How to Reduce Cost When Filing a Patent Application in Japan Based on a U.S. Priority Case

--and--

Points for Consideration in Connection with Amendments that Shift the Focus of Prosecution ("Shift Amendments")

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Understanding the JPO's Fee Structure

Comparison of US vs JP Fee Structure

ASSUMPTIONS
1.00 USD = 80 JPY; 2 independent claims (constant)
Analyze for 20, 40, and 60 total claims (variable)

OBSERVATIONS
In US, it is only filing fees that vary as function of number of claims.
In JP, search/examination fees, appeal fees, and maintenance fees all vary as function of number of claims.
# Understanding the JPO's Fee Structure

## Comparison of US vs JP Fees (Filing, Appeal, and Maintenance Fees) for Different-Sized Claim Sets

### 20 claims total; 2 independent claims; large entity; PTO/JPO fees as of 1 May 2012; all figures shown are U.S. dollars (USD 1.00 = JPY 80)

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### 40 claims total; 2 independent claims; large entity; PTO/JPO fees as of 1 May 2012; all figures shown are U.S. dollars (USD 1.00 = JPY 80)

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### 60 claims total; 2 independent claims; large entity; PTO/JPO fees as of 1 May 2012; all figures shown are U.S. dollars (USD 1.00 = JPY 80)

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Japanese annuities (maintenance fees) are charged annually and are calculated depending on the number of claims and in accordance with a fee schedule that becomes more expensive in stages with elapsed time since grant. To simplify calculation, we compare the cumulative issue/publication + maintenance fees due through the end of the 8th year from grant. For an English-language schedule of JPO fees, see [http://www.jpo.go.jp/cgi/linke.cgi?url=/tetuzuki_e/ryoukin_e/ryokine.htm](http://www.jpo.go.jp/cgi/linke.cgi?url=/tetuzuki_e/ryoukin_e/ryokine.htm).
Understanding the JPO's Fee Structure

HOW TO REDUCE COST WHEN FILING IN JP

→ Amend/revise to reduce number of claims

(1) Rewrite multiple singly dependent claims as single multiply dependent claim

(2) Rewrite independent claims as dependent claims while regrouping to eliminate redundancy

(3) Delete dependent claims of limited value in JP (e.g., claims reciting numeric ranges of successively narrower scope)

(4) Rewrite group of dependent claims sharing common functional limitation as single Markush claim

(5) Claims as amended/revised should arrange subject matter strategically in light of constraints imposed by Japanese shift amendment practice (at least claim 1, and preferably also claim 2, should recite novel "special technical features")
Understanding JP Shift Amendment Practice

BE SURE TO TAKE SHIFT AMENDMENT PRACTICE INTO CONSIDERATION WHEN AMENDING/REVISING TO REDUCE CLAIM NUMBER!


In addition to the provisions of the preceding Section, when amending the claims pursuant to any of the situations listed at the several paragraphs of Section 1, the invention with respect to which determination as to whether or not grant of patent should be refused has been indicated in a Notification of Reasons for Refusal received prior to such amendment, and the invention as defined by the limitations of the claims following such amendment, must correspond to a single inventive group satisfying the requirements of unity of invention under Article 37.

• Prohibits amendments which would shift focus of prosecution so as to destroy Japanese unity of invention (defined in terms of special technical features at point of novelty)

• Failure of an amendment to satisfy the requirements of Article 17bis(4) will result in rejection of the application (Article 49(1))
Understanding JP Shift Amendment Practice

PROCEDURE USED BY EXAMINER IN DETERMINING WHETHER AMENDMENT WOULD SHIFT FOCUS OF PROSECUTION SO AS TO VIOLATE JAPANESE UNITY OF INVENTION

During examination, the following analysis is carried out in iterative fashion until a claim reciting an invention having a special technical feature (STF) is found:

→ "Analyze to determine whether STF is present in the invention recited in the lowest-numbered claim among the claims of the same category as and including all limitations of the invention recited in the claim analyzed for presence of STF during the previous iteration."

↓

(i) When an invention having STF is found, the only amendments permitted to be entered are those made with respect to an invention of the same category as and including all limitations of the invention recited in the pre-amendment claim determined to have the STF.

↓

(i) When an invention having STF is not found, the only amendments permitted to be entered are those made with respect to an invention of the same category as and including all limitations of the invention recited in the claim analyzed for presence of STF during the final iteration.

↓

Without adequate planning, it is entirely possible to find oneself in a situation in which the foregoing constraints make amendment impossible.
EXAMPLE (Article 37 Violation Example No. 33 from the JPO’s Examination Guidelines for Patent and Utility Model Applications)

CLAIMS

1. A refrigerant comprising a mixture in which saturated hydrocarbons are mixed and having a boiling point in a range -50° C to 0° C.

2. The refrigerant according to claim 1 wherein the mixture contains propane (C3H8) and butane (C4H10) mixed in a ratio in a range 1.6 : 1 to 4.5 : 1.

3. The refrigerant according to claim 2 wherein the mixture ratio is in a range 1.8 : 1 to 2.5 : 1.

4. A refrigeration unit employing the refrigerant according to claim 3.

5. A refrigeration unit according to claim 4 wherein a ferrous sliding component of a compressor mechanism of the refrigeration unit has a sliding surface on which there is a surface-hardened layer of Vickers hardness not less than 400 and thickness not less than 2 microns, or a surface layer of thickness 1 x 10^-3 micron to 50 microns formed from a compound having iron and sulfur as principal constituents.

6. A refrigeration unit according to claim 5 employing as refrigeration unit oil at least one species selected from among napthenic mineral oil, paraffinic mineral oil, and synthetic oil.
RESULT OF EXAMINATION

- The invention as recited at claims 1-3 is publicly known (no STF).
- The invention as recited at claim 4 lacks STF when viewed in combination with the
general state of the art (e.g., as asserted by an examiner taking official notice of such
fact).
- The invention recited at claim 5 has little technical relevance to the invention recited at
claim 4.

The claims that will be examined on the merits without implicating
unity of invention are claims 1-4.
Understanding JP Shift Amendment Practice

GENERALIZING FROM THE FOREGOING EXAMPLE

CLAIMS
1. Component (refrigerant) comprising A. (No STF)
2. Component at claim 1 comprising A wherein B. (No STF)
3. Component at claim 2 comprising A wherein B + C. (No STF)
4. Finished product (refrigeration unit) employing component at claim 3.
5. Another component D of finished product at claim 4 has some limitation X.
6. Yet another component E of finished product at claim 5 has some limitation Y.

>> Component at claims 1-3, and components D & E at claims 5 & 6, have little technical relevance to each other.
Understanding JP Shift Amendment Practice

>> Examples of amendments that will be examined on the merits without implicating Japanese Patent Law Article 17bis(4)

EXAMPLE 1: Claim amended to have all limitations of claims 1-4 plus an additional "outside" limitation

POST-AMENDMENT CLAIM 1

A refrigeration unit employing a refrigerant comprising a mixture in which propane (C3H8) and butane (C4H10) are mixed in a ratio in a range 1.8 : 1 to 2.5 : 1 and having a boiling point in a range -50º C to 0º C,

wherein *****.

(... where ***** is a limitation described in the specification)

GENERALIZING FROM POST-AMENDMENT CLAIM 1

Finished product employing a component which is such that A + B + C, wherein *****.
Understanding JP Shift Amendment Practice

>> Examples of amendments that will be examined on the merits without implicating Japanese Patent Law Article 17bis(4)

EXAMPLE 2: Claim amended to have all limitations of claims 1-4 plus an additional "inside" limitation

POST-AMENDMENT CLAIM 1

A **refrigeration unit** employing a refrigerant comprising a mixture in which propane (C3H8) and butane (C4H10) are mixed in a ratio in a range 2.0 : 1 to 2.3 : 1 and having a boiling point in a range -50º C to 0º C.

(... where there is a description in the specification to the effect that a mixture ratio of 2.0 : 1 to 2.3 : 1 is preferred)

GENERALIZING FROM POST-AMENDMENT CLAIM 1

Finished product employing a component which is such that A + B + C, wherein the C is c1.
Understanding JP Shift Amendment Practice

>> Examples of amendments that will not be examined on the merits but will instead trigger a rejection from the examiner alleging violation of Japanese Patent Law Article 17bis(4)

EXAMPLE 1: Not the invention last found to have STF

POST-AMENDMENT CLAIM 1

A refrigerant comprising a mixture in which propane (C3H8) and butane (C4H10) are mixed in a ratio in a range 2.0 : 1 to 2.3 : 1 and having a boiling point in a range -50º C to 0º C.

(... where there is a description in the specification to the effect that a mixture ratio of 2.0 : 1 to 2.3 : 1 is preferred)

GENERALIZING FROM POST-AMENDMENT CLAIM 1

A component which is such that A + B + C, wherein the C is c1.
Understanding JP Shift Amendment Practice

>> Examples of amendments that will not be examined on the merits but will instead trigger a rejection from the examiner alleging violation of Japanese Patent Law Article 17bis(4)

EXAMPLE 2: Includes claim constituents deemed to be of little technical relevance

POST-AMENDMENT CLAIM 1

A refrigeration unit employing a refrigerant comprising a mixture in which propane (C3H8) and butane (C4H10) are mixed in a ratio in a range 1.8 : 1 to 2.5 : 1 and having a boiling point in a range -50º C to 0º C,

a ferrous sliding component of a compressor mechanism of the refrigeration unit having a sliding surface on which there is a surface-hardened layer of Vickers hardness not less than 400 and thickness not less than 2 microns, or a surface layer of thickness $1 \times 10^{-3}$ micron to 50 microns formed from a compound having iron and sulfur as principal constituents.

GENERALIZING FROM POST-AMENDMENT CLAIM 1

Finished product employing a component which is such that A + B + C, and further comprising component D.
Understanding JP Shift Amendment Practice

SUMMARY

(1) To decrease cost when filing in JP based on a US priority case, it is absolutely essential to amend/revise so as to reduce the number of claims.

(2) When reducing the number of claims, it is important to strike the right balance between cost reduction achieved through reduction in the number of claims versus the relative importance of narrow dependent claims.

(3) In light of Japanese shift amendment practice, limitations which Applicant believes have STF should be placed in claim 1 (and preferably also claim 2).