant may pay any or all additional fees under protest.
5. Failure to pay additional fees does not affect the application; however, the additional inventions will not be searched and, subsequently, the claims relating to unsearched inventions need not be examined by the IPEA.

Protest procedure (Rule 40.2)

1. If the applicant pays any or all additional fees under protest, the ISA carries out the search on the additional inventions and, in parallel, reviews the invitation to pay additional fees
2. If, upon review, the ISA concludes that the invitation was not justified, the additional search fees will be refunded
3. If, upon review, the ISA concludes that the invitation was justified,
   - ISA/US — the protest is denied.
   - ISA/EP — the applicant will be invited to pay a protest fee for the examination of the protest
     — additional search fees will be refunded to the extent the protest is found justified
     — the protest fee will be refunded only if the protest is found entirely justified
4. The applicant may request that the text of the protest and decision thereon be notified to the designated Offices. (Attention: the designated Offices may require that the applicant furnish a translation thereof.)

Lack of unity of invention before IPEA (Rule 68)

1. Unity of invention based on same criteria as for international search (Rules 13 and 68)
2. IPEA may also hold lack of unity of invention under Rule 68 and send an invitation to restrict or pay additional examination fees
3. Applicant can select invention to be examined as "main invention" and those inventions for which additional fees are paid
4. Payment of additional fees may be made under protest
5. Applicant may be required to pay a protest fee after a prior review
6. Decision on protest made in same manner as for international search

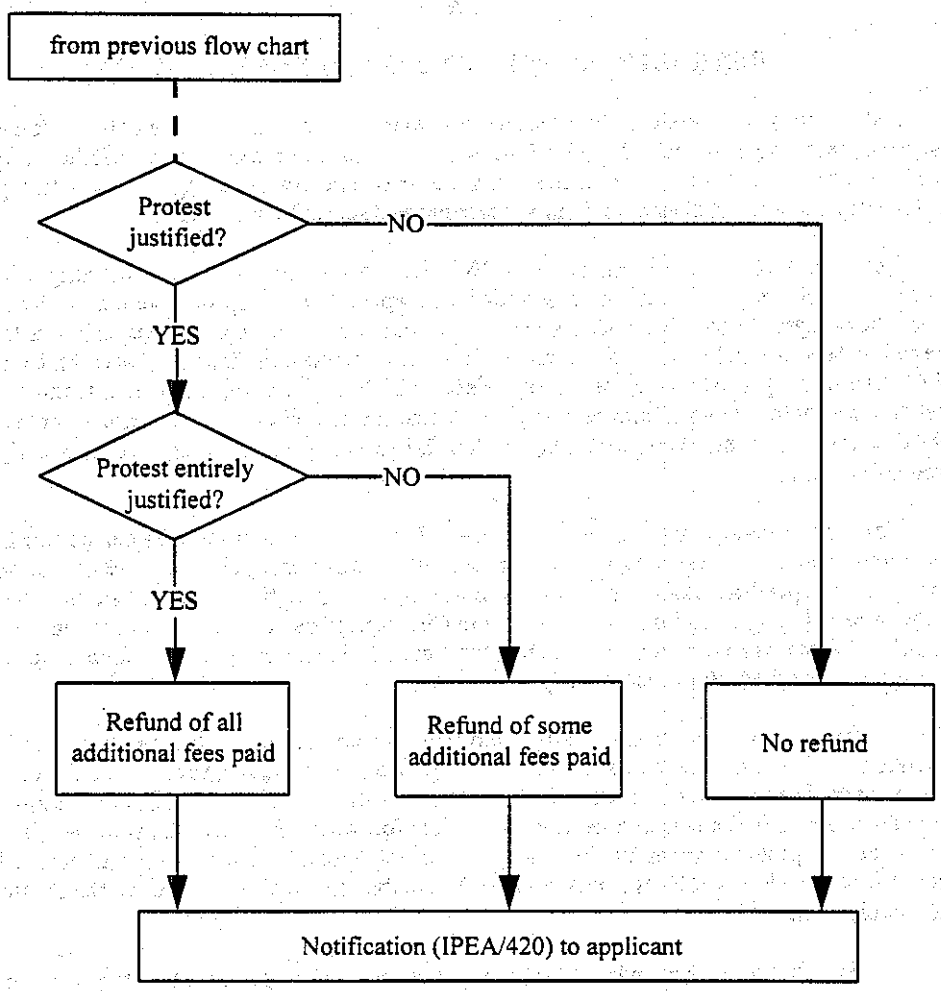
Relevant provisions of the US law concerning unity of invention under the PCT

Generally	37 CFR 1.475 (Unity of invention before the ISA, the IPEA, and during the national stage)
	Caterpillar Tractor Co. v. Commissioner of Patents and Trademarks, 231 USPQ 590 (E.D. Va. 1986)
ISA/US	37 CFR 1.476 (Determination of unity of invention) 37 CFR 1.477 (Protest to lack of unity of invention) MPEP Section 1850
IPEA/US	37 CFR 1.488 (Determination of unity of invention) 37 CFR 1.489 (Protest to lack of unity of invention) MPEP Section 1875
DO/EO/US	35 USC 372(b)(2) * 37 CFR 1.499 MPEP Section 1893.03(d)

* *"... the Commissioner may cause the question of unity of invention to be re-examined under Section 121 of this title**, within the scope of the requirements of the Treaty and the Regulations ..."*

** *ed. note: (Divisional applications)*

Unity of Invention before the IPEA (Article 34(3)(a) and Rule 68) (continued)



Principles for the interpretation of the method contained in Rule 13.2, in the context of each of those situations are set out below. It is understood that the principles set out below are, in all instances, interpretations of and not exceptions to the requirements of Rule 13.2.

Examples to assist in understanding the interpretation on the three areas of special concern referred to in the preceding paragraph are set out below.

(e) **Combinations of Different Categories of Claims.** The method for determining unity of invention under Rule 13 shall be construed as permitting, in particular, the inclusion of any one of the following combinations of claims of different categories in the same international application:

(i) in addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of the said product, and an independent claim for a use of the said product, or

(ii) in addition to an independent claim for a given process, an independent claim for an apparatus or means specifically designed for carrying out the said process, or

(iii) in addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of the said product and an independent claim for an apparatus or means specifically designed for carrying out the said process,

it being understood that a process is specially adapted for the manufacture of a product if it inherently results in the product and that an apparatus or means is specifically designed for carrying out a process if the contribution over the prior art of the apparatus or means corresponds to the contribution the process makes over the prior art.

Thus, a process shall be considered to be specially adapted for the manufacture of a product if the claimed process inherently results in the claimed product with the technical relationship being present between the claimed product and claimed process. The words "specially adapted" are not intended to imply that the product could not also be manufactured by a different process.

Also an apparatus or means shall be considered to be "specifically designed for carrying out" a claimed process if the contribution over the prior art of the apparatus or means corresponds to the contribution the process makes over the prior art. Consequently, it would not be sufficient that the apparatus or means is merely capable of being used in carrying out the claimed process. However, the expression "specifically designed" does not imply that the apparatus or means could not be used for carrying out another process, nor that the process could not be carried out using an alternative apparatus or means.

(f) **"Markush Practice."** The situation involving the so-called "Markush practice" wherein a single claim defines alternatives (chemical or non-chemical) is also governed by Rule 13.2. In this special situation, the requirement of a technical interrelationship and the same or corresponding special technical features as defined in Rule 13.2, shall be considered to be met when the alternatives are of a similar nature.

(i) When the Markush grouping is for alternatives of chemical compounds, they shall be regarded as being of a similar nature where the following criteria are fulfilled:

(A) all alternatives have a common property or activity, and

(B)(1) a common structure is present, i.e., a significant structural element is shared by all of the alternatives, or

(B)(2) in cases where the common structure cannot be the unifying criteria, all alternatives belong to a recognized class of chemical compounds in the art to which the invention pertains.

(vii) If the intermediate and final products are families of compounds, each intermediate compound shall correspond to a compound claimed in the family of the final products. However, some of the final products may have no corresponding compound in the family of the intermediate products so that the two families need not be absolutely congruent.

(h) As long as unity of invention can be recognized applying the above interpretations, the fact that, besides the ability to be used to produce final products, the intermediates also exhibit other possible effects or activities shall not affect the decision on unity of invention.

(i) Rule 13.3 requires that the determination of the existence of unity of invention be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

(j) Rule 13.3 is not intended to constitute an encouragement to the use of alternatives within a single claim, but is intended to clarify that the criterion for the determination of unity of invention (namely, the method contained in Rule 13.2) remains the same regardless of the form of claim used.

(k) Rule 13.3 does not prevent an International Searching or Preliminary Examining Authority or an Office from objecting to alternatives being contained within a single claim on the basis of considerations such as clarity, the conciseness of claims or the claims fee system applicable in that Authority or Office.

[Annex B, Part 2, follows]

Example 4

Claim 1: Use of a family of compounds X as insecticides.

Claim 2: Compound X_1 belonging to family X.

Provided X_1 has the insecticidal activity and the special technical feature in claim 1 is the insecticidal use, unity is present.

Example 5

Claim 1: A process for treating textiles comprising spraying the material with a particular coating composition under special conditions (e.g., as to temperature, irradiation).

Claim 2: A textile material coated according to the process of claim 1.

Claim 3: A spraying machine for use in the process of claim 1 and characterized by a new nozzle arrangement providing a better distribution of the composition being sprayed.

The process according to claim 1 imparts unexpected properties to the product of claim 2.

The special technical feature in claim 1 is the use of special process conditions corresponding to what is made necessary by the choice of the particular coating. Unity exists between claims 1 and 2.

The spraying machine in claim 3 does not correspond to the above identified special technical feature. Unity does not exist between claim 3 and claims 1 and 2.

Example 6

Claim 1: A fuel burner with tangential fuel inlets into a mixing chamber.

Claim 2: A process for making a fuel burner including the step of forming tangential fuel inlets into a mixing chamber.

Claim 3: A process for making a fuel burner including casting step A.

Claim 4: An apparatus for carrying out a process for making a fuel burner including feature X resulting in the formation of tangential fuel inlets.

Claim 5: An apparatus for carrying out a process for making a fuel burner including a protective housing B.

Claim 6: A process of manufacturing carbon black including the step of tangentially introducing fuel into a mixing chamber of a fuel burner.

Unity exists between claims 1, 2, 4 and 6. The special technical feature common to all the claims is the tangential fuel inlets. Claims 3 and 5 lack unity with claims 1, 2, 4 and 6 since claims 3 and 5 do not include the same or corresponding special technical feature as set forth in claims 1, 2, 4 and 6. Claims 3 and 5 would also lack unity with one another.

Example 10

Claim 1: Conveyor belt with feature A.

Claim 2: Conveyor belt with feature B.

Claim 3: Conveyor belt with features A + B.

Feature A is a special technical feature and feature B is another unrelated special technical feature. Unity exists between claims 1 and 3 or between claims 2 and 3, but not between claims 1 and 2.

Example 11

Claim 1: Control circuit A for a d.c. motor.

Claim 2: Control circuit B for a d.c. motor.

Claim 3: An apparatus including a d.c. motor with control circuit A.

Claim 4: An apparatus including a d.c. motor with control circuit B.

Control circuit A is a special technical feature and control circuit B is another unrelated special technical feature. Unity exists between claims 1 and 3 or between claims 2 and 4, but not between claims 1 and 2 or 3 and 4.

Example 12

Claim 1: A display with features A + B.

Claim 2: A display according to claim 1 with additional feature C.

Claim 3: A display with features A + B with additional feature D.

Unity exists between claims 1, 2 and 3. The special technical feature common to all the claims is features A + B.

Example 13

Claim 1: Filament A for a lamp.

Claim 2: Lamp B having filament A.

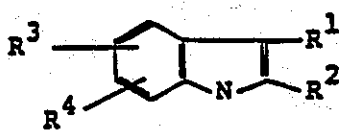
Claim 3: Searchlight provided with lamp B having filament A and a swivel arrangement C.

Unity exists between claims 1, 2 and 3. The special technical feature common to all the claims is the filament A.

III. MARKUSH PRACTICE

Example 18—common structure:

Claim 1: A compound of the formula:

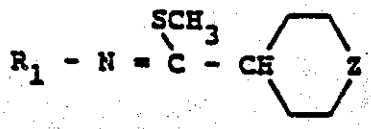


wherein R^1 is selected from the group consisting of phenyl, pyridyl, thiazolyl, triazinyl, alkylthio, alkoxy and methyl; R^2-R^4 are methyl, benzyl or phenyl. The compounds are useful as pharmaceuticals for the purpose of enhancing the capacity of the blood to absorb oxygen.

In this case the indolyl moiety is the significant structural element which is shared by all of the alternatives. Since all the claimed compounds are alleged to possess the same utility, unity is present.

Example 19—common structure:

Claim 1: A compound of the formula:

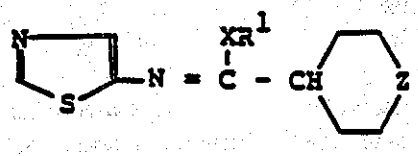


wherein R_1 is selected from the group consisting of phenyl, pyridyl, thiazolyl, triazinyl, alkylthio, alkoxy and methyl; Z is selected from the group consisting of oxygen (O), sulfur (S), imino (NH) and methylene ($-CH_2-$). The compounds are alleged to be useful as pharmaceuticals for relieving lower back pain.

In this particular case the iminothioether group $-N=C-SCH_3$ linked to a six atom ring is the significant structural element which is shared by all the alternatives. Thus, since all the claimed compounds are alleged to possess the same use, unity would be present. A six membered heterocyclic ring would not have been of sufficient similarity to allow a Markush grouping exhibiting unity, absent some teaching of equivalence in the prior art.

Example 20—common structure

Claim 1: A compound of the formula:



wherein R^1 is methyl or phenyl, X and Z are selected from oxygen (O) and sulfur (S).

The compounds are useful as pharmaceuticals and contain the 1,3-thiazolyl substituent which provides greater penetrability of mammalian tissue which fact makes the compounds useful as relievers for headaches and as topical anti-inflammatory agents.

All compounds share a common chemical structure, the thiazole ring and the six atom heterocyclic compound bound to an imino group, which occupy a large portion of their structure. A six membered heterocyclic ring would not have been of sufficient similarity to allow a Markush grouping exhibiting unity, absent some teaching of equivalence in the prior art.

Example 23—No common structure:

Claim 1: A herbicidal composition consisting essentially of an effective amount of the mixture of A 2,4-D(2,4-dichlorophenoxy acetic acid) and B a second herbicide selected from the group consisting of copper sulfate, sodium chlorate, ammonium sulfamate, sodium trichloroacetate, dichloropropionic acid, 3-amino-2,5-dichlorobenzoic acid, diphenamid (an amide), ioxynil (nitrile), dinoseb (phenol), trifluralin (dinitroaniline), EPTC (thiocarbamate) and simazine (triazine) along with an inert carrier or diluent.

The different components under B must be members of a recognized class of compounds. Consequently in the present case a unity objection would be raised because the members of B are not recognized as a class of compounds, but, in fact, represent a plurality of classes which may be identified as follows:

a) **inorganic salts:**

copper sulfate
sodium chlorate
ammonium sulfamate

b) **organic salts and carboxylic acids:**

sodium trichloroacetate
dichloropropionic acid
3-amino-2,5-dichlorobenzoic acid

c) **amides:**

diphenamid

d) **nitriles:**

ioxynil

e) **phenols:**

dinoseb

f) **amines:**

trifluralin

g) **heterocyclic:**

simazine

Example 24

Claim 1: Catalyst for vapor phase oxidation of hydrocarbons, which consists of (X) or (X + a).

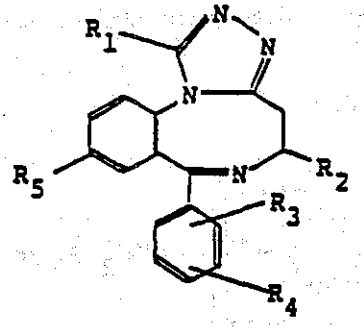
In this example (X) oxidizes RCH_3 into RCH_2OH and (X+a) oxidizes RCH_3 further into RCOOH.

Both catalysts share a common component and a common activity as oxidation catalyst for RCH_3. With (X+a) the oxidation is more complete and goes until the carboxylic acid is formed but the activity still remains the same.

A Markush grouping is acceptable.

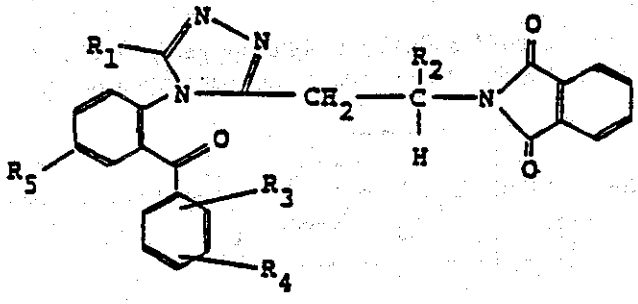
Example 26

Claim 1:



(I)

Claim 2:



(II)

(II) is described as an intermediate to make (I). The closure mechanism is one well known in the art. Though the basic structures of compound (I) (final product) and compound (II) (intermediate) differ considerably, compound (II) is an open ring precursor to compound (I). Both compounds share a common essential structural element which is the linkage comprising the two phenyl rings and the triazole ring. The chemical structures of the two compounds are therefore considered to be technically closely interrelated.

The example therefore satisfies the requirement for unity of invention.

Example 27

Claim 1: Amorphous polymer A (intermediate).

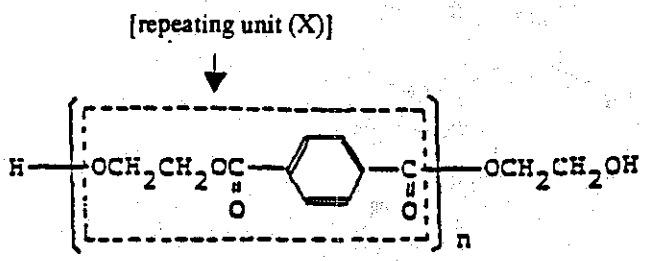
Claim 2: Crystalline polymer A (final product).

In this example a film of the amorphous polymer A is stretched to make it crystalline. Here unity exists because there is an intermediate final product relation in that amorphous polymer A is used as a starting product to prepare crystalline polymer A.

For purposes of further illustration, assume that the polymer A in this example is polyisoprene. Here the intermediate, amorphous polyisoprene and the final product, crystalline polyisoprene have the same chemical structure.

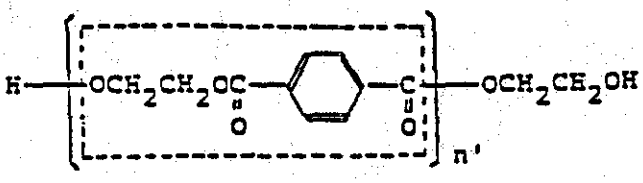
Example 28

Claim 1: Polymeric compound useful as fiber material identified by the following general formula:



(I)

Claim 2: Compound identified by the following general formula:
(useful as intermediate for polymeric compound I)



(II)

(primary condensation product)

The two inventions are in an intermediate and final product relationship.

Substance (II) is a raw material for substance (I).

Meanwhile, both compounds share an essential structural element (repeating unit (X)) and are technically closely interrelated. The intermediate and final products therefore satisfy the requirements for unity.

Example 29

Claim 1: Novel compound having structure A (Intermediate).

Claim 2: Product prepared by reacting A with a substance X (Final Product).

Example 30

Claim 1: Reaction product of A and B (Intermediate).

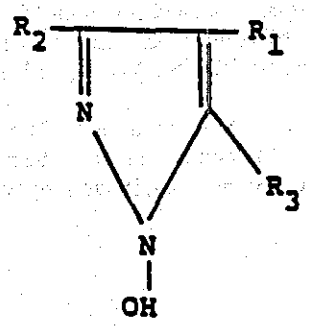
Claim 2: Product prepared by reacting the reaction product of A and B with substances X and Y (Final Product).

In examples 29 and 30 the chemical structure(s) of the intermediate and/or the final product is not known. In (29) the structure of the product of claim 2 (the final product) is not known. In (30) the structures of the products of claim 1 (the intermediate) and claim 2 (the final product) are unknown. Unity exists if there is evidence which would lead one to conclude that the characteristic of the final product which is the inventive feature in the case is due to the intermediate. For example, the purpose for using the intermediates in (29) or (30) is to modify certain properties of the final product. The evidence may be in the form of test data in the specification showing the effect of the intermediate on the final product. If no such evidence exists then there is no unity on the basis of an intermediate-final product relationship.

IV. INTERMEDIATE/FINAL PRODUCTS

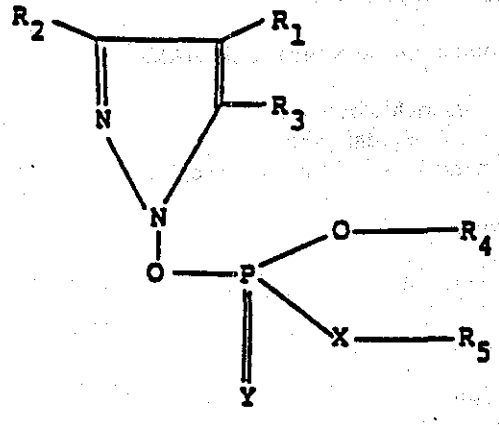
Example 25

Claim 1:



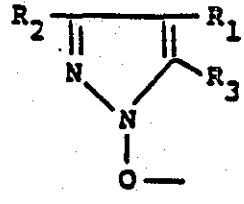
(intermediate)

Claim 2:



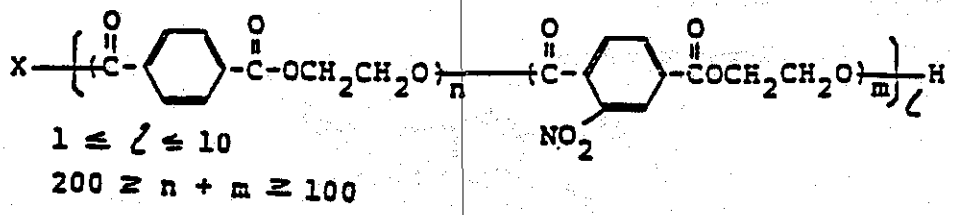
(final product)

The chemical structures of the intermediate and final product are technically closely interrelated. The essential structural element incorporated into the final product is:



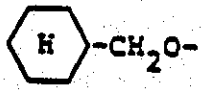
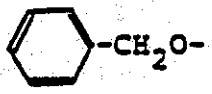
Therefore, unity exists between claims 1 and 2.

Example 21—common structure:



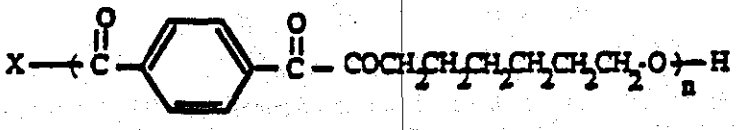
$1 \leq \ell \leq 10$

$200 \geq n + m \geq 100$

X:  or 

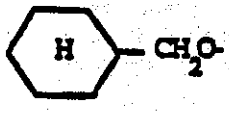
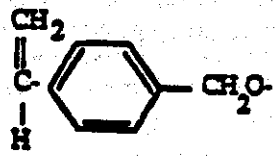
All of the above copolymers have in common a thermal degradation resistance property, due to the reduced number of free COOH radicals by esterification with X of the end COOH radicals which cause thermal degradation. The chemical structures of the alternatives are considered to be technically closely interrelated to one another. A grouping in one claim is therefore allowed.

Example 22—common structure:



(polyhexamethyleneterephthalate)

$100 \geq n \geq 50$

X:  or 

The compound obtained by esterifying the end COOH radical of known polyhexamethyleneterephthalate with  has a thermal degradation resistant property, due to the reduced number of free COOH radicals which cause thermal degradation. In contrast, the compound obtained by esterifying the end COOH radical of known polyhexamethyleneterephthalate with a vinyl compound containing a $CH_2 = CH$--CH_2O- moiety serves as a raw material for a setting resin when mixed with unsaturated monomer and cured (addition reaction).

All esters covered by the claim do not have a property or activity in common. For example, the product obtained through esterification with the "$CH_2 = CH$" vinyl compound does not have a thermal degradation resistant property. The grouping in a single application is not allowed.

Example 14

Claim 1: A marking device for marking animals, comprising a disc-shaped element with a stem extending normally therefrom, the tip of which is designed to be driven through the skin of the animal to be marked, and a securing disk element to be fastened to the protruding tip of the stem on the other side of skin.

Claim 2: An apparatus for applying the marking device of claim 1, constructed as a pneumatically actuated gun for driving the stem of the disc-shaped element through the skin, and provided with a supporting surface adapted for taking up a securing disc element, to be placed at the other side of the body portion in question of the animal to be marked.

The special technical feature in claim 1 is the marking device having a disc-shaped element with a stem and a securing disc element to be fastened to the tip of the stem. The corresponding special technical feature in claim 2 is the pneumatically actuated gun for driving the marking device and having a supporting surface for the securing disc element. Unity exists between claims 1 and 2.

Example 15

Claim 1: Compound A.

Claim 2: An insecticide composition comprising compound A and a carrier.

Unity exists between claims 1 and 2. The special technical feature common to all the claims is compound A.

Example 16

Claim 1: An insecticide composition comprising compound A (consisting of a_1, a_2 ...) and a carrier.

Claim 2: Compound a_1.

All compounds A are not claimed in the product claim 2 for reasons of lack of novelty of some of them for instance. There is nevertheless still unity between the subject matter of claims 1 and 2 provided a_1 has the insecticidal activity which is also the special technical feature for compound A in claim 1.

Example 17

Claim 1: Protein X

Claim 2: DNA sequence encoding protein X.

Expression of the DNA sequence in a host results in the production of a protein which is determined by the DNA sequence. The protein and the DNA sequence exhibit corresponding special technical features. Unity between claims 1 and 2 is accepted.

Example 7

Claim 1: A high corrosion resistant and high strength ferritic stainless steel strip consisting essentially of, in percent by weight: Ni=2.0-5.0; Cr=15-19; Mo=1-2; and the balance Fe having a thickness of between 0.5 and 2.0 mm and a 0.2% yield strength in excess of 50 kg/mm squared.

Claim 2: A method of producing a high corrosion resistant and high strength ferritic stainless steel strip consisting essentially of, in percent by weight: Ni=2.0-5.0; Cr=15-19; Mo=1-2; and the balance Fe, comprising the steps of:

hot rolling to a thickness between 2.0 and 5.0 mm;

annealing the hot rolled strip at 800-1000 degrees C under substantially non-oxidizing conditions;

cold rolling the strip to a thickness of between 0.5 and 2.0 mm; and final annealing the cold rolled strip at between 1120 and 1200 degrees C for a period of 2-5 minutes.

Unity exists between product claim 1 and process claim 2. The special technical feature in the product claim is the 0.2% yield strength in excess of 50 kg/mm squared. The process steps in claim 2 inherently produce a ferritic stainless steel strip with a 0.2% yield strength in excess of 50 kg/mm squared. Even if this feature is not apparent from the wording of claim 2, it is clearly disclosed in the description. Therefore said process steps are the special technical feature which correspond to the limitation in the product claim directed to the same ferritic stainless steel with the claimed strength characteristics.

II. CLAIMS IN THE SAME CATEGORY

Example 8

Claim 1: Plug characterized by feature A.

Claim 2: Socket characterized by corresponding feature A.

Feature A is a special technical feature which is included in both claims 1 and 2 and therefore unity is present.

Example 9

Claim 1: Transmitter provided with time axis expander for video signals.

Claim 2: Receiver provided with time axis compressor for video signals received.

Claim 3: Transmission equipment for video signals comprising a transmitter provided with time axis expander for video signals and a receiver provided with time axis compressor for video signals received.

The special technical features are in claim 1 the time axis expander, and in claim 2 the time axis compressor, which are corresponding technical features. Unity exists between claims 1 and 2. Claim 3 includes both special technical features and has unity with claims 1 and 2. The requirement for unity would still be met in the absence of the combination claim (claim 3).

ANNEX B

PART 2

EXAMPLES CONCERNING UNITY OF INVENTION

The application of the principles of unity of invention is illustrated by the following examples for guidance in particular cases.

I. CLAIMS IN DIFFERENT CATEGORIES

Example 1

Claim 1: A method of manufacturing chemical substance X.

Claim 2: Substance X.

Claim 3: The use of substance X as an insecticide.

Unity exists between claims 1, 2 and 3. The special technical feature common to all the claims is substance X.

Example 2

Claim 1: A process of manufacture comprising steps A and B.

Claim 2: Apparatus specifically designed for carrying out step A.

Claim 3: Apparatus specifically designed for carrying out step B.

Unity exists between claims 1 and 2 or between claims 1 and 3. There is no unity between claims 2 and 3 since there exists no common special technical feature between the two claims.

Example 3

Claim 1: A process for painting an article in which the paint contains a new rust inhibiting substance X including the steps of atomizing the paint using compressed air, electrostatically charging the atomized paint using a novel electrode arrangement A and directing the paint to the article.

Claim 2: A paint containing substance X.

Claim 3: An apparatus including electrode arrangement A.

Unity exists between claims 1 and 2 where the common special technical feature is the paint containing substance X or between claims 1 and 3 where the common special technical feature is the electrode arrangement A.

However, unity is lacking between claims 2 and 3 since there exists no common special technical feature between them.

(ii) In paragraph (f)(i)(B)(1), above, the words "significant structural element is shared by all of the alternatives" refer to cases where the compounds share a common chemical structure which occupies a large portion of their structures, or in case the compounds have in common only a small portion of their structures, the commonly shared structure constitutes a structurally distinctive portion in view of existing prior art. The structural element may be a single component or a combination of individual components linked together.

(iii) In paragraph (f)(i)(B)(2), above, the words "recognized class of chemical compounds" mean that there is an expectation from the knowledge in the art that members of the class will behave in the same way in the context of the claimed invention. In other words, each member could be substituted one for the other, with the expectation that the same intended result would be achieved.

(iv) The fact that the alternatives of a Markush grouping can be differently classified shall not, taken alone, be considered to be justification for a finding of a lack of unity of invention.

(v) When dealing with alternatives, if it can be shown that at least one Markush alternative is not novel over the prior art, the question of unity of invention shall be reconsidered by the examiner. Reconsideration does not necessarily imply that an objection of lack of unity shall be raised.

(g) **Intermediate and Final Products.** The situation involving intermediate and final products is also governed by Rule 13.2.

(i) The term "intermediate" is intended to mean intermediate or starting products. Such products have the ability to be used to produce final products through a physical or chemical change in which the intermediate loses its identity.

(ii) Unity of invention shall be considered to be present in the context of intermediate and final products where the following two conditions are fulfilled:

(A) the intermediate and final products have the same essential structural element, in that:

(1) the basic chemical structures of the intermediate and the final products are the same, or

(2) the chemical structures of the two products are technically closely interrelated, the intermediate incorporating an essential structural element into the final product, and

(B) the intermediate and final products are technically interrelated, this meaning that the final product is manufactured directly from the intermediate or is separated from it by a small number of intermediates all containing the same essential structural element.

(iii) Unity of invention may also be considered to be present between intermediate and final products of which the structures are not known—for example, as between an intermediate having a known structure and a final product the structure of which is not known, or as between an intermediate of unknown structure and a final product of unknown structure. In order to satisfy unity in such cases, there shall be sufficient evidence to lead one to conclude that the intermediate and final products are technically closely interrelated as, for example, when the intermediate contains the same essential element as the final product or incorporates an essential element into the final product.

(iv) It is possible to accept in a single international application different intermediate products used in different processes for the preparation of the final product, provided that they have the same essential structural element.

(v) The intermediate and final products shall not be separated, in the process leading from one to the other, by an intermediate which is not new.

(vi) If the same international application claims different intermediates for different structural parts of the final product, unity shall not be regarded as being present between the intermediates.

ANNEX B

UNITY OF INVENTION

PART 1

INSTRUCTIONS CONCERNING UNITY OF INVENTION

(a) **Unity of invention.** Rule 13.1 deals with the requirement of unity of invention and states the principle that an international application should relate to only one invention or, if there is more than one invention, that the inclusion of those inventions in one international application is only permitted if all inventions are so linked as to form a single general inventive concept.

(b) **Technical Relationship.** Rule 13.2 defines the method for determining whether the requirement of unity of invention is satisfied in respect of a group of inventions claimed in an international application. Unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding "special technical features." The expression "special technical features" is defined in Rule 13.2 as meaning those technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art. The determination is made on the contents of the claims as interpreted in light of the description and drawings (if any).

(c) **Independent and Dependent Claims.** Unity of invention has to be considered in the first place only in relation to the independent claims in an international application and not the dependent claims. By "dependent" claim is meant a claim which contains all the features of another claim and is in the same category of claim as that other claim (the expression "category of claim" referring to the classification of claims according to the subject matter of the invention claimed—for example, product, process, use or apparatus or means, etc.).

(i) If the independent claims avoid the prior art and satisfy the requirement of unity of invention, no problem of lack of unity arises in respect of any claims that depend on the independent claims. In particular, it does not matter if a dependent claim itself contains a further invention. Equally, no problem arises in the case of a genus/species situation where the genus claim avoids the prior art. Moreover, no problem arises in the case of a combination/subcombination situation where the subcombination claim avoids the prior art and the combination claim includes all the features of the subcombination.

(ii) If, however, an independent claim does not avoid the prior art, then the question whether there is still an inventive link between all the claims dependent on that claim needs to be carefully considered. If there is no link remaining, an objection of lack of unity *a posteriori* (that is, arising only after assessment of the prior art) may be raised. Similar considerations apply in the case of a genus/species or combination/subcombination situation.

(iii) This method for determining whether unity of invention exists is intended to be applied even before the commencement of the international search. Where a search of the prior art is made, an initial determination of unity of invention, based on the assumption that the claims avoid the prior art, may be reconsidered on the basis of the results of the search of the prior art.

(d) **Illustrations of Particular Situations.** There are three particular situations for which the method for determining unity of invention contained in Rule 13.2 is explained in greater detail:

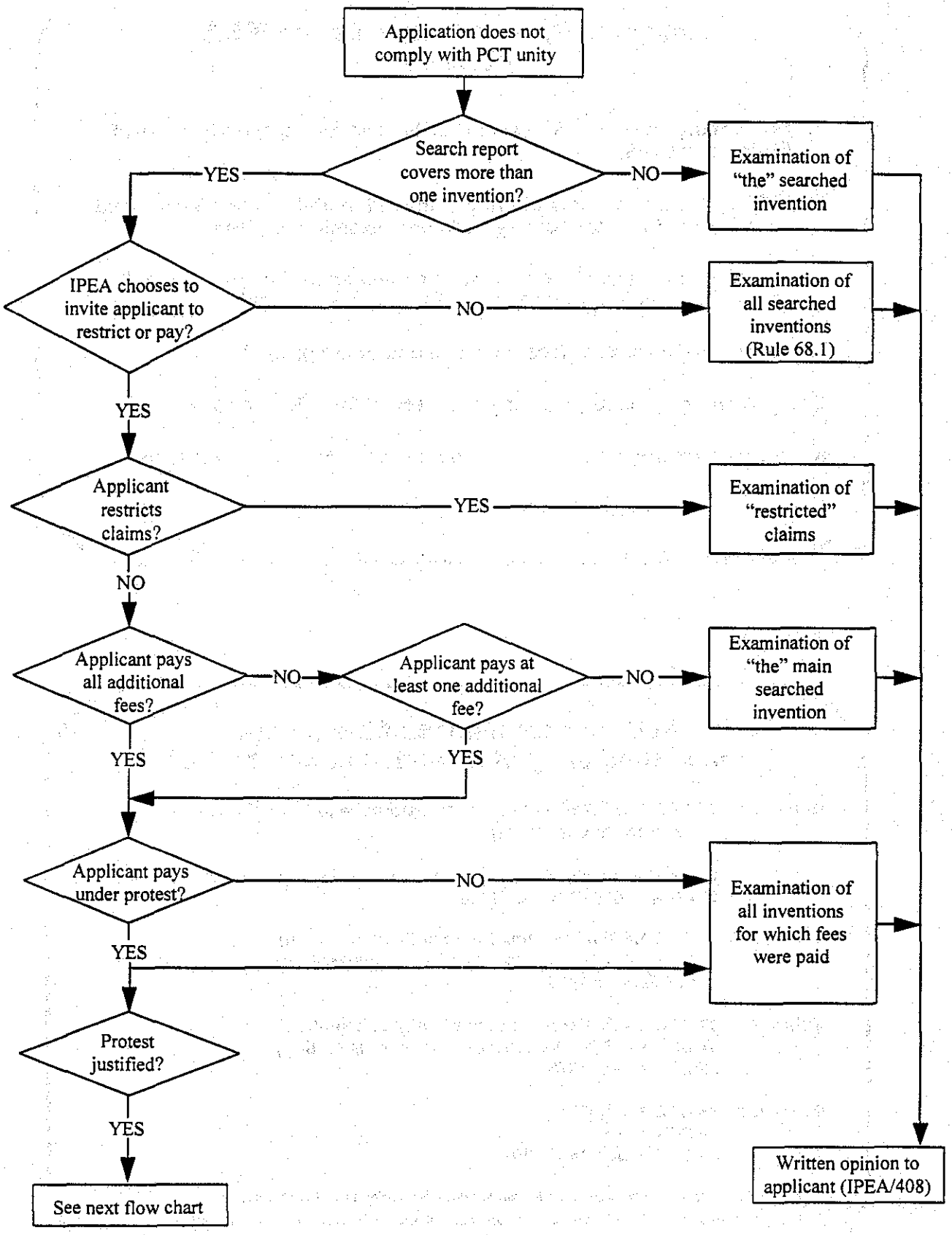
(i) combinations of different categories of claims;

(ii) so-called "Markush practice"; and

(iii) intermediate and final products.

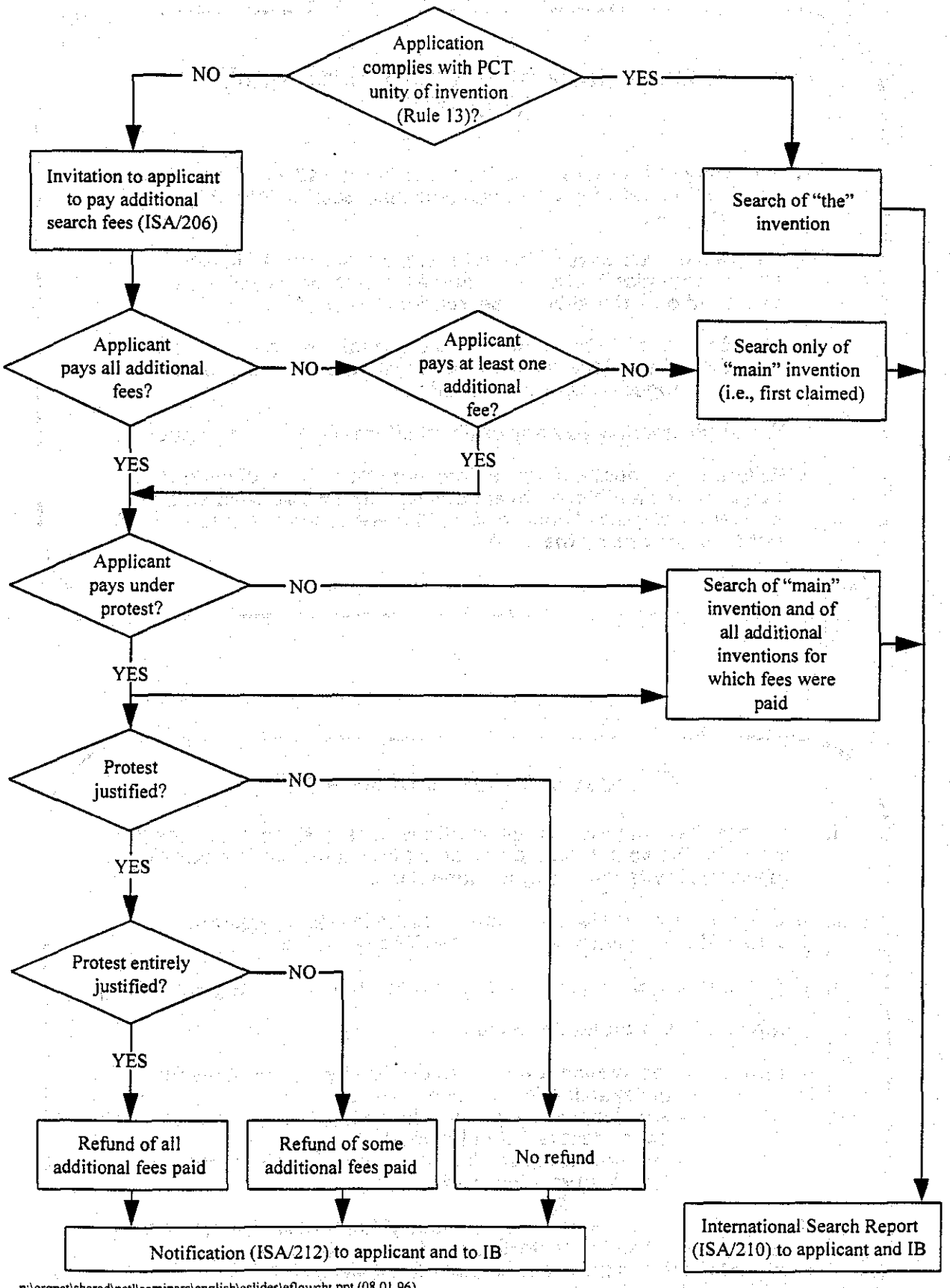
VIII.6

Unity of Invention before the IPEA (Article 34(3)(a) and Rule 68)



VIII.4

Unity of invention before the ISA (Article 17(3)(a) and Rule 40)



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Requirement of unity of invention (Rule 13)

1. An international application must relate to one invention only or,

   – if there is more than one invention, the inclusion of those inventions is only permitted if all inventions are so linked as to form a **single general inventive concept** (Rule 13.1).

2. Unity of invention exists only when there is a **technical relationship** involving one or more of the same or corresponding **"special technical features".**

   The expression **"special technical features"** means **those technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art (Rule 13.2).**