Patent Trial and Appeal Board Boardside Chat: Presenting Technology in AIA Proceedings

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November 17, 2022
Question/comment submission

• To send in questions or comments during the webinar, please email:
  – PTABBoardsideChat@uspto.gov
Agenda

• Where to include technology descriptions
• Tips for addressing technology descriptions
• Examples of effective visuals
• Handling technology descriptions at the oral hearing
• Panel question-and-answer
Who is your audience?

• Not a district court trial – no jury
• Decided by a panel of three APJs
  – APJs with technical background and experienced in patent law
  – At least a bachelor’s degree in engineering or science
• Paper record primarily
Timeline of an AIA proceeding

Petition → POPR → Institution → PO Response → Petitioner Reply → PO Sur-reply → Oral Hearing → Final Written Decision
Where to include technology descriptions
Petition

- Sections of a petition
  - Background
  - Separate technology review
  - Overview of patent
  - Summary of prior art
  - Claim construction

- Others possible places where technology may be addressed
  - Applying prior art to claims
  - Explanation of combination of references
Expert declaration

• Include a background technology tutorial
  – Define/explaining technical terms and concepts
  – Expanding on technology in the patent/prior art/argument
  – Discussing additional references/materials
Preliminary Response and Response

- Different goals for patent owner preliminary response (POPR) and patent owner response
  - POPR is optional and may have dual purposes
    - Explain why trial should not be instituted (e.g., discretionary denials); and
    - Address the merits (e.g., missing claim elements, motivation to combine)
      - Provide technology background similar to petition
  - Response has a more singular purpose to address the merits
    - Focus on technology as needed to address the merits
    - More focus on holes in petitioner’s argument
Reply and Sur-reply

- Focus on disputed issues
- Concentrate on the relevant evidence to support arguments
- Highlight inconsistencies in arguments
- May include declaration with additional technology descriptions and figures
- Can discuss deposition testimony
- Last chance to include figures/subject matter that might be used as demonstratives
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Recent Requests for Comments

Requests for Comments on

• Expanding Admission Criteria for Registration to Practice in Patent Cases Before the USPTO

• Expanding Opportunities To Appear Before the Patent Trial and Appeal Board

• Published on October 18, 2022

• Comments will be accepted through January 17, 2023

• Federal Register:
Tips for addressing technology descriptions
Using modified/annotated figures

- Highlighting and/or labeling
- Adding arrows and descriptors
- Color coding to match claim elements
- Combining figures from different references to show a combination
- Creating new diagrams to show operation of patent or prior art
Are the visuals effective in these examples?
Example 1
**Example 2**

<table>
<thead>
<tr>
<th>Claim 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1[preamble]</td>
</tr>
<tr>
<td>1[a]</td>
</tr>
<tr>
<td>1[b]</td>
</tr>
<tr>
<td>1[c]</td>
</tr>
<tr>
<td>1[d]</td>
</tr>
<tr>
<td>1[e]</td>
</tr>
<tr>
<td>1[f]</td>
</tr>
</tbody>
</table>
Example 2

Anger’s vacuum interrupter includes a vacuum-sealed “first internal area (20),” which corresponds to the claimed “first vacuum bottle.” (Ex. 1005, 11:19.) The first internal area 20 has a fixed contact piece (22/23) and a movable contact piece (19/24), with the movable contact piece (19/24) affixed to the movable contact rod 14, as shown in annotated Figure 1 of Anger below. (Id., 11:14-22, Fig. 1.)
Example 2

Anger also teaches a **second internal area** (21), which corresponds to the claimed "second vacuum bottle" and contains a **grounding contact** (16) and a **mating contact** (11), as shown in annotated Figure 1 of Anger below. (Ex. 1005, 11:10-20, Fig. 1.)
Example 2

Anger in combination with Field discloses this limitation. Figure 1 of Anger discloses a movable contact rod (14) (which is operated by a non-depicted “actuating device”) that is “conductively connected” to an electrical power supply. (Id., 6:15-17.) The movable contact rod is shown below in annotated Figure 1 and forms the claimed “mechanical linkage” that moves between the claimed first and second positions. (Id., 6:8-7:16; Ex. 1003, ¶142-147.)
Example 3

Magnified portion

Second capacitor pad outer boundary

Second capacitor pad inner boundary

Inductor

Capacitor

Al

TiN

Hybrid C

Feedline

Interior clearance area

First capacitor pad

IBM-1010, Fig. 1 (partial and annotated)
Example 4 (claim)

1. A compound represented by the formula

wherein:
ring A is a pyrrolidine ring or a pyrrolidinone ring; and each straight line is a single bond and =C= is a single bond.
ring B is an aromatic ring optionally having substituents;
rings D is an aromatic ring optionally having substituents, wherein 6-quinolinyl is excluded;
L is a group represented by the formula

wherein each of R<sup>1</sup> and R<sup>4</sup> is as defined above, then ring
D is an aromatic ring having substituents;
excluding: N-4-(diphenyl-1-o)pyrrolidin-3-yl)-N-1-(4-nitro-
hexyl)-2-y-l)amine;
or a salt thereof.
Example 4 (prior art disclosures)

EP ‘721

N-[4-(4-{(3-[(anilinocarbonyl)(butyl)amino]-4-(3-fluorophenyl)pyrrolidin-yl]methyl}phenoxy)phenyl] methanesulfonamide.
Example 4 (claim chart)

**Claim Limitations**

1. A compound represented by the formula

   ![Chemical Structure](image1)

   wherein: ring A is a piperidine ring or a pyrroline ring and each straight line is a single bond and \(-\) is a single bond;

**Disclosed in EP ’721**

Compound 3 of EP ’721, has a pyrroline ring, which is depicted in red in the drawing above. The pyrroline ring of Compound 3 has all single bonds.

Compound 3 of EP ’721 also contains an amino carbonyl moiety, which is depicted in black.

**Disclosed in KR ’645**

The KR Compounds have a piperidine ring, which is depicted in red in the drawing above. The piperidine ring of the KR Compounds has all single bonds.

The KR Compounds also contain an amino carbonyl moiety, which is depicted in black.
Example 5
Question/comment submission

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The USPTO has published information on the Director review process to increase openness as it formalizes the process.

Details on the interim process and suggestions for parties who wish to request Director review:

https://www.uspto.gov/patents/patent-trial-and-appeal-board/interim-process-director-review

Status of Director review requests:
- Information about the proceedings in which Director review has been granted
- Monthly updated spreadsheet with the status of all Director review requests

https://www.uspto.gov/patents/patent-trial-and-appeal-board/status-director-review-requests
How should technology description be handled at the oral hearing?
Oral hearing

- At this stage, panel is very familiar with the record
- General technology overview typically not helpful
- Focused discussions on disputed technical issues can be helpful
- Demonstratives limited to what is already of record
- Type of hearing: virtual or in-person
- Showing animation and video require advance approval
Demonstratives

• Demonstratives must be filed no later than the time of the hearing (can be modified)
• PTAB hearing rooms contain a document camera projector and laptop projector
• Parties must provide their own laptop
• Currently, PTAB has HDMI, VGA, and Mac connections only
• Different judges use demonstratives differently
Example 1

Mark Up of Wentker (Ex1005) Fig. 1

Ex1005, Fig. 1.
### Example 2

#### Applying the *Wands* Factors to EP ’721

1. **The quantity of experimentation necessary**
   - Routine experimentation will suffice because all of the steps needed to make and purify Compound 3 were known *(Ex. 1011, Crimmins Decl., at ¶ 64)*

2. **The amount of direction or guidance presented**
   - Skilled artisans have all of the direction needed based on the disclosed structure and generally available knowledge *(Id. at ¶¶ 49, 55, 62, and see Appendix B)*

3. **The presence or absence of working examples**
   - Dr. Hunt agrees that Compound 3 could be made *(Id. at ¶ 50)*

4. **The nature of the invention**
   - EP ’721 discloses chemical compounds that could be readily made *(Id. at ¶¶ 49, 58)*

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#### Applying the *Wands* Factors to EP ’721 (Continued)

5. **The state of the prior art**
   - The organic chemistry knowledge needed for synthesizing the compounds is well known *(Id. at ¶¶ 52, 59; Ex. 2053 at 10-22)*

6. **The relative skill of those in the art**
   - Those of ordinary skill in the art are highly skilled and educated *(Ex. 1011 at ¶ 60)*

7. **The predictability or unpredictability of the art**
   - Synthetic organic chemistry is predictable *(Id. at ¶ 61)*

8. **The breadth of the subject matter**
   - Only one compound needs to be enabled *(Id. at ¶ 57)*
Example 3

Ground 5 - Claim 26

290. Wehr discloses the determination of a discount for a fuel purchase (i.e., the evaluation of a rule) only during a specified time, namely, a time frame associated with a particular promotion code. (See, e.g., Ex1008, ¶[0054] (“If a promotion code is indeed identified and transmitted, the presence of the promotion code in the loyalty promotion table 18 that is stored in the computer readable medium 38 is determined in step 54ab and, if the promotion code is present, it is determined in step 54ac whether the current date and time of use of the fuel dispenser 26 by the customer falls between the start date/time and the end date/time associated with the promotion code. If the current date and time does fall between the start and end dates and times, a group discount associated with the promotion code is determined in step 54ad, with the group discount being a discount applicable to one or more POS systems, including the POS system 20.

Ex1002, Zatkovich Declaration, ¶290 (cited in Petition, Paper No. 1, p. 69).
Example 4

Ground 5 - Claim 26

Indeed, Mr. Landers confirmed that Wehr does disclose the evaluation of a processing rule (e.g., the determination of a group discount associated with the promotion code) during a specified time period (e.g., a time frame associated with a particular promotion code):

Q. Date and time of use of the fuel dispenser 26 by the customer falls between the start date and time and the end date and time associated with the promotion code. Do you see that?
A. Yes, yes.
Q. And if it falls within the time period, you move on to 54ad. If it doesn’t, you stop, right?
A. Yes.
Q. So 54d only occurs if you are during the specified time period that is tested in 54c, correct?
A. Yes.
Q. So whatever rule occurs in 54d is only testified -- is only evaluated during the active time interval specified in 54c, correct?
MR. MAHONEY: Objection, form.
Q. In Wehr.
A. That’s correct.
Q. So 54d would meet claim 26 in your -- in your opinion, correct?
A. Fifty-four D -- give me a second. (Reading.) During the active time, yeah, yes.

Ex1008, FIG. 5C (discussed in Paper No. 13, pp. 21-22, and Ex1002, ¶290).

Example 5

Array Did Not Abandon, Suppress or Conceal AR0045365

- AR00453645 was synthesized
- Chemical structure was confirmed
- Ability to inhibit TrkA activity was demonstrated
- Structural binding problem solved
- May 13, 2011: AR00453645 was disclosed in the ’858 application
- November 22, 2012: Ex. 2029 published

2011 - 2012

- Continued synthesis using information about the binding mode
- Preparation and filing of the ’858 patent application
- Diligence

Investigation of mechanism of action for inhibiting TrkA activity

Synthesis and testing of chemical compounds

Ex. 1018, Andrews Decl., ¶¶ 14-31; Ex. 1017, Kercher Decl., ¶¶ 8-16; Ex. 2029
Takeaways

• Many ways to effectively describe the technology
• Most effective way may depend on (i) the technology itself or (ii) the issues presented in the pleadings
• Focus on describing the technology that is important; discuss related technology, as needed
• Make effective use of expert declarations
• Oral hearings should not be technology tutorials
Question/comment submission

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