Making the Move to Patent Translation

by Martin Cross
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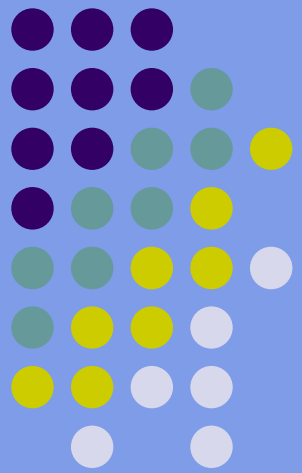

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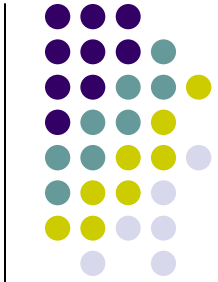
What we are going to cover

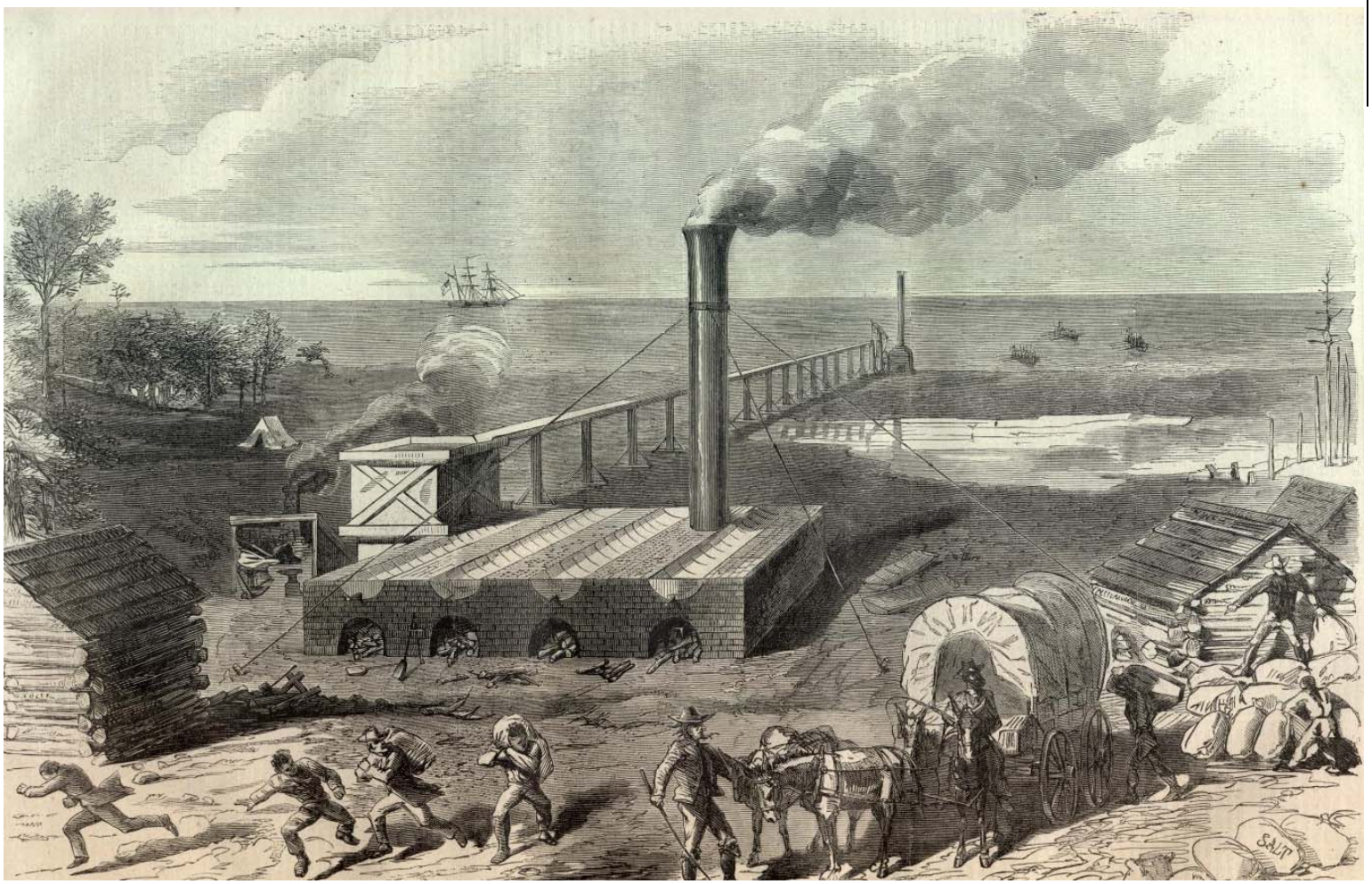


- What are patents, why are they written and why are they translated
- How to translate a patent, including formatting and certification
- How to market your awesome skills

Are we all sitting comfortably?

Daniel

Horatio



US006500216B1

(12) **United States Patent**
Takayasu

(10) **Patent No.: US 6,500,216 B1**
(45) **Date of Patent: Dec. 31, 2002**

(54) **METHOD AND APPARATUS FOR DESALINATING SEA WATER, NATURAL SALT AND FRESH WATER**

(76) Inventor: **Masakatsu Takayasu**, 960 Aza Taba, Gushikawa-shi, Okinawa 904-2213 (JP)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/355,697**

(22) PCT Filed: **Feb. 16, 1998**

(86) PCT No.: **PCT/JP98/00651**

§ 371 (c)(1),
(2), (4) Date: **Jul. 30, 1999**

(87) PCT Pub. No.: **WO98/35911**

PCT Pub. Date: **Aug. 20, 1998**

(30) **Foreign Application Priority Data**

Feb. 18, 1997 (JP) 9-050916
Oct. 22, 1997 (JP) 9-309392

(51) **Int. Cl.**[7] **C01D 3/06**; C02F 1/12

(52) **U.S. Cl.** ..... **23/303**; 23/298; 23/302 T; 23/295 R; 203/10; 203/90; 203/48; 159/48.1; 159/45; 159/4.01; 159/4.1; 423/499.4

(58) **Field of Search** ..... 23/298, 303, 302 T, 23/295 R; 203/10, 90, 48; 159/48.1, 45, 4.01, 4.1; 423/499.4

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,904,122 A * 9/1975 Schnitzer 239/236
4,334,886 A * 6/1982 Tani et al. 23/303
4,704,189 A * 11/1987 Assaf 159/48.2
5,015,332 A * 5/1991 Iwaya et al. 159/4.2
5,139,612 A * 8/1992 Andersen 159/4.01
5,348,622 A * 9/1994 Deutsch et al. 203/10
5,527,494 A * 6/1996 Weinberg et al. 159/4.01
5,984,981 A * 11/1999 Miyagi 23/303

FOREIGN PATENT DOCUMENTS

WO 98/05432 * 2/1998

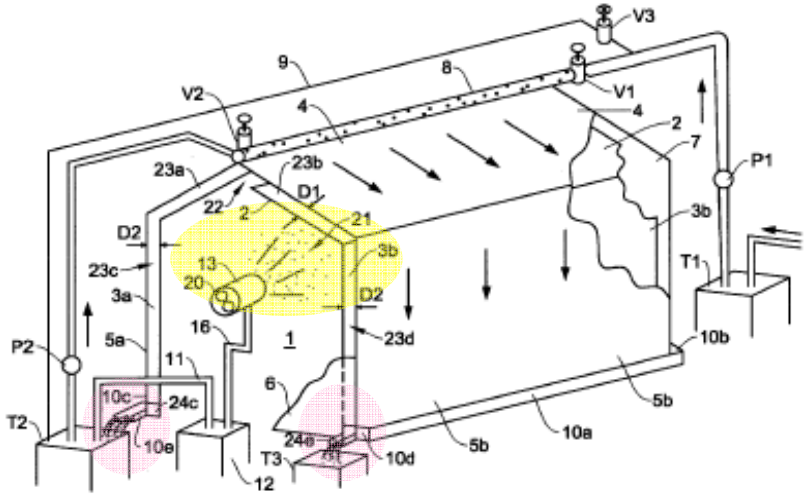
* cited by examiner

Primary Examiner—Ngoc-Yen Nguyen
(74) *Attorney, Agent, or Firm*—Muramatsu & Associates

(57) **ABSTRACT**

A method and an apparatus of producing natural salt or fresh water by treating sea water in an extremely short period of time and with high efficiently. The distilled water and salt components are treated for expediting crystallization of the salt components by evaporating water components by atomizing sea water and blowing warm wind thereto. During this treatment, there are provided a method and an apparatus of arranging net or cloth at one stage or a plurality of stages in a midway of a flow of the evaporated water components and adhering the salt components on the net or the cloth when the evaporated water components pass through the net or the cloth.

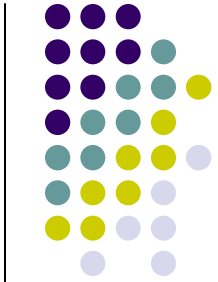
22 Claims, 7 Drawing Sheets



A patent is an agreement between a government and an applicant.

- The government promises to stop anybody other than the applicant from using the invention for a fixed period of time.
- The applicant promises to let everyone know exactly how the invention works.

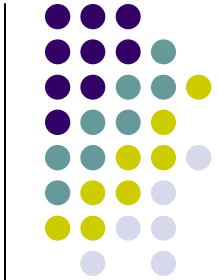
To be eligible for a patent the invention must be:



- new (novel)
- not obvious
- useful
- statutory

The application must:

- demonstrate the above
- particularly point out and distinctly claim the invention
- enable those skilled in the art to make and use the invention



METHOD AND APPARATUS FOR DESALINATING SEA WATER, NATURAL SALT AND FRESH WATER

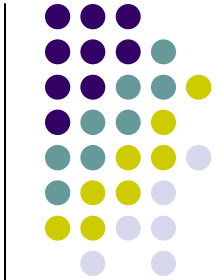
BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a method and apparatus for producing natural salt by treating sea water.

2. Description of Related Art

According to a currently known method of producing natural salt, a number of pieces of bamboo with branches are hung upside down in a tower formed by piling up blocks, sea water is sprinkled from thereabove and water is evaporated by wind and solar heat while flowing down on the surface of



SUMMARY OF THE INVENTION

The technical problem of the invention is revolved by the following means.

Invention according to a first through a seventh aspect relates to a method of treating sea water for producing salt by means of atomizing sea water by rotating a centrifugal generator and of evaporating a water component to crystallize the salt by blowing warm wind thereto, wherein between a treating chamber and an outflow portion for the evaporated water component there is arranged at least one of net and cloth in one stage or a plurality of stages, the salt component is adhered to at least one of the net and the cloth when the evaporated water component passes through at least one of the net and the cloth, and thereafter the adhered salt component is peeled and dropped from at least one of the net and cloth.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view showing a total configuration of a sea water treating apparatus according to the invention;

FIG. **2** is a perspective view exemplifying a vicinity of a heating unit;

FIG. **3** is a plane view horizontally cutting side walls and outer walls of a treating chamber;

FIG. **4** is a longitudinal sectional view exemplifying a vicinity of a heater;

FIGS. **5(1)**, **5(2)** and **5(3)** are sectional views showing various embodiments of a vicinity of a roof of the treating chamber and an outer roof;

FIGS. **6(1)**, **6(2)** and **6(3)** are other embodiments of an inner constitution of a treating chamber;

FIG. **7** is a perspective view of essential portions of the embodiment shown by FIG. **6(1)**; and

FIGS. **8(1)** and **8(2)** are views showing various embodiments of atomizing means.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Next, an explanation will be given of embodiments showing how a treating method and a treating apparatus of sea water according to the invention are actually embodied. FIG. **1** is a perspective view showing a total configuration of a sea

Industrial Applicability

According to the first aspect of the invention, when sea water is atomized, innumerable small particles of sea water are produced and accordingly, the surface area in contrast to the volume is increased and vaporization of the water component is facilitated. As a result, separation of the water component from crystals of the salt component can efficiently be carried out. Further, the warm air is blown thereto and accordingly, vaporization of the water component can further be expedited by thermal energy and wind and natural salt can inexpensively be produced.

Particularly, between the treating chamber and the outflow portion of the evaporating water component there is

What is claimed is:

1. A method of treating sea water or condensed sea water for producing salt, comprising the following steps of:

providing a treating chamber having a roof and side walls,

atomizing sea water into the treating chamber by scattering the sea water with use of a centrifugal generator,

evaporating water components of the atomized sea water by blowing warm wind to the atomized sea water,

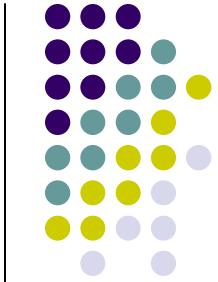
arranging a first screen in one stage or a plurality of stages for passing the evaporated water components therethrough, said first screen is positioned below an opening provided at the roof of the treating chamber for exhausting the evaporated water components,

adhering salt components to the first screen when the water components atomized by the rotation of the centrifugal generator and evaporated by the warm wind move upwardly toward the opening and pass through the first screen, and

removing the adhered salt components by peeling and dropping the salt components from the first screen.

2. The method of treating sea water according to claim **1**, further comprising a step of arranging a second screen having a mesh size different from that of the first screen, and the salt components are adhered to the first screen and the second screen.

What are patent translations used for?

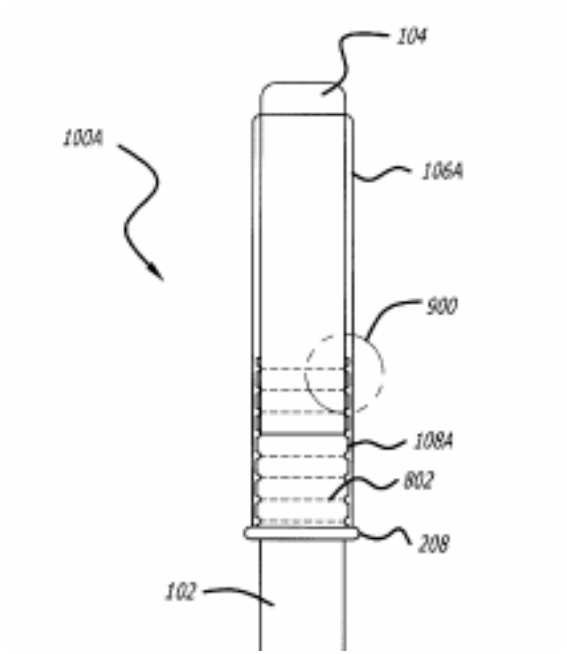


- Prior art research
- Research into related technology
- Information Disclosure Statement
- Arguing with the examiner
- Litigation
- Filing in foreign countries

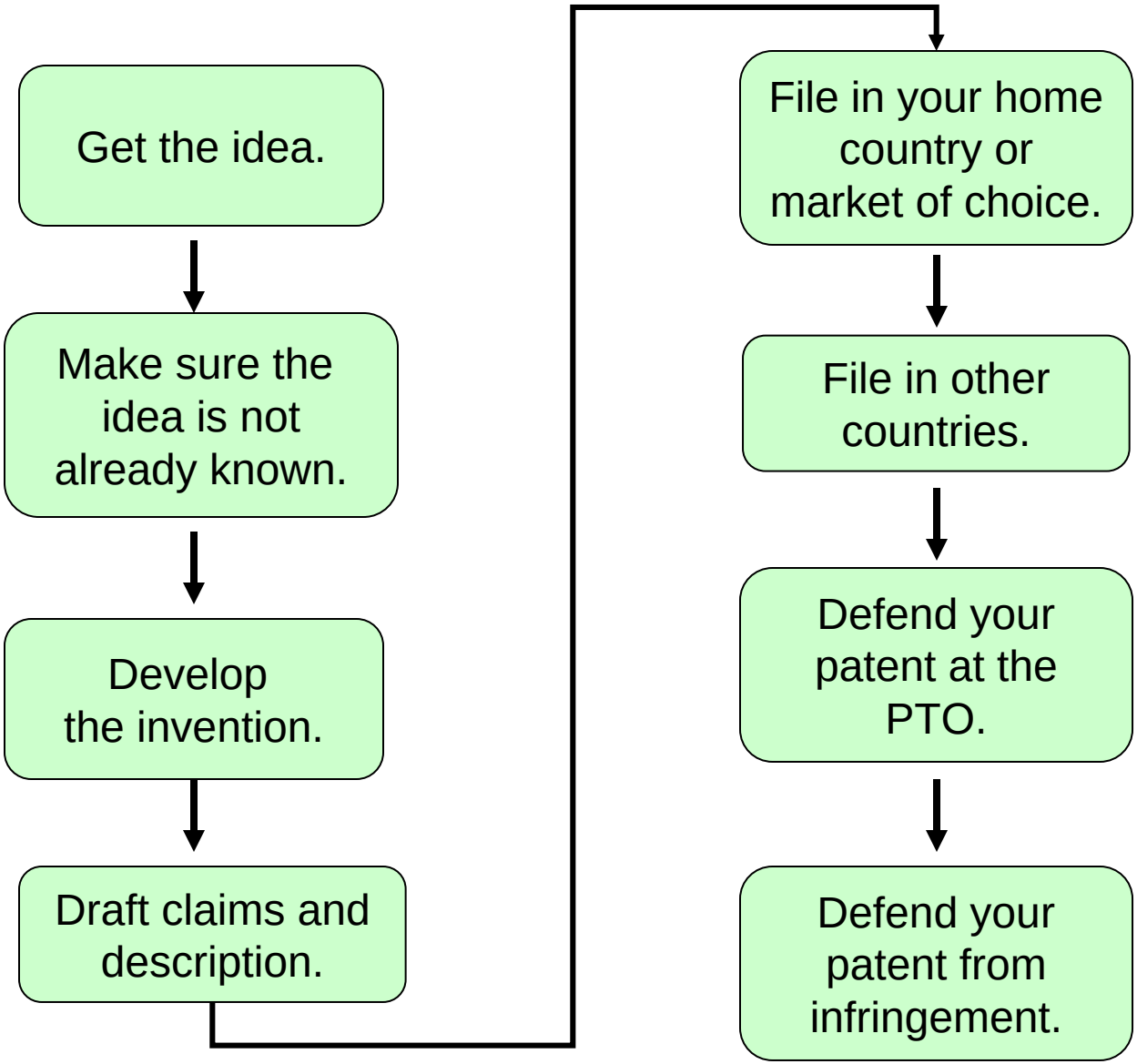
http://patenttranslations.com/res_forTranslators.htm

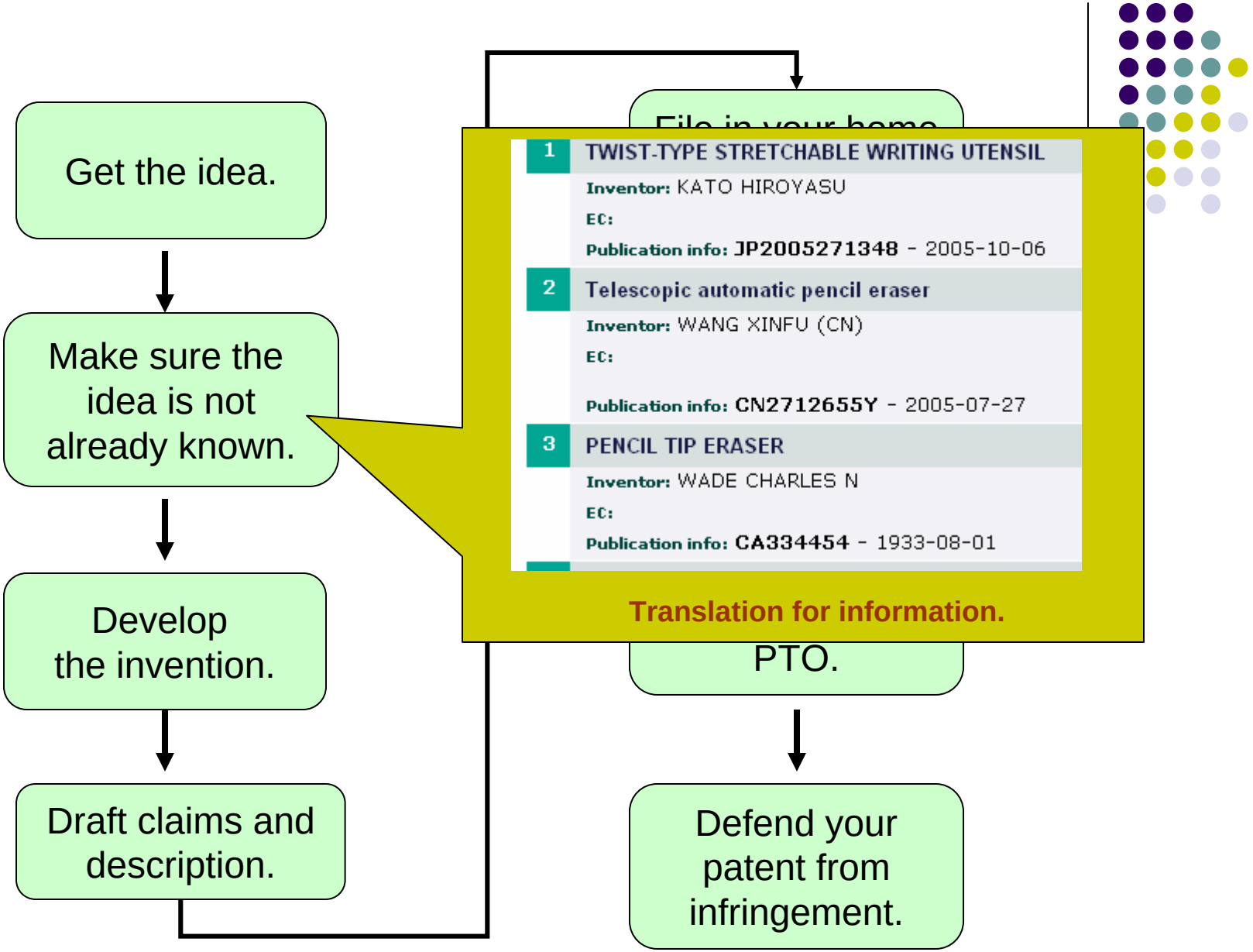
Types of Patent Translation

A cautionary tale



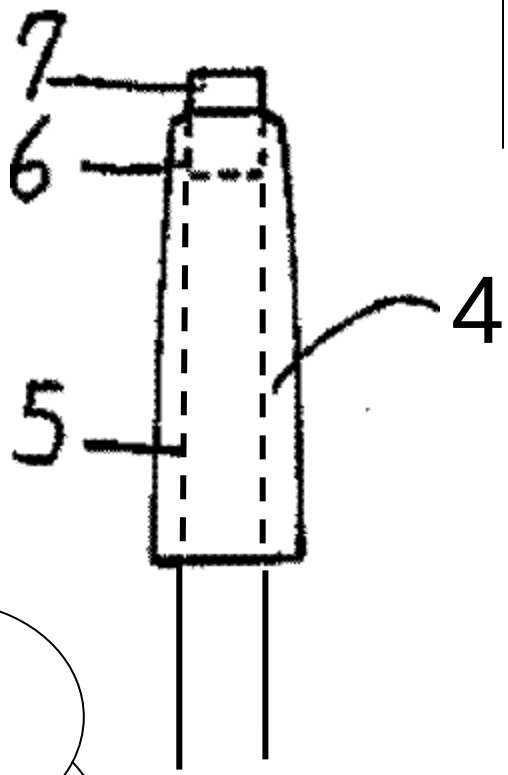
Frank


Get the idea.
Make sure the idea is not already known.
Develop the invention.
Draft claims and description.
File in your home country or market of choice.
File in other countries.
Defend your patent at the PTO.
Defend your patent from infringement.


Get the idea.
Make sure the idea is not already known.
Develop the invention.
Draft claims and description.
File in your home
PTO.
Defend your patent from infringement.
1
TWIST-TYPE STRETCHABLE WRITING UTENSIL
Inventor: KATO HIROYASU
EC:
Publication info: JP2005271348 - 2005-10-06
2
Telescopic automatic pencil eraser
Inventor: WANG XINFU (CN)
EC:
Publication info: CN2712655Y - 2005-07-27
3
PENCIL TIP ERASER
Inventor: WADE CHARLES N
EC:
Publication info: CA334454 - 1933-08-01
Translation for information.

Anna

The cap comprises an aperture having a diameter that is greater than the diameter of the eraser, and is slidably engaged on the end of the pencil so as to support and protect the eraser.



The cap has a hole in it
that is wider than the eraser,
and it fits on the end of the pencil
so as to protect the eraser.

Get the idea.

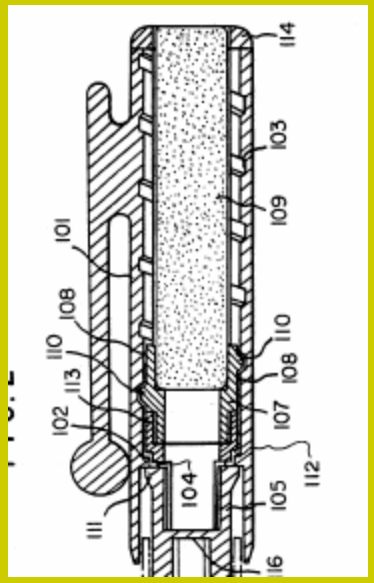
Make sure the idea is not already known.

Develop the invention.

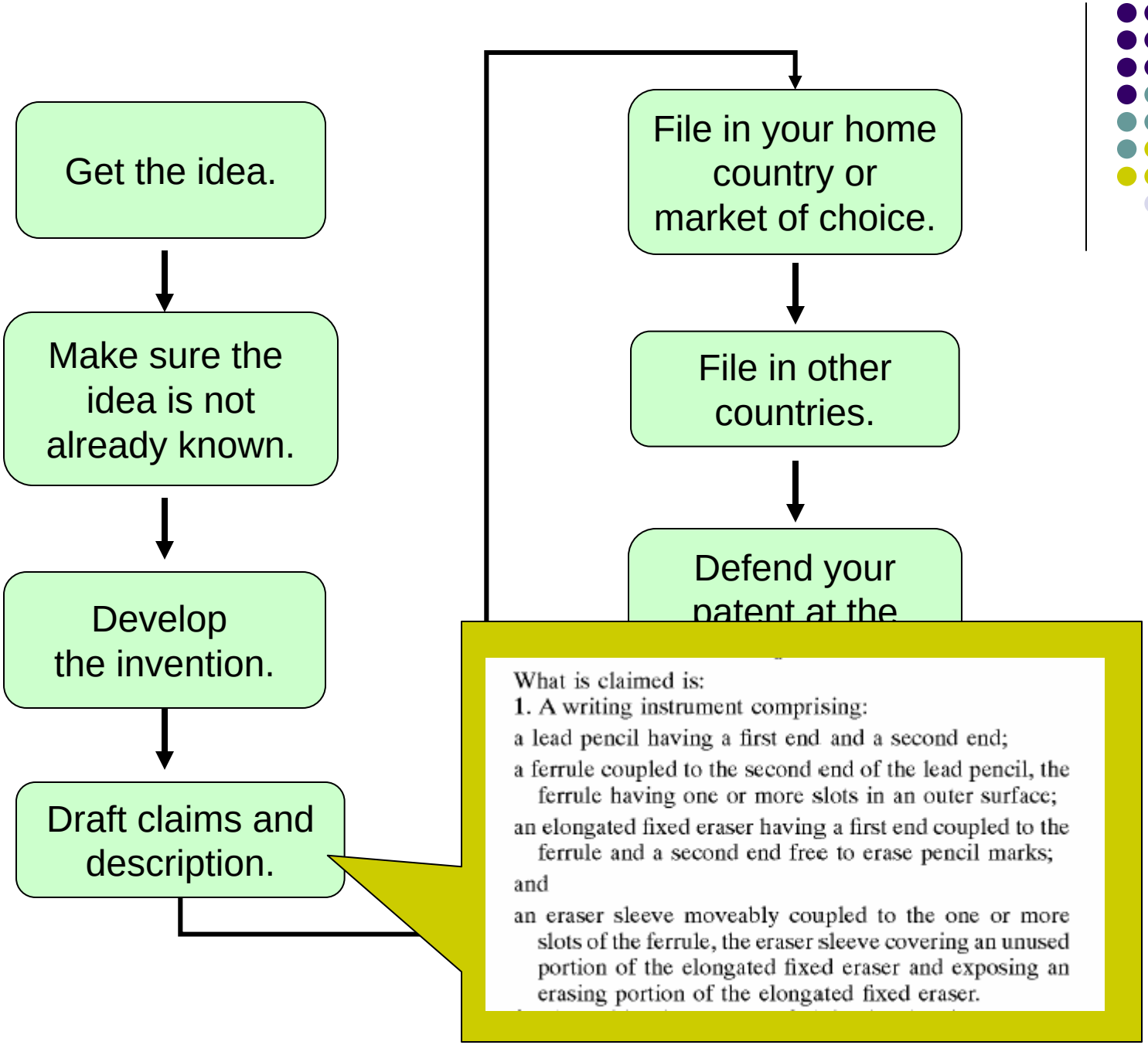
Draft claims and description.

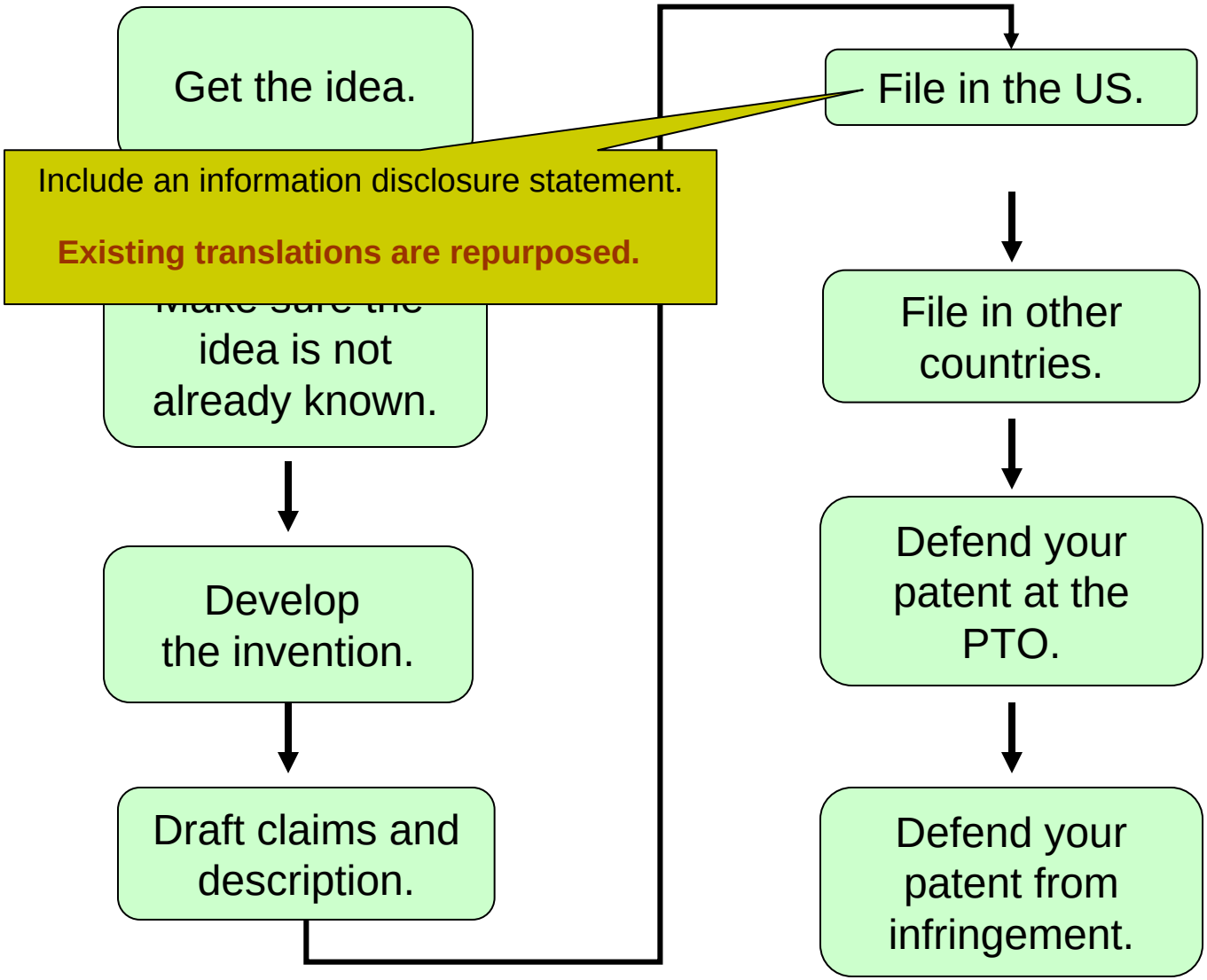
File in your home country or market of choice.

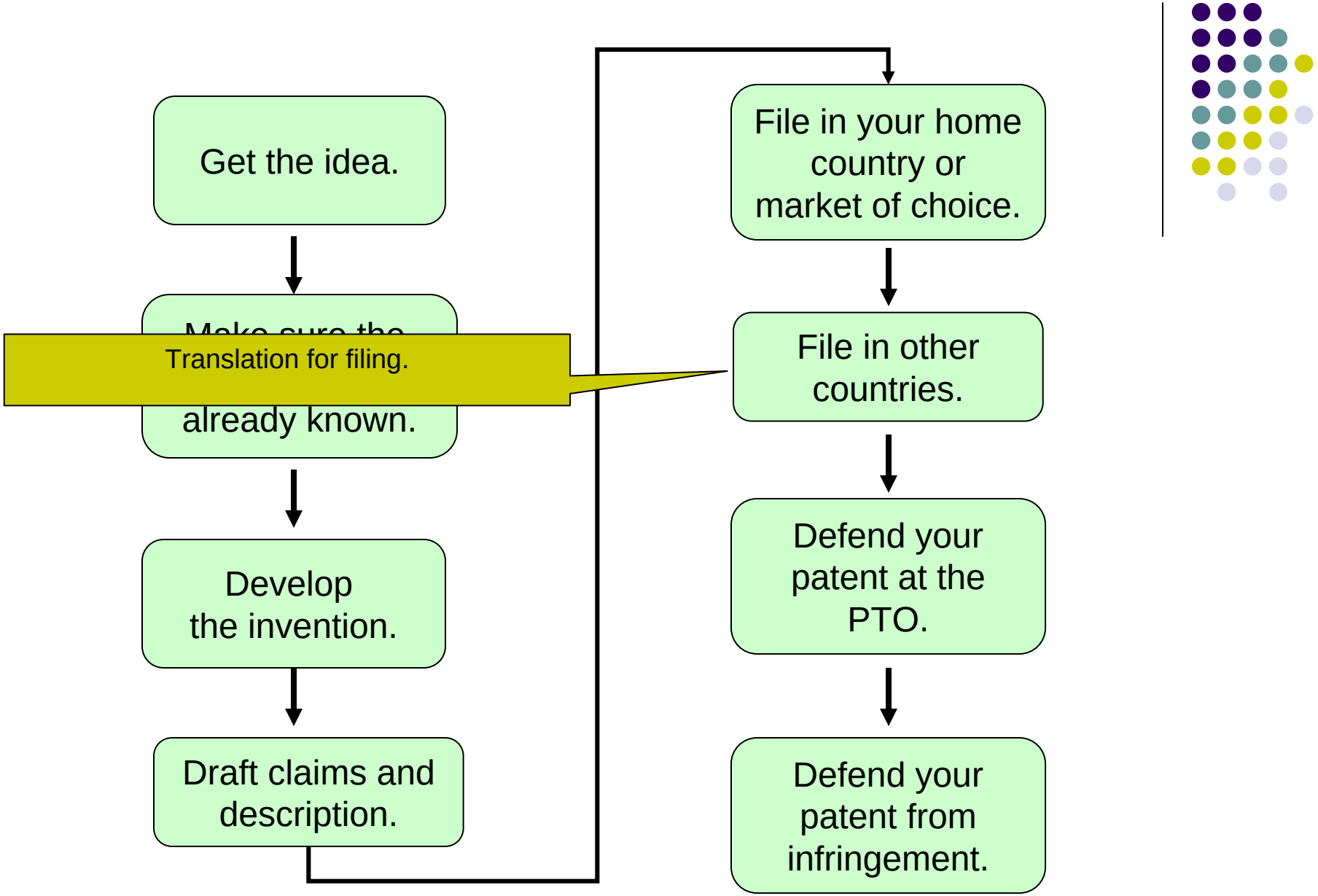
File in other

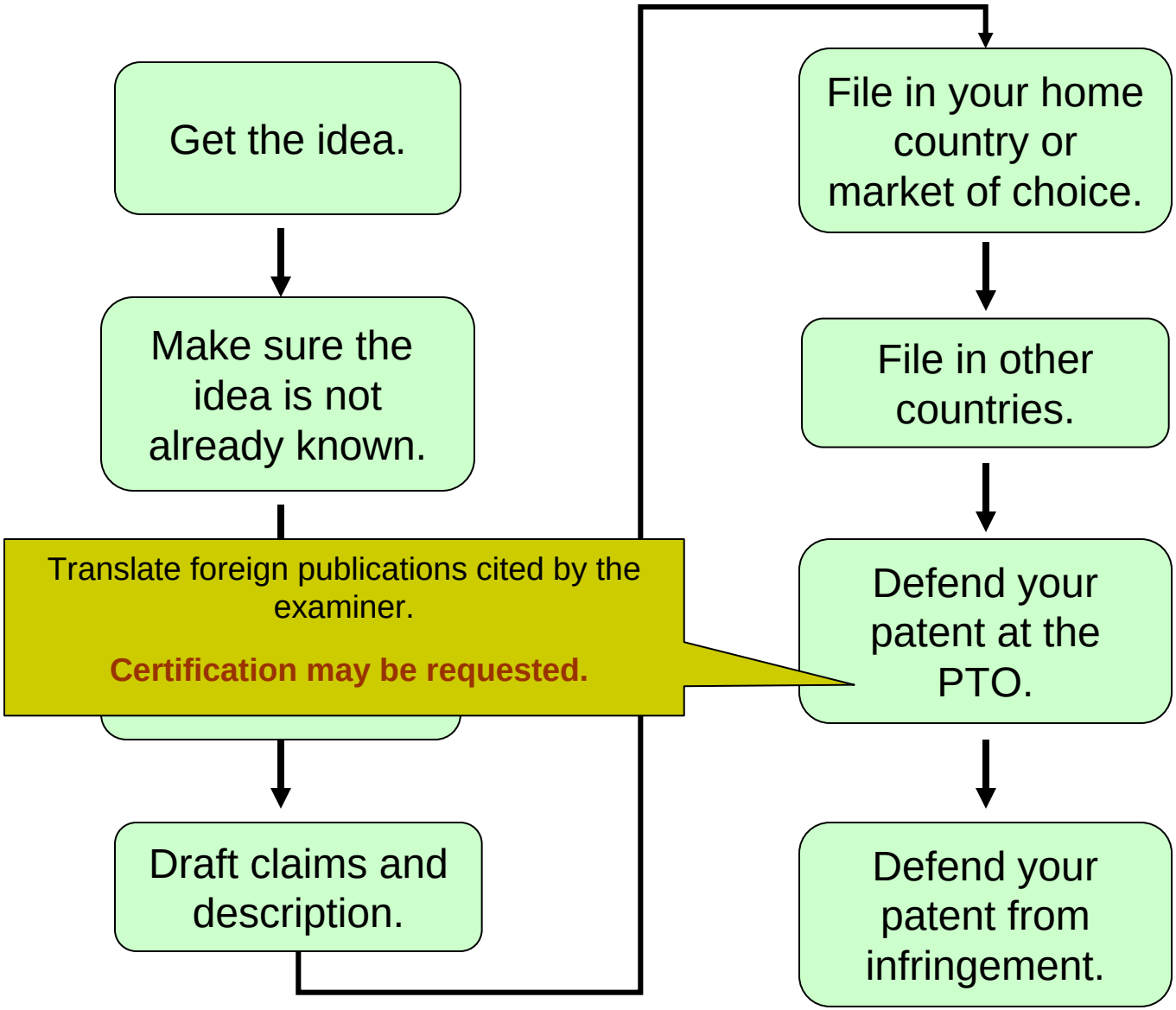


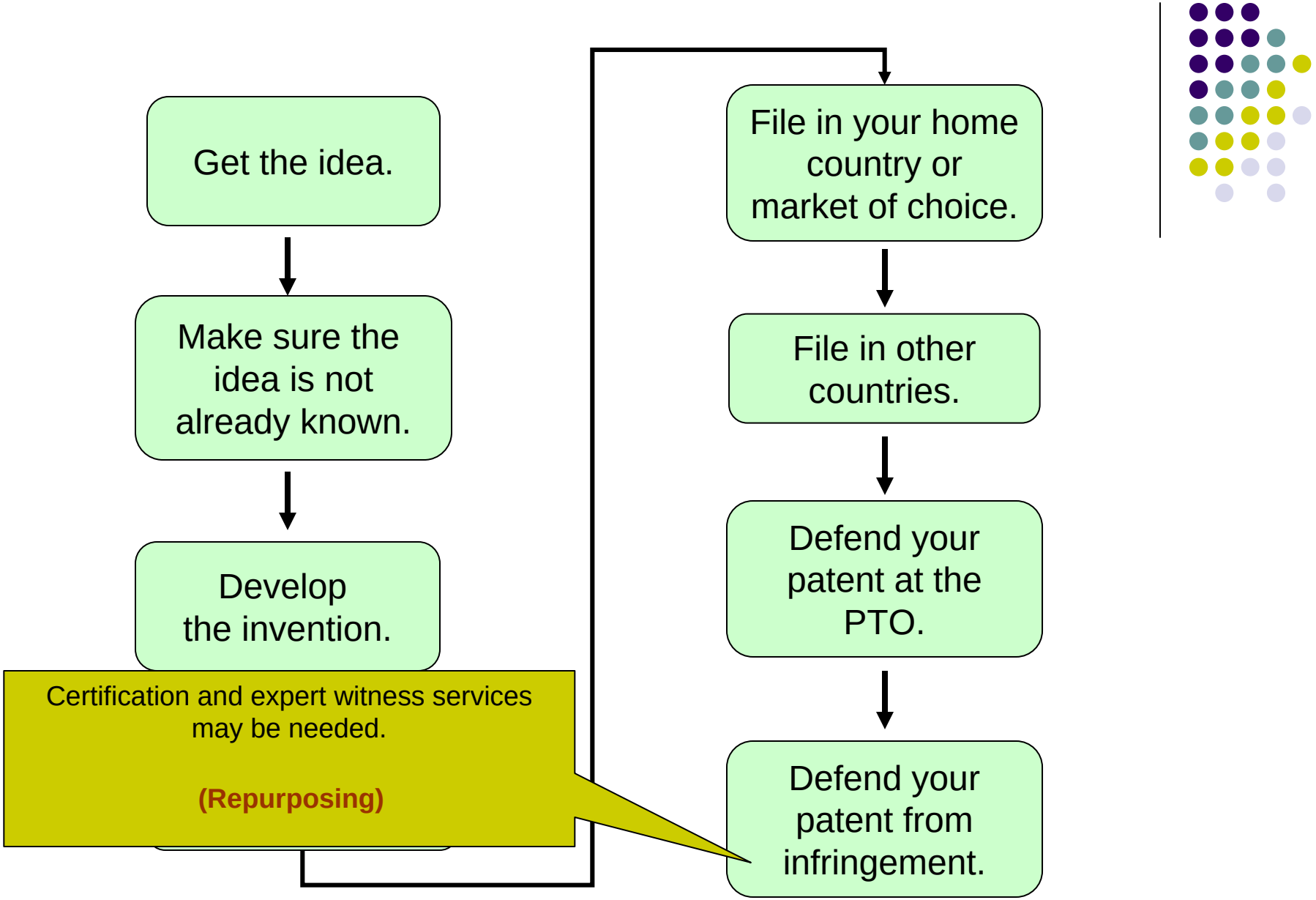
Translation for technical information


Get the idea.
Make sure the idea is not already known.
Develop the invention.
Draft claims and description.
File in your home country or market of choice.
File in other countries.
Defend your patent at the
What is claimed is:
1. A writing instrument comprising:
a lead pencil having a first end and a second end;
a ferrule coupled to the second end of the lead pencil, the ferrule having one or more slots in an outer surface;
an elongated fixed eraser having a first end coupled to the ferrule and a second end free to erase pencil marks;
and
an eraser sleeve moveably coupled to the one or more slots of the ferrule, the eraser sleeve covering an unused portion of the elongated fixed eraser and exposing an erasing portion of the elongated fixed eraser.


Get the idea.
Include an information disclosure statement.
Existing translations are repurposed.
idea is not already known.
Develop the invention.
Draft claims and description.
File in the US.
File in other countries.
Defend your patent at the PTO.
Defend your patent from infringement.

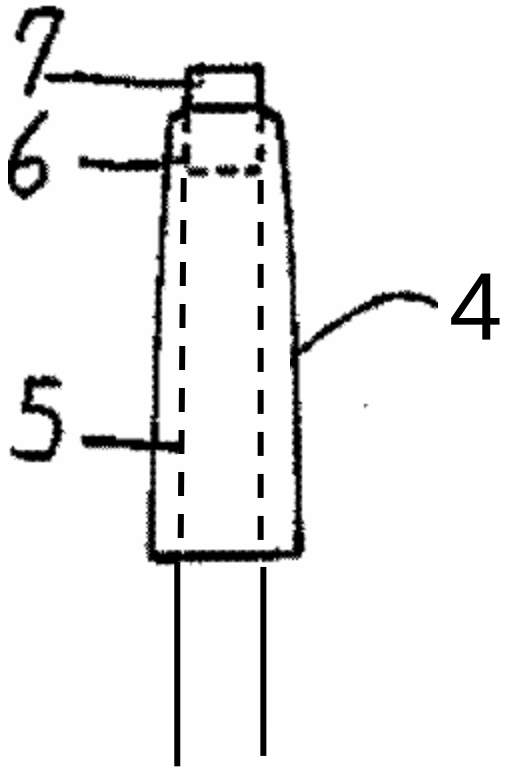

Get the idea.
already known.
Develop the invention.
Draft claims and description.
File in your home country or market of choice.
File in other countries.
Translation for filing.
Defend your patent at the PTO.
Defend your patent from infringement.


Get the idea.
Make sure the idea is not already known.
Translate foreign publications cited by the examiner.
Certification may be requested.
Draft claims and description.
File in your home country or market of choice.
File in other countries.
Defend your patent at the PTO.
Defend your patent from infringement.

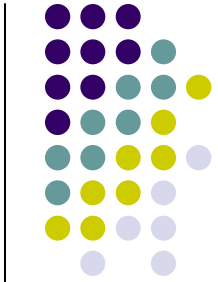

Get the idea.
Make sure the idea is not already known.
Develop the invention.
Certification and expert witness services may be needed.
(Repurposing)
File in your home country or market of choice.
File in other countries.
Defend your patent at the PTO.
Defend your patent from infringement.

~~The cap has a hole in it that is wider than the eraser, and it fits on the end of the pencil so as to protect the eraser.~~

The cap comprises an aperture having a diameter that is greater than the diameter of the eraser, and is slidably engaged on the end of the pencil so as to support and protect the eraser.

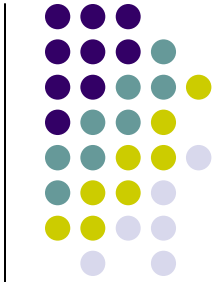


Literal Translation



An exact and accurate reproduction the entire content of the source text without embellishment or modification.

What literal patent translation is not:



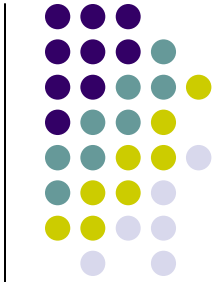
- a lesson the syntax of the source language (formal equivalence)

Je m’appelle Martin et je suis traducteur.

~~**I call myself Martin and I am translator.**~~

My name is Martin and I am a translator.

The Basic Rules



1. Reproduce meaning
2. Reproduce register
3. Respect sentence breaks and carriage returns
4. One-to-one correspondence between source and target

Only worry about the lexemes

- Lexemes are the basic units in “content words,” and have independent meaning.

For our purposes, we are going to say that lexemes include: nouns, verbs, adjectives, adverbs and numerals.

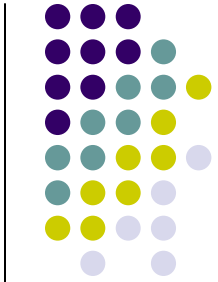
dog, gun, multitasking, run, implement, disassociate, fast, slowly, 150, five, …

- Function words are the grammatical glue that holds lexemes together.

Function word include: articles, pronouns, prepositions, postpositions, conjunctions, auxiliary verbs, interjections, and particles.

him, she, it, they, that, of, on, under, before, thereafter, thereby, and, but, for, so, unless, because, is, may, can, should, will, to, even, there

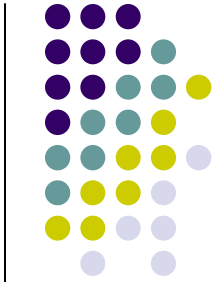
Spot the lexeme



The invention relates generally to the field of writing instruments.

The casing may also be referred to as a barrel or a sheath.

Conserving lexemes



F	L	L	L	L (jump)	L	F	L	L
The	quick	brown	fox	jumped	over	the	lazy	dog.

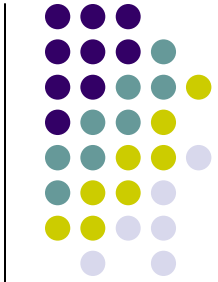
✓*Over the lazy dog, jumped the quick brown fox.*

✓*The lazy dog was jumped over by the quick brown fox.*

✓*The fox, which was quick and brown, jumped over the dog, which was lazy.*

✓*The fox did jump, and did so over the dog, the fox being both quick and brown, while the dog was lazy.*

Word and phrase order



- La présente invention est relative à un système de verrouillage des portières d'un véhicule automobile.

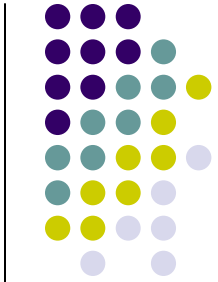
- The present invention relates to a system of locking of the doors of a motor vehicle.

✓ The present invention relates to a motor vehicle door locking system.

✓ The present invention relates to a door locking system for a motor vehicle.

× The present invention relates to a system whereby the doors of a motor vehicle can be locked.

Parts of speech



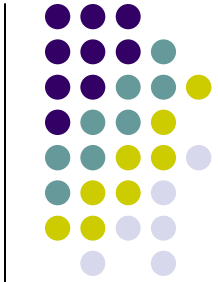
- Dieses Mittel wurde auf eine belichtete und ausgewaschene Photopolymer-Hochdruckplatte gesprüht ...

- This product was sprayed on a light-exposed and rinsed-off photopolymer letterpress printing plate ...

✓ This product was sprayed on a photopolymer letterpress printing plate, which had been exposed to light and rinsed-off ...

× After preparing a photopolymer letterpress printing plate by exposing it to light and rinsing it off, the product was sprayed on.

Parts of speach



- La présente invention propose un système qui permette une resynchronisation fiable et économique entre émetteur et récepteur.

- The present invention proposes a system which allows a reliable and economic resynchronization between transmitter and receiver

✓ The present invention proposes a system that allows the transmitter and the receiver to be resynchronized reliably and economically

✗ The present invention proposes a reliable and economical system for resynchronizing the transmitter and the receiver

What if it doesn’t work?

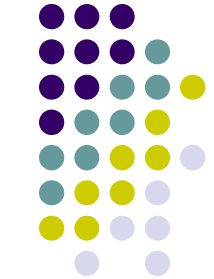
Je m’appelle Martin et je suis traducteur.

Equivalent Phrasing

Conservation of Lexemes

My name is Martin and I am a translator.

When to use Equivalent Phrasing



- When the equivalence is very well established (usually, but not always, when the equivalence is listed in a dictionary)

- When conserving the source lexemes would lead to undue confusion, or highly unnatural style.

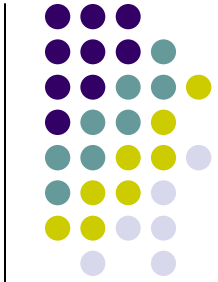
Your call

- ...電源の切り忘れを防止し得る。
- … it is possible to prevent forgetting to turn off the power

- ... it is possible to prevent [people from] forgetting to turn the power off

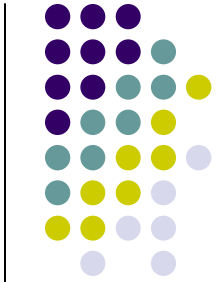
- ...it is possible to prevent the power from being accidentally left on.

The messy stuff



- Use [*sic*] to avoid blame
- Use square brackets around lexemes that you just had to add.
- Use footnotes to add comments or explanations. (remove before certification)

Formatting



- Match the pagination
- Do not add formatting for clarity
  - No extra carriage returns
  - No setting things off to emphasize organization
- Small fonts are OK
- Do not copy and paste government seals

VERIFICATION AND CERTIFICATION OF TRANSLATION

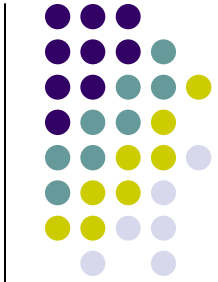
Document translated: JP-01-234567-A

This is to certify that the document or portion thereof identified above was translated into English by Martin Cross and represents an accurate and faithful rendition of the original text to the best of my knowledge and belief.

Martin Cross
President, Patent Translations Inc.
10/25/2009

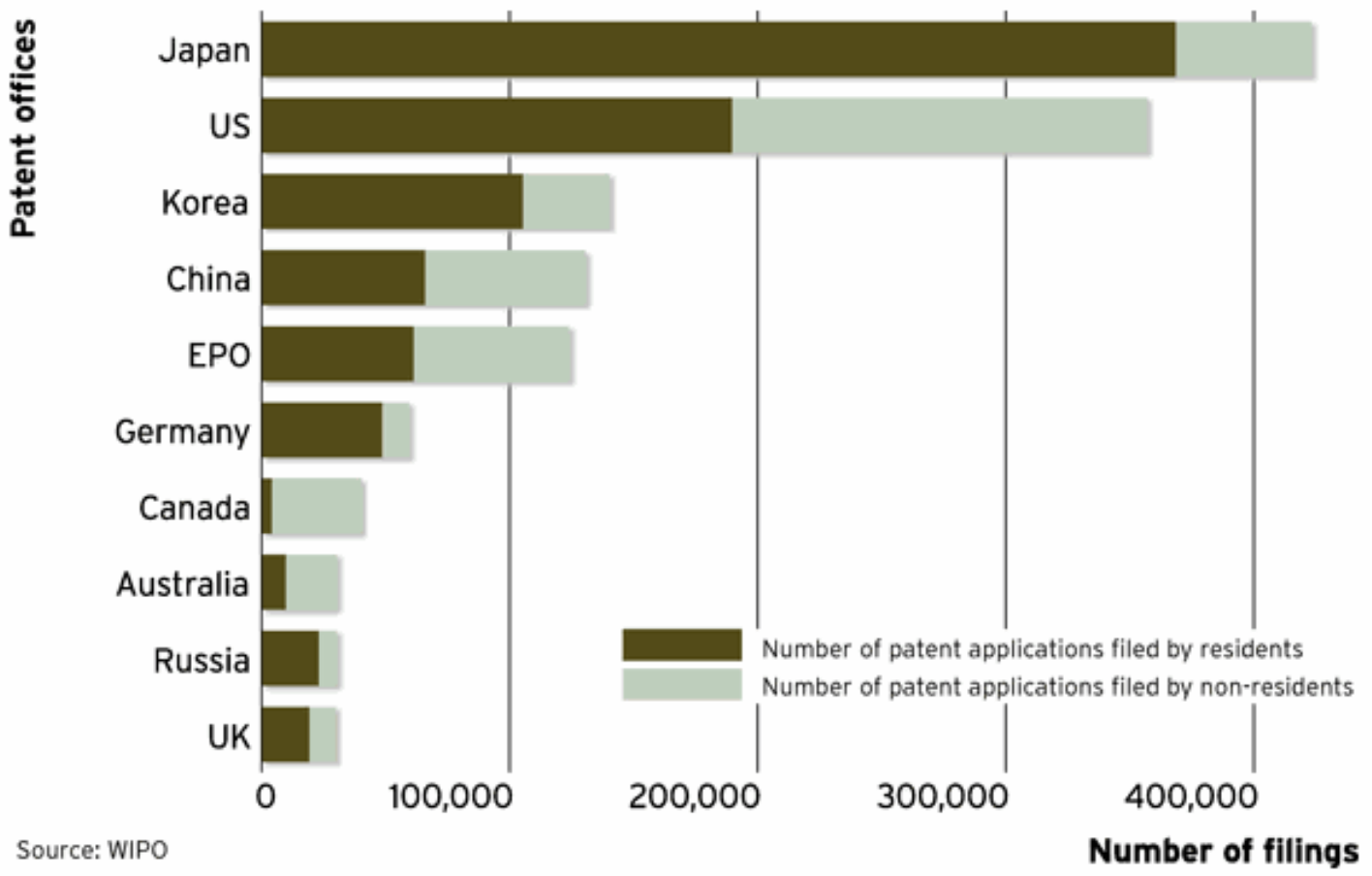
Martin Cross has worked for nineteen years as a Japanese to English translator and translation editor specialized in patent documents. He is a recognized expert in the field, whose publications on the subject include co-authorship of the Patent Translator's Handbook, which is published by the American Translators Association.

OK, but how does this make me rich and happy?



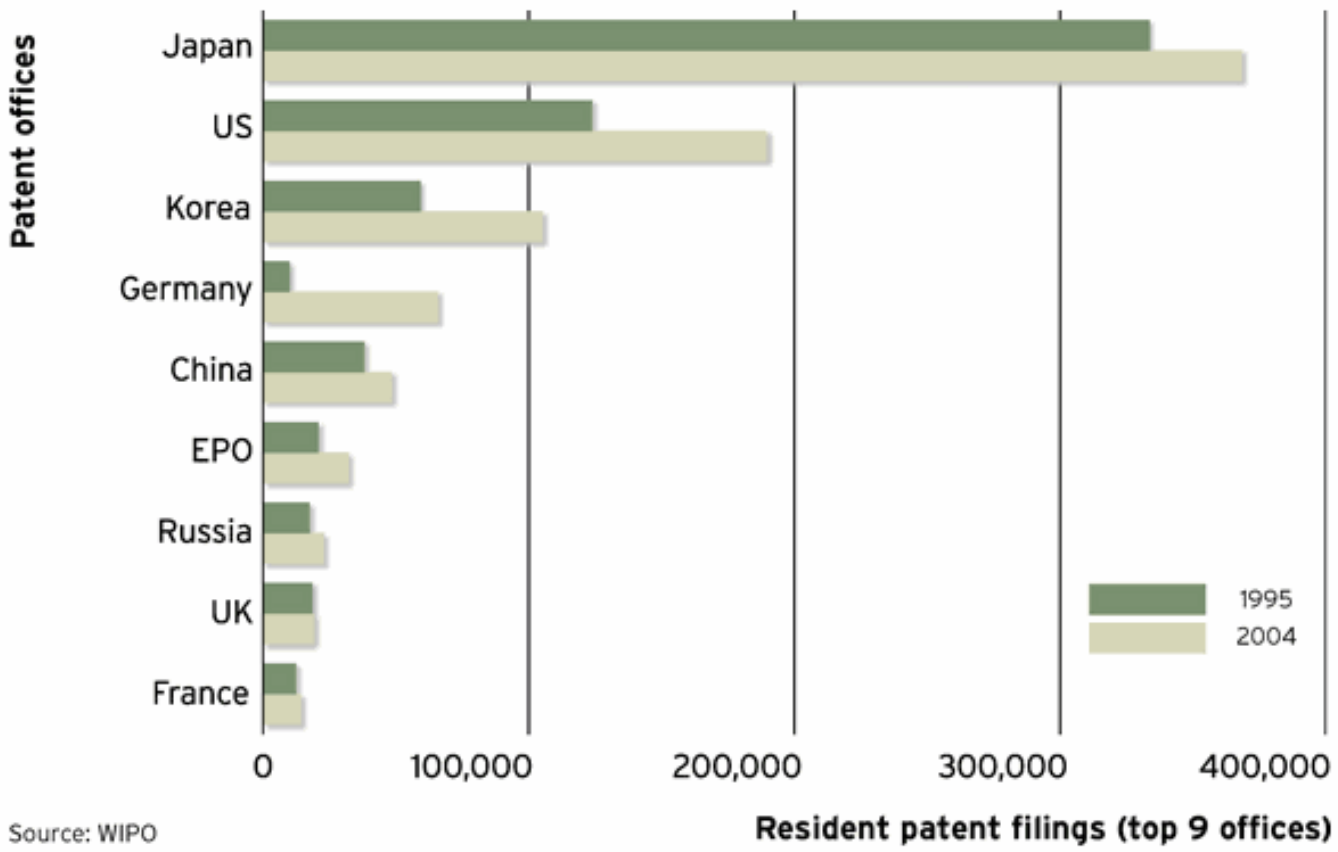
- **Rich**
  - Good per-word rates
  - Very high throughput
  - Steady business
  - Recession immunity
- **and happy**
  - A technical treat in every box
  - Linguistic jigsaw puzzles extraordinaire
  - A front row seat for the march of progress

What languages are involved?



Source: *Managing IP*

Which way are the trends going?



Source: *Managing IP*

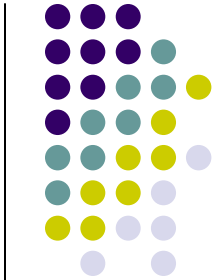
How big is the US market?

Patents Filed in the US from Foreign Countries

	1965	1975	1985	1995	2005	words per day	fulltime translators
Japan	2,263	8,566	21,431	39,872	71,994	2,000,000	670
Germany	5,728	8,258	10,452	11,853	20,664	600,000	200
Korea		20	129	2,820	17,217	480,000	160
France	2,238	3,048	3,605	5,001	6,972	190,000	60
Sweden	833	1,359	1,239	1,500	2,243	60,000	20
China			24	144	2,127	60,000	20
Russia	215	696	145	221	366	10,000	3

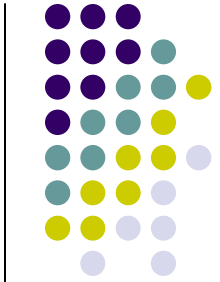
Source: USPTO

Who buys patent translations?



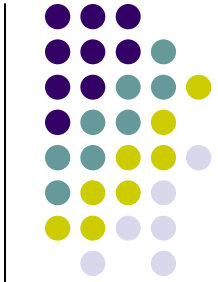
- Translations agencies
- Law firms
- Corporate IP Departments
- Individual inventors

Translations agencies



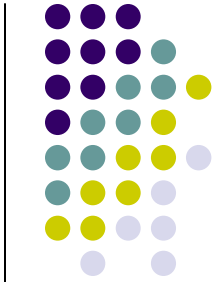
- Be explicit
- Be targeted (either they care of they don’t)
  - Don’t let their website fool you
  - See if you can find the PM
- Be persistent
- Provide samples
- Push for feedback (from small and large)

Law firms



- Know your market
  - In the US only some individual attorneys buy from freelancers (mostly for D>E)
  - In Japan many law firms buy but the competition is high
  - In France in-house counsel handles overseas filing

Corporate IP Departments & Individual inventors



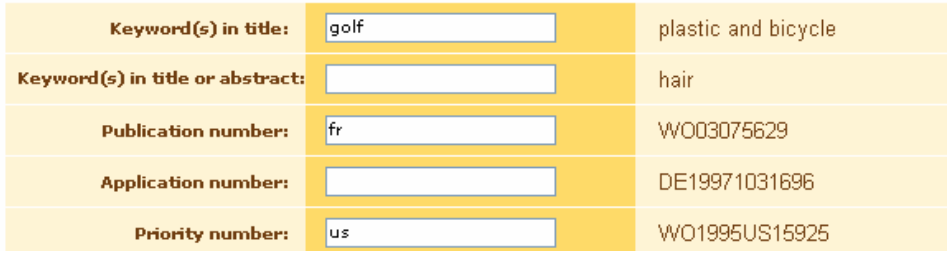
- Not such a good idea

Books

- The ATA's *Patent Translator's Handbook*
- The ATA's *Japanese Patent Translation Handbook*
- *Inventor's Guide to Successful Patent Applications,* by Thomas E. Deforest
- *Landis on Mechanics of Patent Claim Drafting*, by Robert C. Faber. (expensive)
- *How to Write a Patent Application,* by Jeffrey G. Sheldon (expensive)

Websites

- European Patent Office Worldwide database
  - http://ep.espacenet.com/advancedSearch?locale=en_EP



- *United States Manual of Patent Examining Procedure*
  - www.uspto.gov/web/offices/pac/mpep/index.html
- Patent Translations Inc. Translator Resources
  - http://patenttranslations.com/res_forTranslators.htm

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