Rothwell Outline

State of the Law:

1. 35 USC 112a
2. Enable POSIA
   1. Full Scope
      1. Scope of claims must bear reasonable correlation to scope of enablement
   2. Without Undue Experimentation
      1. Wands factors
   3. Don’t need to disclose what is well known in the art
      1. But must still be enabling
      2. Spec must disclose novel aspects of invention

Argument:

1. Umbrella
   1. Thesis w/ LSF
   2. Road map
2. Merits
   1. Claim 1 not fully enabled
      1. “turned to specific values” but only gives 1 embodiement
         1. i.e. to get the high switching speeds need W and L to be certain lengths. For a certain W range, L must change accordingly to maintain the high switching speed. As shown this can be achieved with W 5 < 15 and L = 22. The expert and spec suggests that to operate at W > 15, experimentation would show which L will grant Ts > 1 THz.
         2. POSIA knows that increasing L decreases Ts. However, Judge notes that not practicable to manufactore L > 22. (Appx 3). Also noted in spec and Hendricks, not practicable to manufacture L < 20.
         3. It is not possible to tune L to the specific value to achieve Ts > 1 T Hz when W > 15 nm because there is practicable to manuature L greater than 22 or less than 20.
      2. Not all values allow Ts > 1 T Hz. (but that’s whats in claim 1)
      3. In consistent judge says its well known that you can make to 1 THz with W up to 35. A single experiment, or worse case scenario? Can it be both? Appx3
      4. Over qualified expert

Specification admits that not always possible to get lengths less than 20nm (appx24 and 6).   
Summary Judgement Order state’s that hendrix’s declaration says it would be obvious to that is not practicable to manufacture ribbons greater than 22. (however I don’t see this in the actually declaration)

With this in mind, the Fig. shows switching speeds over 1 THz over widths 5-15. They say that achieving switch speeds for larger W requires increasing L (increasing L decreases switching speed appx25). However, the specification admits it is not praciticble to produce ribbons of L less than 20nm. And judge says its not pracitible to manufacture over 22. And So it would not be routine, minimal experimentation to achieve the desired switching speed with W > 15 nm because theres not enough play in the ribbon length. Can’t find the operative range of L through routine experimentation because L can’t be made outside of 20 – 22 nm.

The Standard:

* The enablement requirement is satisfied when one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation. Wands, 858 F.2d at 736–37. AK Steel Corp. v. Sollac & Ugine, 344 F.3d 1234, 1244 (Fed. Cir. 2003)
* the applicant's specification must enable one of ordinary skill in the art to practice the full scope of the claimed invention. Wright, 999 F.2d at 1561. AK Steel Corp. v. Sollac & Ugine, 344 F.3d 1234, 1244 (Fed. Cir. 2003)
* [A] specification need not disclose what is well known in the art.” Genentech at 1366.
* “To be enabling, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without ‘undue experimentation.’ ” Genentech at 1365 quoting wright at 1561
* But it does mean that, when a range is claimed, there must be reasonable enablement of the scope of the range. AK Steel Corp. v. Sollac & Ugine, 344 F.3d 1234, 1244 (Fed. Cir. 2003)
* Usually have a markham hearing for claim construction (not necessary here) ALZA at 938
* Enablement from effective filling date (ALZA at 940). No hindsight
* Enablement is not precluded where a “reasonable” amount of routine experimentation is required to practice a claimed invention, however, such experimentation must not be “undue.” (ALZA at 940, Enzo Biochem at 1371, wands at 736-37)
* Wands Factors (factors of undue experimentation) at 737
  + They include (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims.25
* [w]hether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations.” Wands at 737
* As this court has repeatedly stated, “the rule \*941 that a specification need not disclose what is well known in the art is ‘merely a rule of supplementation, not a substitute for a basic enabling disclosure.’ ” Auto. Tech., 501 F.3d at 1282 (quoting Genentech, 108 F.3d at 1366). ALZA at 941
* The specification here does not contain “such full, clear, concise, and exact terms as to enable any person skilled in the art” to make and use non-osmotic oral dosage forms with ascending release rates. 35 U.S.C. § 112, ¶ 1. Instead, it provides “only a starting point, a direction for further research.” Auto. Tech., 501 F.3d at 1284; Genentech, 108 F.3d at 1366. ALZA Corp. v. Andrx Pharm., LLC, 603 F.3d 935, 941 (Fed. Cir. 2010)
  + In Genentech, Inc. v. Novo Nordisk A/S, 108 F.3d 1361, 1366 (Fed.Cir.1997), we stated: “It is the specification, not the knowledge of one skilled in the art, that must supply the novel aspects of an invention in order to constitute adequate enablement.” Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc., 501 F.3d 1274, 1283 (Fed. Cir. 2007)
* Possible to challenge expert for having too much skill ALZA at 941-942
* HAVE TO SHOW CLEAR ERROR in underlying factual findings in wands factors? ALZA at 942
* [In re Fisher, 57 C.C.P.A. 1099, 427 F.2d 833, 839, 166 USPQ 18, 24 (1970)](https://1.next.westlaw.com/Link/Document/FullText?findType=Y&serNum=1970102024&pubNum=350&originatingDoc=I1e426ee0941311d9bdd1cfdd544ca3a4&refType=RP&fi=co_pp_sp_350_839&originationContext=document&transitionType=DocumentItem&contextData=(sc.Folder*cid.4b7b6fd7610d46b3b03695a459b1e985*oc.DocLink)#co_pp_sp_350_839) (“[T]he scope of the claims must bear a reasonable correlation to the scope of enablement provided by the specification to persons of ordinary skill in the art.”).
* Specification need not disclose what is well known in the art. Genentech at 1366
* “The key word is ‘undue,’ not ‘experimentation.’ ”21 In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988)
  + The determination of what constitutes undue experimentation in a given case requires the application of a standard of reasonableness, having due regard for the nature of the invention and the state of the art. Ansul Co at 763 In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988)
* Something broad enough to cover multiple things must enable both:
  + Because the asserted claims are broad enough to cover both movies and video games, the patents must enable both embodiments. Sitrick v. Dreamworks, LLC, 516 F.3d 993, 1000 (Fed. Cir. 2008)

Other Notes:

* Arguments:
  + The formal argument: Novo argues that the district court's findings regarding validity under § 112, ¶ 1, are clearly erroneous because it presented clear and convincing evidence that the patent specification would not have enabled a person of ordinary skill in the art to practice the claimed invention without undue experimentation. Genentech, Inc. v. Novo Nordisk A/S, 108 F.3d 1361, 1364 (Fed. Cir. 1997)
  + Expert too skilled
    - Look for expert admissions of need for testing
  + Spec doesn’t tell everything, only a single thing (WHATS MISSING FROM THE SPEC)
  + Spec admits it doesn’t know how to get below 22nm for length
  + What’s the relationship between independent and dependent claim, claim 1 is anything length, only claim 3 modifies it. But the spec says they can’t even get down to 22.