

PART II

Ten Common Mistakes To Avoid When Drafting and Prosecuting US Patent Applications

Will be
discussed in
detail

Ten Common Mistakes

1. failure to properly identify inventors and inventive entity;
2. failure to comply with duty of disclosure;
3. disparaging prior art leads to claim interpretation issues and denial of Doctrine of Equivalents;
4. incomplete usage of all information in the inventor's disclosure leads to dispute and/or best mode issues;

Ten Common Mistakes

5. inclusion of potentially "harmful" or limiting wordings, such as "the invention," "object of the invention" etc. in specification;
6. apparatus claims drafted in operational state;
7. improper means plus function limitations;
8. poor translations might lead to uncorrectable errors;
9. failure to minimize harmful *Festo* effects;
10. under-investment in patent prosecution and application drafting.

Detailed Discussion of Mistakes 3, 5, 6, 7

3. DISPARAGING PRIOR ART

WHY is it a mistake ?

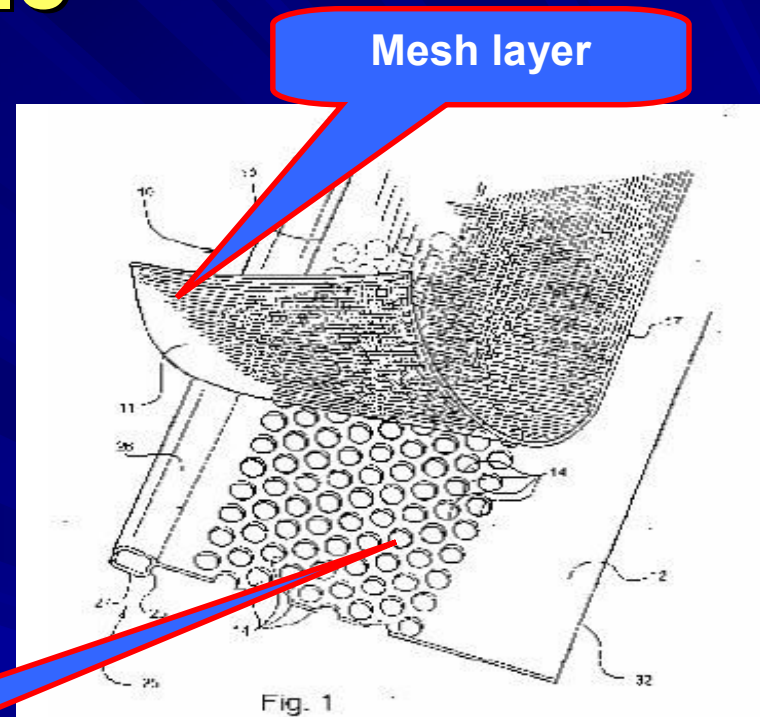
- Mostly likely seen in
 - Background section
 - Drawings with “Prior Art” labels
- disparaging prior art leads to
 - claim interpretation issues and
 - denial of Doctrine of Equivalents
- unnecessary admission of applicant’s own work as “prior art” (especially where applicant’s own work does not belong to public domain)
 - Unnecessary/unwanted rejections based on applicant’s admission

Avoid Disparaging Prior Art

Example

■ Specification:

- Composite guard includes guard panel and mesh layer attached by fusing or heat/ultrasonic welding
- **criticized** attachment means in prior art



Guard panel

Mesh layer

■ Claim:

- **Heat weld**...connecting said mesh layer to said guard panel

COMPOSITE GUTTER GUARD

L.B. Plastics, Inc. v. Amerimax Home Products, Inc., no. 2006-1465. (Fed.Cir.2007)

Avoid Disparaging Prior Art

Example

- Accused product: mesh screen attached to guard panel by adhesive, hot glue
- Court:
 - No definition of “weld,” “fuse” in spec → dictionary
 - Dictionary → “weld” and “fuse” require melting, liquefying parts to be joined, ie, mesh and guard panel
 - Mesh screen and guard panel in accused product are not melt/liquefied (it is the glue/adhesive that is melt) → no literal infringement
 - Spec criticized prior art attachment means, including adhesive, → no infringement under DOE

5. INCLUSION OF POTENTIALLY "HARMFUL" OR LIMITING WORDINGS IN SPECIFICATION

■ Examples

- “the invention,” “the present invention”
- “object of the invention,” “advantage of the invention,”
- “essential,” “key,” “important,” “critical,” “vital”
- “must,” “should,” “has/have to,”

- ### ■ Most harmful in sections that could be interpreted to limit the scope of the claims
- Title, Technical Field, Summary, Abstract

Why harmful ? - Reason 1

- the specification can be read as requiring **essential** elements of the invention that must be included in the claims. Claims that do not include essential elements are **not enabled** by the specification.
- *Tronzo v. Biomet, Inc.*, 47 USPQ2d 1829 (CAFC 1998)
 - Spec: “Another **extremely important** aspect of the present device resides in the configuration of the acetabular cup as a **trapezoid** or a portion of a **truncated cone**”
 - Claim 1: generic as to the shape of the cup
 - Holding: trapezoid or truncated cone cup shape is essential → claim 1 is not enabled by spec.

Why harmful ? - Reason 2

- the **object** or important aspect described in the Summary section can be used to **limit the scope of the claims**.
- *Gentry Gallery, Inc. v. Berkline Corp.*, 45 USPQ2d 1498 (CAFC 1998)
 - Spec: “Another **object of the present invention** is to provide ... a **console** positioned between [the reclining seats] that **accommodates the controls** for both of the reclining seats.”
 - Claims: the location of the recliner controls is not limited to the console
 - Holding: Claims are narrowly interpreted to include the recliner controls at the console → no infringement

Drafting/Prosecution Recommendations

- Application drafting
 - Always refer to “embodiments” rather than “the invention” or “the present invention”
 - Avoid harmful wordings given above (i.e., critical, must, essential etc.)
 - Discuss objects/advantages
 - in Detail Description section (rather than in Summary section) and
 - with respect to embodiments
- Prosecution:
 - Avoid arguments that include harmful wordings
 - Argue the claim or “claimed subject matter” (rather than Specification or “the invention”)

6. APPARATUS CLAIMS DRAFTED IN OPERATIONAL STATE WHY is it a mistake ?

- An apparatus claimed in operational state requires accused device to also be in operational state to directly infringe
 - direct infringement by end users only
 - End users are most likely clients/customers
 - Patentees do not want to sue clients/customers
 - no direct infringement by manufacturer/seller/importers
 - It is manufacturer/seller/importers rather than end users that patentees want to sue
 - Indirect infringement requires evidence of direct infringement (by an end user) plus other evidence → difficult to prove

Example

1. A first element which **slides (or sliding)** along a second element.

Better → 1. A first element **slidable** along a second element .

- This issue is often met in Electronic Arts where inventions are usually defined by signals traveling among components but signals are generated mostly/only when apparatus is in operation

Example – Electronic Arts

1. A power converter, comprising:
a rectifying circuit **which rectifies** power provided by a power source;
a filtering circuit **which filters** the power; and
an amplifying circuit **which amplifies** the power.

■ Better:

1. A power converter, comprising:
a rectifying circuit for rectifying power provided by a power source;
a filtering circuit for filtering the rectified power; and
an amplifying circuit for amplifying the filtered and rectified power.

7. IMPROPER MEANS PLUS FUNCTION LIMITATIONS

Common Mistake 1

“means” + no functions

- ***York Prods v. Central Tractor Fbody*, 99 F.3d 1568 (Fed. Cir. 1996)**
 - “means formed on the upwardly extending liner sidewall portions including a plurality of spaced apart, vertically extending ridge members protruding from the liner sidewall portions and forming load locks in gaps separating adjacent ones of the ridge members”
- **Holding**
 - No function recited
 - **Not m+f**

IMPROPER MEANS PLUS FUNCTION LIMITATIONS

Common Mistake 2

“means” + function + structure

- *Cross Med Prod v. Medtronic*, 424 F.3d 1293 (Fed. Cir. 2005)

“said anchors each comprising

- anchoring means which secure said anchors to said bone segment and
- an anchor seat means which has a lower bone interface operatively joined to said bone segment and an anchor seat portion spaced apart from said bone interface including a channel to receive said rod”

- Holding

- “anchoring means” is m+f
- but “anchoring seat means” is not, because the claim language is sufficiently structural

Why/How to Use Means plus Function

- To claim alternatives that spread across multiple technologies
- Quick and convenient way to convert process claims (mostly in electronics or computer-related arts) to apparatus claims
 - Just add “means for” before each step
 - Be sure to include adequate hardware description and a description of the algorithm
- How to Invoke 112p6
 - Use “means for” and “step for”
 - Modify “means for” and “step for” with functional language
 - Do not further modify “means for” and “step for” with structure or acts

How to Invoke 112p6

1. Use “means for” and “step for”
 - Not “step of” which will create a rebuttable presumption that 112p6 does *not* apply.
 - Seal-Flex, Inc. v. Athletic Track and Court Construction, 172 F.3d 836 (Fed.Cir.1999)
2. Modify “means for” and “step for” with functional language
3. Do not further modify “means for” and “step for” with structure or acts.

Other Common Mistakes No. 1-2, 4, 8-10

1. FAILURE TO PROPERLY IDENTIFY INVENTORS OR INVENTIVE ENTITY

- Inventor: someone who conceived the new idea and/or reduced it to practice.
 - No paper inventor: president/director, sponsor, or team leader if no contribution
 - Patent can be held unenforceable/invalid if incorrect inventorship was given with deceptive intent
 - correct inventorship is crucial for patent validity and enforceability

Identify Correct Inventorship

■ Inventorship ~ Claimed invention

- If, due to **claim amendment/cancellation**, more or fewer inventors are the actual inventors of the pending claims, inventorship must be corrected by adding/deleting inventors

■ Three ways to **correct** inventorship

1. **Newly filed application** naming wrong inventorship: **first** filed Oath/Declaration with correct inventorship
2. **Pending application or Request for Continued Examination (RCE)**: 37 CFR 1.48 Petition
3. **Continuing application**: no petition required, just name the correct inventors

Identify Correct Inventorship

- Correct inventorship is still important under Patent Reform Act of 2011
 - “First inventor to file” (instead of “first to invent”)
 - Not an inventor → cannot apply for a patent
- Identify correct inventorship
 - Ask: Who contributed to which claim ?
 - Make sure applicant/inventor understand the importance of naming correct inventorship
 - Raise issues re potential paper inventors
- Consider inventorship audit

2. FAILURE TO COMPLY WITH DUTY OF DISCLOSURE

Importance of Duty of Disclosure

- If the Duty of Disclosure is Violated
 - Applications:
 - will not be issued
 - Patents:
 - Unenforceable
 - Intentional efforts to enforce such patents → patent misuse, violations of antitrust laws, attorney's fees, court costs
- Inequitable conduct is a **very popular** defense
 - Therasense Inc. v. Becton, Dickinson and Co., slip op. 2008-1511 (Fed. Cir. 2011) (**en banc order**) decided major issues of inequitable conduct

Therasense v. Becton Dickinson

Fed. Cir. May 25, 2011

Background – Before *Therasense*

- **Proof of Inequitable Conduct**
 - (a) either a failure to disclose material information or a submission of false material information
 - (b) with an intent to mislead or deceive an examiner.
- Key elements, i.e., (a) **materiality** and (b) **intent**, must be proven by clear and convincing evidence
- Many different standards for showing **materiality**
- Intent is difficult to prove → **tendency to infer intent from the level of materiality**, i.e., finding materiality and asserting that intent can be presumed from the level of materiality

Therasense v. Becton Dickinson

Fed. Cir. May 25, 2011

Summary of Relevant Facts

- Abbott's (Therasense, now Abbott Diabetes Care Inc.) Claim ('551 patent): "wherein said active electrode is configured to be exposed to said whole blood sample **without an intervening membrane**"
- Prior Art cited against '551 patent: Applicant's own patent US 4,545,382
 - Specification: "**Optionally, but preferably** when being used in live blood, a protective membrane surrounds both the enzyme and the mediator layers"
- Applicants' statements:
 - In EPO during the prosecution of the counterpart of '382, the attorney made the statement that the membrane in '382 **is not necessary**
 - Later, in USPTO during the prosecution of the '551 patent, the attorney made the statement that membrane in '382 **is required**, and the applicants **failed to disclose the above-mentioned conflicting statement made to the EPO.**

Therasense v. Becton Dickinson

Fed. Cir. May 25, 2011

District Court Holdings -

- The district court found Abbott's '551 patent unenforceable for inequitable conduct because the Abbott failed to disclose to the USPTO its briefs to the EPO.
 - Materiality – the district court found the statements made in the EPO briefs material under the Rule 56 standard
 - Intent – the district court found intent to deceive based on the absence of a good faith explanation for failing to disclose the EPO briefs.

Abott appealed – whether the district court applied the correct standards?

Therasense v. Becton Dickinson

Fed. Cir. May 25, 2011

Federal Circuit's Holding: Inequitable Conduct standards under *Therasense*

■ Materiality:

- “But-for” materiality standard (i.e., the PTO would not have allowed a claim had it been aware of the undisclosed prior art), which is harder to prove than current Rule 56 standard.
- Exception to Materiality – affirmative egregious misconduct

■ Intent:

- Specific intent to deceive the USPTO
- Knowing and deliberate standard - Knew the reference, knew that it was material, and made a deliberate decision to withhold it.

■ Balance

- Still need to balance the factors
- Independent finding of intent and materiality by clear and convincing evidence

Therasense v. Becton Dickinson

Fed. Cir. May 25, 2011

The Majority opinion in *Therasense*:

- Materiality: remand
 - “Because the district court found statements made in the EPO briefs material under the PTO’s Rule 56 materiality standard, not under the but-for materiality standard set forth in this opinion, this court vacates the district court’s findings of materiality.”
 - “On remand, the district court should determine whether the PTO would not have granted the patent but for Abbott’s failure to disclose the EPO briefs.”
- Intent: remand
 - “[A] patentee need not offer any good faith explanation unless the accused infringer first . . . prove[s] a threshold level of intent to deceive by clear and convincing evidence.”
 - Because the district court did not find intent to deceive under the knowing and deliberate standard set forth in this opinion, this court vacates the district court’s findings of intent.

Therasense v. Becton Dickinson

Fed. Cir. May 25, 2011

Impact to patent prosecution – **NONE**

- Duty of disclosure under 37 CFR § 1.56
 - This federal case does not change the administrative regulations set forth by the PTO .
 - The PTO might change the rule in view of *Therasense*. However, we are still bounded by Rule 56 until the PTO changes it.
- Duty of candor required by state ethic rules and PTO ethic rules for practitioners

Applicants should still be careful about:

- The Supreme Court may still review/revise the inequitable conduct standard in the future, if not by taking *Therasense*.
- It is not clear what exactly the scope of “**affirmative egregious misconduct**” is – your activities may still subject to a debate re whether it is “affirmative egregious misconduct.”

FAQ 1

1. Do we have to submit IDS on references cited against PCT application before entering US national stage ?
 - **Yes** → filing IDS when entering US
 - It is Applicant's duty to disclose → do not rely on Examiner
 - Per IB (International Bureau), generally, only ISR, i.e., a list of cited references, will be transmitted to USPTO → non-US and non-patent documents will not be considered without copies
 - Even if copies of references are provided, US Examiner may forget to consider references or forget to indicate that references have or have not been considered → late filing of IDS → late IDS fee (\$180) or denial of consideration (after final/allowance)

FAQ 2

2. Do we have to submit IDS on references cited against corresponding EPC or other applications, even if those references are categorized merely as background prior art?

- **Not necessarily, but recommended**
- to avoid harsh consequences of violating duty of disclosure if background references are indeed relevant
- What if EPO/KIPO incorrectly evaluated relevance of references and incorrectly categorized the references as “background art”?
- Due to claim amendments, “background” references may suddenly turn more pertinent than originally thought

FAQ 3

3. Do we have to submit the English translation of non-English prior art ?

- No, if a concise explanation (in English) of relevance of prior art is submitted
- Yes, if specification or abstract includes such explanation

If yes, translation of the whole specification or abstract ?

- In most cases, English Abstract will suffice
- translation of the whole specification is required only for very relevant reference
- Only translated parts will be considered

Is machine translation enough (e.g., for JP references) ?

- Yes, for most cases. (e.g. PPH accepts JPO machine-translated OA)
- Human-translated document is required for very relevant reference and can be submitted after IDS
 - upon Examiner's request; or
 - to rebut Examiner's interpretation of reference

Revised Requirements for Requesting Participation in the Patent Prosecution Highway Program in the United States Patent & Trademark Office (USPTO) (Between the USPTO and the Japan Patent Office (JPO))

I. The USPTO and JPO agreed at the November 2009 Trilateral Conference to revise the requirements for requesting participation in the PPH permanent program **to permit applicants to submit a machine translation into the English language of the copy of the latest JPO office action** just prior to the “Decision to Grant a Patent” (e.g., the latest “Notification of Reasons for Refusal”) from each of the JPO application(s) containing the allowable/patentable claims that are the basis for the PPH request. **The machine translation into the English language must be one that is provided by the JPO.** That is, the machine translation into the English language cannot be one that is provided by a commercial service. Where a machine translation into the English language of the copy of the latest JPO office action (obtained from the JPO) is submitted, it will not be necessary to include a statement that the English translation is accurate.

Note that the acceptance of the machine translation into the English language does **not** apply to the copy of all claims which were determined to be allowable/patentable by the JPO. Applicants must continue to submit an English translation of the JPO allowable/patentable claims along with a statement that the English translation is accurate.

Effective January 29, 2010, the USPTO will start accepting machine translation into the English language of the copy of the latest JPO office action as indicated above.

FAQ 4

4.1 Why does *Therasense* not change our current IDS practice?

- The duty of disclosure directly comes from the USPTO's power, delegated by the congress by laws, in making administrative regulations. The duty of disclosure is also based on a more general idea of exchanging technical information for exclusive rights.
- On the other hand, The inequitable conduct is a court-made doctrine that gives the accused infringer a defensive tool to make the patent in dispute unenforceable.
- This federal case does not change the administrative regulations set forth by the USPTO. The IDS practice should be done under Rule 56 until the USPTO changes it.

4.2 How can USPTO discipline the non-compliance of Rule 56 if the non-compliance acts are not severe enough for justifying an inequitable conduct finding in the court.

- While to court has the power to punish the patentee for inequitable conduct by finding the patent in dispute unenforceable, the USPTO and the state bar associations also have the power to punish non-complying patent agents/attorneys, such as by suspension of license or disbarment.

Who owes the Duty ?

37 CFR 1.56 (c)

Individuals associated with the filing or prosecution of a patent application include:

**These
individuals
must be
informed
of their
duty**

1. Each **inventor** named in the application;
2. Each **attorney or agent (US and non-US)** who prepares or prosecutes the application; and
3. Every other person who is **substantively involved** in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application

**Project/Sale
Manager;
CEO of small
tech-company**

- typists, clerks
- organizations, corporations, institutions

Information Material to Patentability

a prima facie case of **unpatentability** of a claim

not only

- 35 USC 102/103 (novelty/obviousness)

} **mostly Prior Art,
including non-US
OAs, rejections**

but also

- 35 USC 112 ¶1 (disclosure)
- 35 USC 112 ¶2 (definiteness)
- 35 USC 101 (utility)

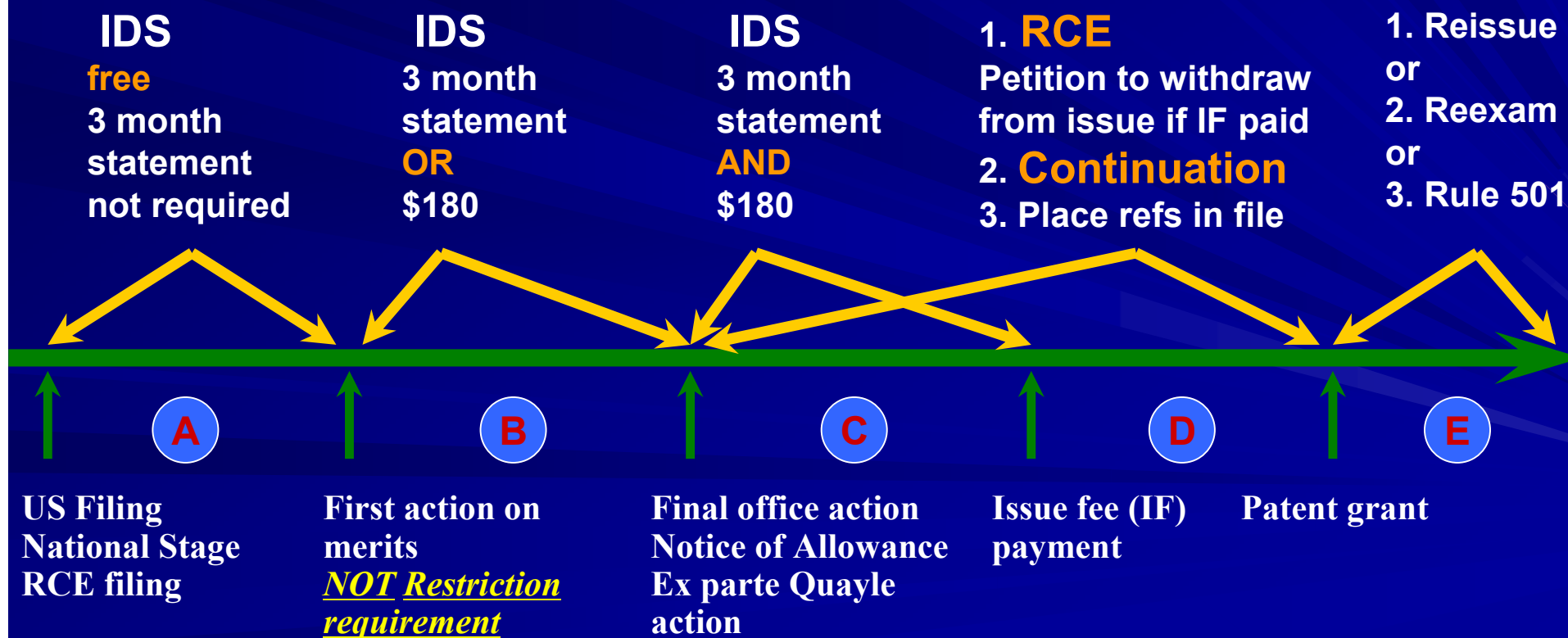
} **both prior art
and non-prior
art (inventor's
statement/publi
cation**

- 35 USC 101/121 (double patenting)

} **related,
commonly owned
applications
and/or patents**

How to Comply ?

- Good faith
- Timely compliance
 - **3 month Rule**: file IDS within 3 months of discovery)
 - IDS is Not extendable



General Recommendations

1. Always file IDS in case of doubt
2. Disclose previously known references and/or information at or shortly (3 months) after US filing
3. Promptly advise US attorney of newly discovered references and/or information after US filing (3 month Rule)
4. Cross-filing among related applications/patents
5. Consider filing RCE/Continuation, Reissue, Reexam if “late” references are relevant
 - Post-allowance total review in all related (US/non-US) cases
6. All (non-US) individuals subject to the duty of disclosure should be informed of and fulfill their duty

4. INCOMPLETE USAGE OF ALL INFORMATION IN THE INVENTOR'S DISCLOSURE

WHY is it a mistake ?

- Dispute with Inventors

- If

- all info supplied by Inventor was not used in Application

- Prosecution was difficult

- The omitted material could have resulted in allowance

- Then, Inventor might question Attorney's ability and/or raise issues of malpractice

INCOMPLETE USAGE OF ALL INFORMATION IN THE INVENTOR'S DISCLOSURE

WHY is it a mistake ?

- Potential Best Mode Issue
 - Best mode disclosure is required for patentability
 - Best mode is most likely included in Inventor's disclosure
 - If all info supplied by Inventor was not used in Application, Best mode might be omitted
 - This is a fatal error, also leads to malpractice issues

Drafting Recommendations

- Use all info supplied by Inventor
- However, attorney should ask Inventor if any info in Inventor's Disclosure is
 - Proprietary info that should be kept secret
 - Subject of another patent application
- Check with Inventors to make sure that any withheld info is not relevant to Best mode
 - Must disclose if best mode

8. POOR TRANSLATIONS MIGHT LEAD TO UNCORRECTABLE ERRORS

Most Translational Errors Are Correctable

- By **explicitly** incorporating priority application by reference.
 - Also safeguard against missing pages/drawings
 - Without explicit incorporation by reference, only inadvertently omitted material can be fixed

Example:

The present application is based on, and **claims priority** from, JP/UK/KR/CN Application Serial Number _____, filed _____, the disclosure of which is hereby **incorporated by reference** herein in its entirety.

Uncorrectable Translational Error

- Example (fatal translational error)
 - PCT filed in French, discloses A+B.
 - US National Stage's translation into English discloses and claims A + B', wherein B' is broader than B.
 - Not correctable for B' and
 - Not correctable for between B & B' (dedicated to public)
- Recommendation:
 - Unsure about translation → **bypass** application rather than national phase

Near-Fatal Translational Error

- Ring Plus v. Cingular, 614 F.3d 1354 (Fed. Cir., 2010)

- Facts

- Claim 1. A combination comprising A, B, & C.
- Specification's Background section reads: "[German language patent] EP 4,239,560 does not teach or suggest C."
- C is relied upon for allowance but EP560 (properly translated from German) indeed taught C.

Translational error
or
misunderstanding
on the part of the
patent drafter

CAFC: No evidence
of intent to deceive
→ patent is OK

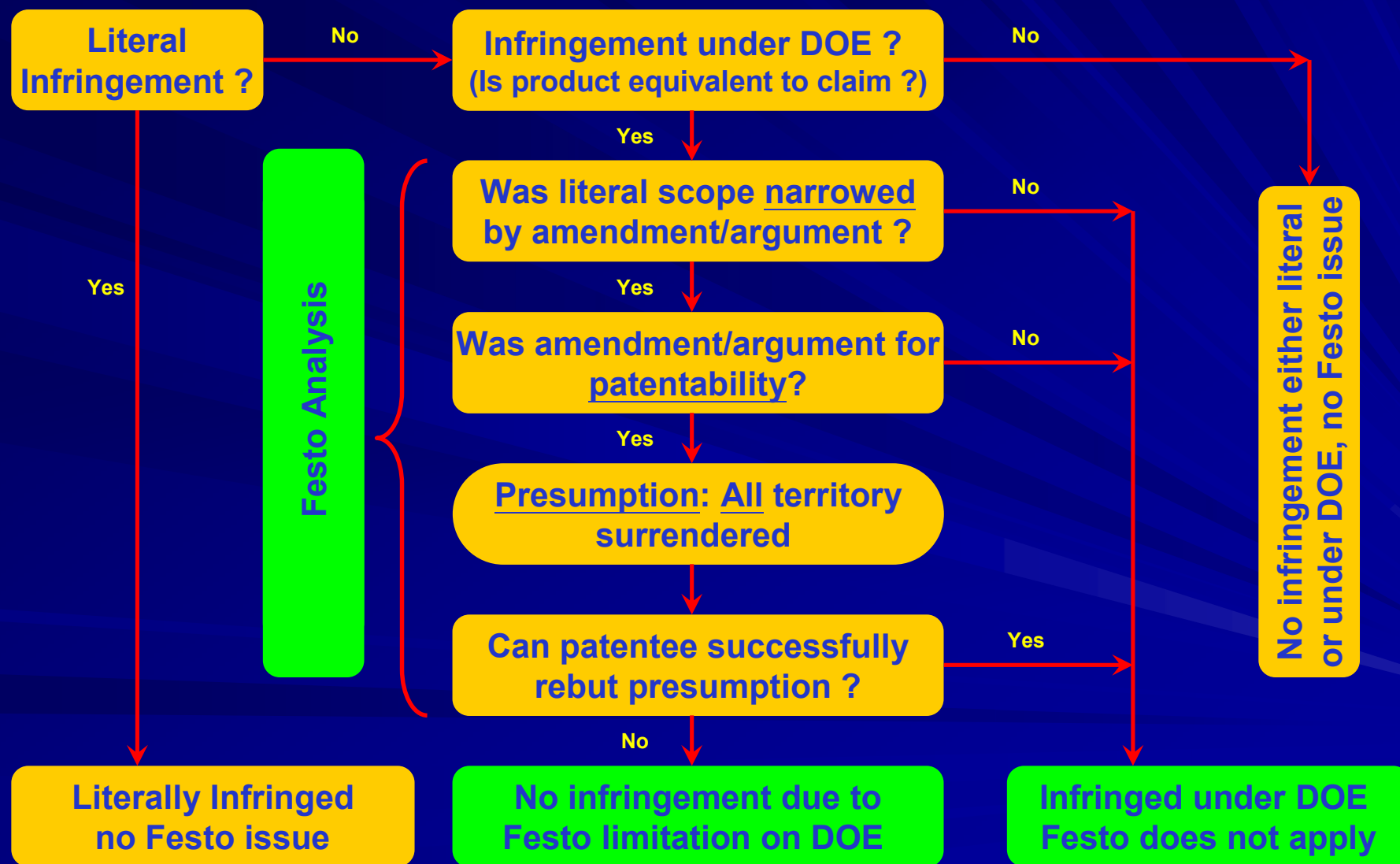
But, the drafter's
mistake caused
costly litigation
issues

Avoid **Translational Errors**

- Always explicitly incorporating priority application by reference.
- Consider bypass application instead of National Phase
 - Same priority benefit
 - Slightly more complex procedure
 - Certified copy of Priority Doc should be re-submitted
 - References should be filed in IDS
- Careful characterization of foreign prior art
 - In spec
 - During prosecution

9. FAILURE TO MINIMIZE HARMFUL FESTO EFFECTS

Infringement Analysis - Overview



Practical Tips - Summary

- Avoid invoking DOE
 - rely on literal coverage
- Avoid Festo/prosecution history estoppel in case DOE must be invoked
 - avoid unnecessary/narrowing amendment/argument
- Rebut Festo presumption
 - Generate evidence to show one or more of
 - the equivalent may have been unforeseeable at the time of the application;
 - the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or
 - there may be some other reasons suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question.

Practical Tips - Drafting

- Have claims that literally cover important embodiments
- Avoid issues unrelated to prior art → minimize Festo-prone claim amendments
 - Claims as filed should be free of 112p1, 112p2 and 101 issues
- File narrow claims, then broaden (in the same application or in Continuation)

Practical Tips - Prosecution

- Avoid unnecessary amendment or argument
- Avoid arguing unclaimed features
- Avoid narrowing amendment if traversing argument is available
- Consider declarations as alternative to claim amendment (i.e., Disqualify prior art)
- Interview Examiner often (off-record discussion)
- Appeal to avoid unwanted amendment
 - Full appeal: Costly, time consuming
 - Pre-appeal: faster, more effective, test drive before appeal

10. UNDER-INVESTMENT IN PATENT PROSECUTION AND APPLICATION DRAFTING

Why is proper investment important

- *Sage v. Devon*, 126 F.3d 1420 (Fed. Cir. 1997)
 - Opinion by now Chief Judge Rader
 - Relatively simple structural device
 - Unskillful claim drafting with unnecessarily narrow limitations
 - No literal infringement
 - Sage unsuccessfully sought to broaden claim scope
 - in court (rather than before PTO)
 - through Doctrine of Equivalents (rather than via literal claim scope that could have been drafted/foreseeable during prosecution)

Why is proper investment important

- Judge Rader (now Chief Judge Rader) commented
 - “between the patentee who had a clear opportunity to negotiate broader claims but did not do so, and the public at large, it is the patentee who must bear the cost of its failure to seek protection for this foreseeable alteration of its claimed structure.”
 - Companies should place “a premium on forethought in patent drafting.” Although “this premium may lead to higher costs of patent protection . . . , the costs are properly imposed on the group best positioned to determine whether or not a particular invention warrants investment at a higher level, that is, the patentees.”

Why is proper investment important

- Your claims and/or specification will be used against you.
 - Drafting/prosecution is important
 - Good strong patent reduces costly litigation issues
 - Pay now, or pay (*more*) later