

Chapter 4 Unity of Invention

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Chapter 4 Unity of Invention

A patent application for an invention shall relate to one invention. Two or more inventions, so linked as to form a single general inventive concept, may be filed in one application. This chapter delineates the relevant criteria for the unity of invention.

A. 33

For the determination of the unity of invention for pharmaceutical-related inventions and biological-related inventions, please refer to Chapter 13, section 6: "Unity of Inventions" and Chapter 14, section 7: "Unity of Inventions," respectively.

1. The Concept of Unity

Each claimed invention should be filed in separate patent applications. However, considering the convenience of the applicant, the public, and the Specific Patent Agency in the classification, prior art search, and examination of patent applications, for two or more inventions that should ordinarily be filed separately, the Patent Law stipulates that two or more inventions linked as to form a single general inventive concept may be filed in one application. This is known as the unity of invention.

A. 33. II

The so-called "linked as to form a single general inventive concept" in the Patent Act shall mean that two or more inventions are technically related to one another. "Technically related to one another" shall mean that the invention recited in the claims contains one or more same or corresponding special technical features. The so-called "special technical features" shall mean the technical features which define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art, that is, technical features that possess novelty and an inventive step over the prior art.

R. 27. I

R. 27. II

R. 27. III

Even if two or more inventions do not contain the same technical features, they may still possess corresponding technical features. For example, one claim recites a nut with a female thread of a specific shape, and another claim recites a bolt with a male thread of a specific shape. If the male and female threads can be screwed together, the female and male threads in the two claims can be considered to possess corresponding technical features.

The concept of special technical feature is proposed for the examination of the unity of invention. To determine whether two or more inventions in different claims or the same claim in an application possess unity of invention,

one should first examine if each invention contains the same or corresponding technical features. Then, one should confirm through prior art search whether the same or corresponding technical features have contributed over the prior art, so that each invention is related to one another.

R. 27.IV

The determination of unity of invention remains the same regardless of the recitation format of the claims. The determination of whether two or more inventions are technically related to one another shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

The legislative intent of the unity of invention provision is to effectively utilize examination resources. For those that are found to lack unity of invention only after examination and grant of patent, since all claims have been examined and found to possess novelty and inventive step, and will not directly harm the interests of the public, it does not constitute grounds for invalidation.

2. Same or Corresponding Technical Features

Whether two or more inventions have the same or corresponding technical features should be determined before prior art search. If there are no same or corresponding technical features, it goes without saying that there will be no same or corresponding special technical features. The following describes the situations in which two or more inventions have the same or corresponding technical features.

2.1 Same Technical Features

The following examples show situations where two or more inventions contain the same technical features.

Example 1.

[Claim(s)]

1. A polymer compound A.
2. A food container, comprising polymer compound A.

[Remark]

The same technical feature of the different independent claims is polymer compound A.

Example 2.

[Claim(s)]

1. A lighting method, characterized in that rendering a portion of the light emitted by a light source shielded.

2. A lighting system comprising a light source and a light-shielding element for shielding a portion of the light emitted by the light source.

[Remark]

The same technical feature of the different independent claims is the technical feature of shielding a portion of the light emitted by the light source.

2.2 Corresponding Technical Features

The following examples show situations where two or more inventions have corresponding technical features.

Example 1.

[Claim(s)]

1. A handset having a structure A.

2. A telephone set having a carrier portion configured to couple structure A.

(As described in the description, when the handset is stored, its structure A can be coupled into the telephone set.)

[Remark]

The corresponding technical features of the different independent claims are structure A of claim 1 and the carrier portion configured to couple structure A of claim 2.

Example 2.

[Claim(s)]

1. A transmitter, characterized in comprising a time-axis expander for video signals.

2. A receiver, characterized in comprising a time-axis compressor for video signals.

[Remark]

Claim 1 has the technical feature of "time-axis expander for video signals," and claim 2 has the technical feature of "time-axis compressor for video signals." The two technical features are related to one another and cannot be used separately, thus are corresponding technical features.

3. The Determination of Same or Corresponding Technical Features for Claims of Different Types

This section illustrates specific methods for determining same or corresponding technical features based on the recitation of the claims.

3.1 Independent Claims of the Same Category

Independent claims of the same category refer to independent claims whose subject matters are either directed to a product or a method, which may possess the same or corresponding technical features.

Example 1.

[Claim(s)]

1. A bearing having structure A.
2. A gearbox comprising the bearing having structure A.

[Remark]

The same technical feature of the different independent claims is the bearing having structure A.

Example 2.

[Claim(s)]

1. A method for manufacturing product A, comprising the following steps: (a)...; (b)...; and (c) heating raw material C to 200°C-250°C.
2. A method for manufacturing product B, comprising the following steps: (a')...; (b')...; and (c) heating raw material C to 200°C-250°C.

[Remark]

The same technical feature of the different independent claims is the step of heating raw material C to 200°C-250°C.

3.2 Independent Claims of Different Categories

Independent claims of different categories refer to claims where the subject matter respectively comprise a product and a method, and may possess the same or corresponding technical features.

3.2.1 Product and Method of Making the Product

When one independent claim is directed to a product invention, and the other independent claim is directed to a method for manufacturing the product, the same technical features among these claims is the product. Examples are provided as follows.

Example 1.

[Claim(s)]

1. A brake disc having a brake pad with structure A.
2. A method for manufacturing a brake pad with structure A, comprising the steps of...

[Remark]

The same technical feature among the different independent claims is the brake pad with structure A.

Example 2.

[Claim(s)]

1. A titanium alloy X.
2. A method for manufacturing a titanium alloy X, comprising the steps of...

[Remark]

The same technical feature among the different independent claims is the titanium alloy X.

3.2.2 Product and Use of the Product

When one independent claim is directed to a product invention, and the other independent claim is directed to a method for using the product, if the use of the product is a technical feature defining that use, the product may be considered the same technical feature among the claims. Examples are provided as follows.

Example 1.

[Claim(s)]

1. A substance A.
2. A method for using substance A as an insecticide, comprising the steps

of...

[Remark]

The same technical feature among the different independent claims is substance A.

Example 2.

[Claim(s)]

1. A paint spray nozzle having structure A.
2. A method of baking varnish using a paint spray nozzle having structure A, comprising the steps of...

[Remark]

The same technical feature among the different independent claims is the paint spray nozzle having structure A.

3.3 Dependent Claims

Because each dependent claim that depends on a same independent claim inheres all the technical features of that independent claim, the recitation of the independent claim is the same technical features of the independent claim and its dependent claims.

Example 1.

[Claim(s)]

1. A turbine blade, characterized in that the blade has a shape X.
2. The turbine blade of claim 1, wherein the blade is made of alloy A.

[Remark]

The same technical feature of the independent claim and its dependent claim is a turbine blade having a shape X.

For dependent claims that depend on different independent claims, if there exist the same or corresponding technical features among the independent claims, the independent claims and their dependent claims possess the same or corresponding technical features. For determining the same or corresponding technical features among different independent claims, please refer to Sections 3.1 "Independent Claims of the Same Category" and 3.2 "Independent Claims of Different Categories" of this chapter.

3.4 Claims of Alternative Format

The plurality of inventions recited in a claim written in alternative form include, in addition to the shared common matter, different alternative technical features. The common matter constitutes the same technical features among the plurality of inventions.

Example 1.

[Claim(s)]

A circuit board having a specific layered structure, wherein the conductors are made of gold, silver, or copper.

[Remark]

The same technical feature among the distinct inventions in the claims is the specific layered structure.

3.5 Claim Containing Reference to Another Claim

If the claims contain one or more claim containing reference to another claim, the content of the referenced claim is the same or corresponding technical feature among the claims.

Example 1.

[Claim(s)]

1. A bearing having structure A.
2. A bracket comprising the bearing as claimed in claim 1.

[Remark]

The same technical feature among the distinct independent claims is the bearing of claim 1.

Example 2.

[Claim(s)]

1. A compound A.
2. A method for manufacturing compound A as claimed in claim 1, comprising the steps of...

[Remark]

The same technical feature among the distinct independent claims is compound A as claimed in claim 1.

Example 3.

[Claim(s)]

1. A composition A, comprising...
2. A method for killing insects, comprising using composition A of claim 1.

[Remark]

The same technical feature among the distinct independent claims is composition A of claim 1.

Example 4.

[Claim(s)]

1. A flat-head bolt having a male thread of Whitworth coarse thread.
2. A square nut, configured to correspondingly fit the flat-head bolt of claim 1 with a female thread of the Whitworth coarse thread.

[Remark]

The corresponding technical features among the distinct independent claims are the male thread of Whitworth coarse thread in claim 1 and the female thread of the Whitworth coarse thread in claim 2 that correspondingly fits the Whitworth coarse thread of claim 1.

4. Special Technical Features

The so-called “special technical features” shall mean the technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. That is, technical features that provide novelty and an inventive step over the prior art. In principle, they should be determined after prior art search and comparing with the prior art. When determining the unity of invention, the prior art does not include cited documents that belong to lacking novelty based on legal fiction or that fall under the first-to-file principle.

Each dependent claim attached to the same independent claim contains all the technical features of that independent claim. Therefore, if an independent claim possesses a special technical feature, the dependent claims thereof also possess that special technical feature, and the independent claim and its dependent claims naturally possess the same special technical feature.

If distinct independent claims possess the same or corresponding special technical features, each dependent claim attached to those independent claims also possesses the same special technical features, and those independent claims and their respective dependent claims possess the same or

corresponding special technical features.

Example 1.

[Claim(s)]

1. A table having legs with structure A.
2. A table having legs with structure A and a tabletop with structure B.

[Assumption]

With respect to the prior art, the table with legs having structure A possesses novelty and an inventive step.

[Remark]

Legs with structure A recited in independent claim 1 is a special technical feature, and independent claim 2 also possesses this special technical feature.

Example 2.

[Claim(s)]

1. A table having legs with structure A.
2. The table of claim 1, ...
3. A table having legs with structure A and a tabletop with structure B.
4. The table of claim 3, ...

[Assumption]

With respect to the prior art, the table with legs having structure A possesses novelty and an inventive step.

[Remark]

Legs with structure A is a special technical feature of independent claims 1 and 3. Dependent claims 2 and 4 also possess this special technical feature.

5. The Determination of Unity of Invention

If there are two or more independent claims, for the invention recited in each independent claim, it shall be determined before prior art search whether there is a situation of “Clearly Lacking Unity of Invention” as described in section 5.1; if not, it falls under the situation of "Not Clearly Lacking Unity of Invention" as described in section 5.2.

In other words, the determination of unity of invention includes the following steps:

- (1) Determine whether the inventions in each independent claim clearly lack unity.

If the inventions in each independent claim do not possess the same or corresponding technical features, or if the prior art recited in the description, the claims, and the drawings clearly indicates that the same or corresponding technical features in each independent claim belong to the prior art or common general knowledge at the time of filing, the inventions in each independent claim clearly lack the same or corresponding special technical features. The claims thus lack unity of invention.

- (2) If the inventions described in each independent claim do not clearly lack unity of invention, then prior art search should be conducted.

In principle, the prior art search begins with the invention recited in claim 1 to determine whether the invention possess any special technical feature. If it does not possess any special technical feature, there will be no same or corresponding special technical feature among the inventions recited in each independent claim. The claims thus lack unity of invention.

- (3) If the invention of claim 1 possesses a special technical feature, it shall be determined whether all other independent claims possess the same or a corresponding special technical feature. If so, the application meets the requirement of unity of invention; if not, the application lacks unity of invention.

5.1 Clearly Lacking Unity of Invention

The claims clearly lacking unity of invention typically involves the following situations:

- (1) The inventions recited in the independent claims do not contain the same or corresponding technical features.

For example, if two independent claims recite an herbicide and a lawnmower, respectively, the herbicide's technical feature is the composition of its components, while the lawnmower's technical feature is the composition of its different components and their interconnections. Since the two inventions do not contain the same or corresponding technical features, the claims lack unity of invention.

As another example, if two independent claims recite a mobile phone antenna and a mobile phone screen, respectively, the mobile phone antenna's technical feature is the composition of its antenna elements and their interconnections, while the mobile phone screen's technical feature is the composition of its touch panel elements and their interconnections.

Since the two inventions do not contain the same or corresponding technical features, the claims lack unity of invention.

- (2) Based on the prior art recited in the description, the claims, and the drawings, it can be ascertained that the technical features that are the same or corresponding to each of the independent claims belong to the prior art or the common general knowledge at the time of filing.

5.2 Not Clearly Lacking Unity of Invention

In principle, when searching for prior art, the search should begin with the invention recited in claim 1, which is then compared with relevant prior art to determine whether the invention recited in claim 1 possesses special technical features.

If the invention of claim 1 possesses a special technical feature (e.g., feature A), it is further determined whether the inventions recited in other independent claims all possess the special technical feature (feature A) or a corresponding special technical feature (e.g., features B, C, D, etc. corresponding to feature A). If so, the inventions recited in other independent application meets the requirement of the same or corresponding special technical feature as the invention of claim 1, and the application meets the requirement of unity of invention. If not, that is, the invention of any other independent claim lacks the same or corresponding special technical feature, the application lacks unity of invention.

If the invention recited in claim 1 does not possess a special technical feature, then there is no same or corresponding special technical feature among the inventions in each of the claims. The application therefore lacks unity of invention.

When searching for prior art, the search should, in principle, begin with the invention recited in claim 1; however, if any of the following circumstances exist, the search may begin with another independent claim:

- (1) Claim 1 suffers the conditions where the content of the invention cannot be determined due to failure to meet the requirements for written description, failure to meet the definition of an invention, belongs to the statutory exclusion of subject matters for invention patent, or lacks industrial applicability.
- (2) Claim 1 is clearly not the most representative independent claim of the invention. For example, if the claims are directed to different categories including compound, composition of matter, manufacture method of the

compound, and the use of the compound, the prior art search should be conducted first with respect to the compound independent claim. If there is no product claim for the compound, the search should be conducted with respect to the method independent claim.

6. Determination of Subject for Examination

Since unity of invention usually exists between an independent claim and its dependent claims, and joint examination of both is more efficient, at least one group of claims consisting of an independent claim and its dependent claims should be subject to examination. In principle, such independent claim shall be claim 1.

Applicants should be notified through Office Action(s) of all grounds of rejection for the subject(s) under examination, or no such grounds at this stage, accompanied by a search report. If the cited prior art documents retrieved indicate that, other groups of claims lack novelty or an inventive step, such findings may also be included concurrently.

It should be noted that if the subject for examination covers all the claims, and all are determined to lack of novelty or an inventive step, then the grounds of rejection for lack of unity of invention need not be separately stated. However, if any claims remain unsearched due to lack of unity of invention, the Office Action should state the grounds of rejection for such lack of unity and specify the claims that were excluded from the search for that reason.

7. Notes for Examination

- (1) The determination of the unity of invention is not affected by the format of the claim. If there is no same or corresponding special technical feature(s) among the multiple inventions recited in the claims of alternative format, even if the multiple inventions are amended into multiple claims, there is still no same or corresponding special technical feature(s) among the inventions recited in each of the claims.
- (2) The dependent claims inherit all the technical features of the independent claim. If an independent claim is found to lack novelty or an inventive step upon examination, it results in the absence of a same or corresponding special technical feature between the invention of the independent claim and its dependent claims. If an amendment involves deleting the independent claim and converting other dependent claims into new independent claims,

a reassessment must be conducted to determine whether the inventions of the newly formed independent claims contain the same or corresponding special technical features.

- (3) Where prior art search has been conducted on a subset of the claims (e.g., independent claim 1 and its dependent claim 2), and the Office Action states the grounds of rejection and the unsearched claims (e.g., independent Claim 3 and its dependent claim 4) due to lack of unity of invention, a Decision of Refusal may be rendered if the applicant fails to overcome the original grounds of rejection due to lack of unity of invention by way of response or amendment. However, in cases where a Decision for Refusal is applicable, if issuing a Final Notice is deemed not to unduly prolong the examination process, a Final Notice may be issued instead of a Decision of Refusal.
- (4) For an application lacking unity of invention, although the applicant may file divisional applications for distinct inventions, it is not appropriate to proactively request the applicant to file such divisional applications in an Office Action.

8. Exemplary Cases

8.1 Clearly Lacking Unity of Invention

Example 1.

[Claim(s)]

1. An automatic gas shut-off device, characterized in having a bimetallic strip (4) connected to a gas valve (3) and a heat-receiving plate that conducts heat from a burner to the bimetallic strip (4), wherein when a temperature of the bimetallic strip (4) drops, deformation of the bimetallic strip (4) causes the gas valve (3) to shutoff.

2. An automatic gas shut-off device, characterized in having permanent magnets (19, 21), at least two thermal ferrite magnets (20, 22, 23) arranged on magnetic field lines of the permanent magnets (19, 21), a gas valve (25) that maintains open or closed position by magnetic attraction of the thermal ferrite magnets (20, 22, 23), and a heat-receiving plate that conducts heat from a burner to the thermal ferrite magnets (20, 22, 23), ...when temperature is abnormal, magnetism of the thermal ferrite magnets (20, 22, 23) disappears.

[Assumption]

The description recites prior art gas automatic shut-off devices that control gas valves using circuits and motors. The application discloses a device that replaces the conventional electronic structure with two mechanical

structures recited in the claims.

[Remark]

Claims 1 and 2 are both “automatic gas shut-off devices.” Claim 1 uses the deformation of a bimetallic strip to control the gas generator and the bimetallic strip to control the gas valve. Claim 2 uses different demagnetization temperatures of a heated ferrite magnet to create different magnetic flux passing through the magnet, thereby changing the position of the gas valve. Apart from the conventional gas valve, there is no same or corresponding technical feature between the two claims. Therefore, the application lacks unity of invention.

Example 2.

[Claim(s)]

1. A rectifier circuit for a power supply, ...
2. A method for manufacturing a porous silicon blue light-emitting diode, ...

[Remark]

The “method for manufacturing a blue light-emitting diode” in claim 2 is unrelated to the “rectifier circuit” in claim 1. Claims 1 and 2 do not possess the same or corresponding technical features. Therefore, the application lacks unity of invention.

Example 3.

[Claim(s)]

1. A method for the nitration reaction of an aromatic compound in a liquid phase, ...
2. An apparatus for removing heat of reaction from a nitration reaction of an aromatic compound in a liquid phase, ...

[Remark]

The “apparatus for removing heat of reaction from a nitration reaction of an aromatic compound in a liquid phase” in claim 2 is not used in the implementation of the “nitration reaction method” in claim 1. Claims 1 and 2 do not possess the same or corresponding technical features. Therefore, the application lacks unity of invention.

8.2 Not Clearly Lacking Unity of Invention

[Possessing Unity of Invention]

Example 1.

[Claim(s)]

1. A filament A, ...
2. A light bulb B made of filament A.
3. A searchlight D, equipped with a light bulb B made of filament A and a rotating device C.

[Assumption]

With respect to prior art, the "filament A" in claim 1 possesses novelty and an inventive step.

[Remark]

Claims 1, 2, and 3 all possess the same special technical feature "filament A," therefore the application meets the requirement of unity of invention.

Example 2.

[Claim(s)]

1. A filter cylinder for a wood pulp sludge thickener, ...
2. A wood pulp sludge thickener, comprising the filter cylinder of claim 1 ...

[Assumption]

With respect to the prior art, the "filter cylinder" of claim 1 possesses novelty and an inventive step.

[Remark]

The "filter cylinder" of claim 1 is one of the constituent components of the "thickener" of claim 2. Both claims 1 and 2 possess the same special technical feature, the "filter cylinder," therefore the application meets the requirement of unity of invention.

Example 3.

[Claim(s)]

1. A semiconductor random access memory device, characterized in comprising a memory array formed by a first metal-insulator-semiconductor (MIS) element, a second MIS element stacked on top of the first MIS element and using either a drain or a source region of the first MIS element as a gate, ... arranged in a matrix configuration, and information lines (D1) wired between memory cells such that the memory array is perpendicular to the sensor line (S1) and the word line (W1).
2. A MIS-type semiconductor device, characterized in being formed by a

first MIS element formed on a main surface of a semiconductor substrate, and a second MIS element stacked on top of the first MIS element and using either a drain or a source region of the first MIS element as a gate.

[Assumption] With respect to the prior art, the “semiconductor random access memory device” of claim 1 possesses novelty and an inventive step.

[Remark]

The “MIS-type semiconductor device” of claim 2 is one of the constituent elements of the “semiconductor random access memory device” of claim 1. Claim 1 includes the content of claim 2. Both claims 1 and 2 possess the same special technical feature: “a second MIS element stacked on the first MIS element and using either a drain or a source region of the first MIS element as a gate.” Therefore, the application meets the requirement of unity of invention.

Example 4.

[Claim(s)]

1. A product X.
2. A method A for manufacturing product X, comprising steps J, K, and L.
3. A method B for manufacturing product X, comprising steps M, N, and O.
4. A method C for manufacturing product X, comprising steps P, Q, and R.

[Assumption]

With respect to the prior art, “product X” in claim 1 possesses novelty and an inventive step.

[Remark]

The product of claim 1 and the method of claims 2, 3, and 4 all possess the same special technical feature “product X,” therefore the application meets the requirement of unity of invention.

Example 5.

[Claim(s)]

1. A compound X.
2. A method for preparing compound X, comprising the following steps: ...
3. A use of compound X as a cleaning agent.

[Assumption]

With respect to the prior art, “compound X” in claim 1 possesses novelty and an inventive step.

[Remark]

Claims 1, 2, and 3 all possess the same special technical feature “compound X,” therefore the application meets the requirement of unity of invention.

Example 6.

[Claim(s)]

1. A high-strength, corrosion-resistant stainless-steel strip, ... having a yield strength exceeding 50 kg/mm² at an elongation of 0.2%.

2. A method for preparing the stainless-steel strip as claimed in claim 1, comprising the steps of...

[Assumption]

With respect to the prior art, the “stainless steel strip” of claim 1 possesses novelty and an inventive step

[Remark]

The stainless-steel strip of claim 1 is characterized by its “yield strength exceeding 50 kg/mm² at an elongation of 0.2%.” The “method for preparing the stainless-steel strip” of claim 2 includes all the technical features of the “stainless steel strip” of claim 1, and therefore also includes this special technical feature. Therefore, the application meets the requirement of unity of invention.

Example 7.

[Claim(s)]

1. A fiber optic cable containing a twisted structure....

2. A method of making fiber optic cable, containing a kneading step....

[Assumption]

With respect to the prior art, the “fiber optic cable” of claim 1 possesses novelty and an inventive step. The kneading step of method claim 2 is used to form the twisted structure when manufacturing the fiber optic cable.

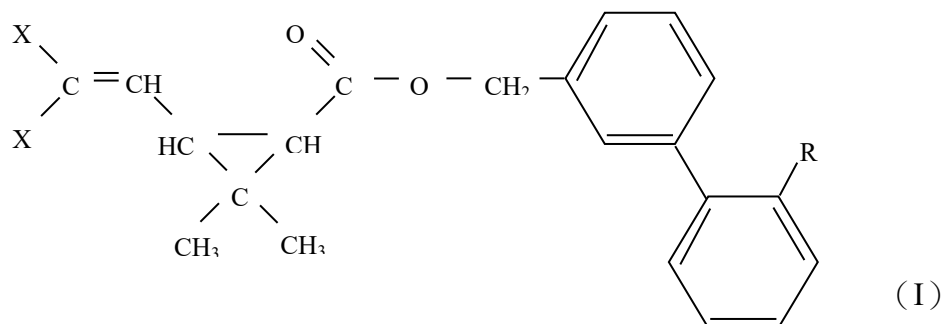
[Remark]

The fiber optic cable of claim 1 has a “twisted structure” as its special technical feature. The technical feature of the “kneading step” of claim 2 corresponds to the technical feature of the “twisted structure” of claim 1, so the application meets the requirement of unity of invention.

Example 8.

[Claim(s)]

1. A cyclopropane carboxylic acid ester derivative, represented by the general formula (I):



wherein X represents chlorine or bromine, and R represents a halogen, a lower alkyl group, a trifluoromethyl group, or a lower alkoxy group.

2. An insecticide composition containing at least one compound described in claim 1 as an active ingredient.
3. A method for killing insects, comprising applying an effective amount of at least one of the compounds described in claim 1 to a location where insects are to be repelled.

[Assumption]

With respect to the prior art, the “cyclopropane carboxylate derivative” in claim 1 possesses novelty and an inventive step.

[Remark]

The “insecticide composition” of claim 2 includes the “cyclopropane carboxylate derivative” of claim 1, and the “method for killing insects” of claim 3 uses the “cyclopropane carboxylate derivative” of claim 1. Claims 1, 2, and 3 all possess the same special technical feature “cyclopropane carboxylate derivative.” Therefore, the application meets the requirement of unity of invention.

Example 9.

[Claim(s)]

1. A microfluidic device with a cell fragmentation electrolysis apparatus, comprising an anode chamber, a cathode chamber, and a barrier...
2. A method for fragmenting cells using the microfluidic device of claim 1, the method comprising: introducing an anode chamber solution through an inlet of the anode chamber...; introducing a cathode chamber solution through an inlet of the cathode chamber...

[Assumption]

With respect to the prior art, the “microfluidic device” of claim 1 possesses novelty and an inventive step.

[Remark]

The steps of the cell fragmentation method of claim 2 utilize the microfluidic device of claim 1. Both claims 1 and 2 possess the same special technical feature “microfluidic device.” Therefore, the application meets the requirement of unity of invention.

Example 10.

[Claim(s)]

1. A plug having a protruding structure A.
2. A socket having a recessed shape that mates with structure A.

[Assumption]

With respect to the prior art, the “plug” in claim 1 possesses novelty and an inventive step.

[Remark]

The “plug” and “socket” in claims 1 and 2 have shapes that mate with each other correspondingly, which belong to corresponding special technical features. Therefore, the application meets the requirement of unity of invention.

[Lacking Unity of Invention]

Example 11.

[Claim(s)]

1. A product X.
2. A method A for manufacturing product X, comprising steps J, K, and L.
3. A method B for manufacturing product X, comprising steps M, N, and O.
4. A method C for manufacturing product X, comprising steps P, Q, and R.

[Assumption]

With respect to the prior art, “product X” in claim 1 lacks novelty and an inventive step.

[Remark]

Since “product X” in claim 1 lacks novelty and an inventive step, and claims 1, 2, 3, and 4 do not possess the same or corresponding special technical

features, the application lacks unity of invention.

Example 12.

[Claim(s)]

1. A compound X.
2. A method for preparing compound X, comprising the following steps: ...
3. A use of compound X as a cleaning agent.

[Assumption]

With respect to the prior art, “compound X” in claim 1 lacks novelty and an inventive step.

[Remark]

“Compound X” in claim 1 lacks novelty and an inventive step, thus claims 1, 2, and 3 do not possess same or corresponding special technical features. Therefore, the application lacks unity of invention.

Example 13.

[Claim(s)]

1. A suitcase, comprising a body, ...; a lid, ...; a hinge, ...; a fastener, ...; characterized in that the body comprising internal ribs.
2. The suitcase of claim 1, wherein the suitcase body is a cuboid with rounded corners.
3. The suitcase of claim 2, wherein the ribs are located on a diagonal of a bottom surface of an inner side of the suitcase and on a side of the body.
4. The suitcase of claim 2, wherein a handle is provided on one side of the body, the handle comprising the following structures: ...
5. The suitcase of claim 2, wherein a caster is provided on one side of the body, the caster comprising the following structures: ...
6. The suitcase of claim 2, wherein the fastener further comprises a four-digit combination lock.

[Assumption]

With respect to the prior arts, the “suitcase” of claim 1 lacks novelty and an inventive step.

[Remark]

The “suitcase” in claim 1 lacks novelty and an inventive step, thus there are no same or corresponding special technical feature among the claims. Therefore, the application lacks unity of invention.

Example 14.

[Claim(s)]

1. A conveyor belt X, comprising feature A and feature D.
2. A conveyor belt Y, comprising feature B and feature D.
3. A conveyor belt Z, comprising feature A, feature B, and feature D.

[Assumption]

With respect to the prior art, “feature D” is not a special technical feature that provides novelty and an inventive step for the conveyor belt X of claim 1, the conveyor belt Y of claim 2, or the conveyor belt Z of claim 3. “Feature A” and “feature B” are the respective special technical features that provide novelty and an inventive step to the conveyor belt X of claim 1 and the conveyor belt Y of claim 2; however, “feature A” and “feature B” are not corresponding technical features.

[Remark]

Claims 1 and 3 both contain the same special technical feature “Feature A,” and claims 2 and 3 both contain the same special technical feature “Feature B.” However, claims 1 and 2 do not contain the same or corresponding special technical features. Therefore, claims 1, 2, and 3 still do not possess the same or corresponding special technical features. The application thus lacks unity of invention.

Example 15.

[Claim(s)]

1. A control circuit for a textile machine, comprising a voltage stabilizing module A and a switching element C.
2. A control circuit for a textile machine, comprising a current conversion module B and a switching element C.
3. A textile apparatus comprising a textile machine having a control circuit having a voltage stabilizing module A and a switching element C.
4. A textile apparatus comprising a textile machine having a control circuit having a current conversion module B and a switching element C.

[Assumption]

With respect to the prior arts, “switching element C” is not a special technical feature that provides novelty and an inventive step to the control circuit of claim 1 or claim 2. “Voltage stabilizing module A” and “current conversion module B” are the respective special technical features that provides novelty and an inventive step to the control circuit of claim 1 and the control circuit of claim 2. However, “voltage stabilizing module A” and

“current conversion module B” are not corresponding technical features.

[Remark]

Claims 1 and 3 both contain the same special technical feature “voltage stabilization module A,” and claims 2 and 4 both contain the same special technical feature “current conversion module B.” However, “voltage stabilization module A” and “current conversion module B” are not corresponding technical features. Therefore, claims 1, 2, 3, and 4 do not contain the same or corresponding special technical features, and the application lacks unity of invention.

Example 16.

[Claim(s)]

1. A coating containing an odor-depressing substance X.
2. A method for applying the coating described in claim 1 to an article, comprising the following steps: (1) spraying the coating into a mist using compressed air; (2) passing the mist of the coating through an electrode device A to energize it before spraying it onto the article.
3. A spraying apparatus, comprising an electrode device A.

[Assumption]

With respect to the prior art, “coating containing an odor-depressing substance X” in claim 1 has novelty and an inventive step, and “electrode device A” is a special technical feature that provides novelty and an inventive step to the method of claim 2 and the spraying apparatus of claim 3.

[Remark]

Claims 1 and 2 both contain the same special technical feature “coating containing an odor-depressing substance X,” and claims 2 and 3 both contain the same special technical feature “electrode device A.” However, claims 1 and 3 do not possess the same or corresponding special technical features. Therefore, claims 1, 2, and 3 also do not possess the same or corresponding special technical features. The application thus lacks unity of invention.