

Avenues for PTAB-related research

PTAB and . . .

- 1. Patent Value/Quality
- 2. Litigation Bifurcation
- 3. Incentives to Challenge/Oppose Patents



Existing literature:

- Characteristics of patents <u>selected</u> for litigation
 - Allison et al (2004)
- Characteristics of patents selected for EPO oppositions
 - Harhoff & Reitzig (2004); Graham et al (2002)

New opportunity: Selection for US PTAB proceedings



Existing literature:

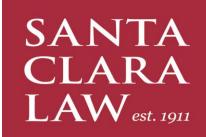
- Characteristics of patents <u>invalidated</u> when challenged in court
 - Mann & Underweiser (2012); Niidome (2017)

New opportunity: characteristics of patents "instituted" / "cancelled" by PTAB



Research in progress (with Shawn Miller):

 Compare characteristics, prosecution histories of patents subject to institution decision(s) on the merits ("likely" invalid or not)



Early results: significant relationship with institution:

- Original assignee is an individual
- Current owner is an NPE/PAE
- Covers computing/telecomm technology
- Lenient examiner (relatively high grant rate)
- Shorter claims
- Smaller patent family
- More tech classes assigned



Early results: Significant relationship with <u>non-institution</u> (on the merits):

- Current owner is university*
- Patent covers bio/pharma/medical tech
- Large law firm was prosecuting counsel
- Longer claims
- Larger patent family

^{*} Before recent rulings on sovereign immunity.



Better than looking at litigation outcomes?

- More data (at least "per capita")
 - Allison et al. (2014): ~5,100 US patent cases filed 2008-09 → 430 validity decisions (< 400 patents?)
 - Our study: $^{\circ}6,100$ PTAB petitions (Q4 2012 to 2016) \rightarrow 2,754 unique patents the subject of at least one institution decision.



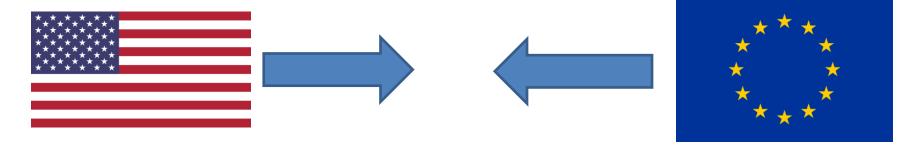
Fewer selection effects?

- PTAB petitions > cases previously going to decision?
 - Cases worth litigating for 2-3 yrs, >> \$1M
 likely also worth challenging for 18 months, \$250k
- Cost savings → greater likelihood of challenge to "nuisance" patents
 - ArrivalStar/Shipping & Transit:
 - ~600 suits, 0 decisions, 77 day median to settle
 - Was challenged at PTAB (by a third party)

Intense interest from patent attorneys



Convergence of US and EU Patent Systems

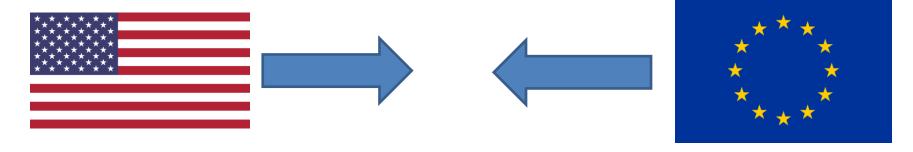


- (Less) algorithm patentability
- (More) attys fee awards

- Unified Patent Court?
- (Fewer) injunctions



Convergence of US and EU Patent Systems



- (Less) algorithm patentability
- (More) attys fee awards
- (More) administrative postgrant review of patent validity

- Unified Patent Court?
- (Fewer) injunctions



Germany & China bifurcate infringement/validity:

- Infringement (often) decided first, by court
- Validity decided second (if at all) by admin tribunal

Current US practice (stays + estoppel)

- Validity (often) decided first, by admin tribunal
- Infringement decided second (if at all) by court



Existing literature:

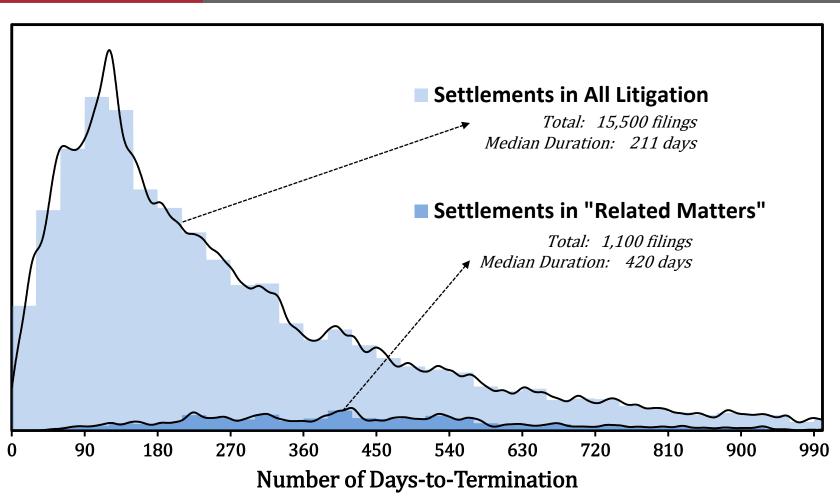
- Cremers, Harhoff, Helmers et al (2016):
 - Compare German and UK patent cases
 - Infringement-1 $^{\rm st}$ bifurcation \rightarrow
 - Lower likelihood of validity challenge, esp for resource-constrained parties
 - Higher settlement rate



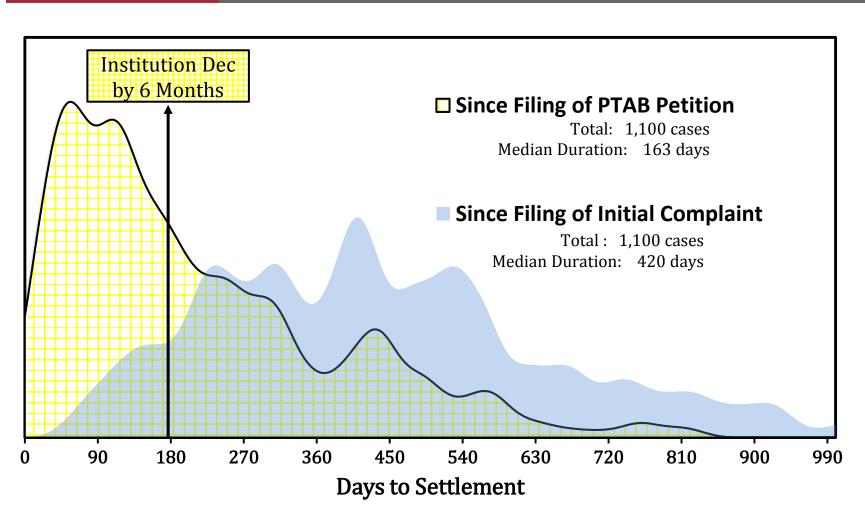
New opportunity: effect of validity-1st bifurcation?

- Ongoing research (with Helmers, Lefouili)
- Link patent cases to co-pending PTAB challenges











Existing literature on patent challenges as "public good" and admin challenges as partial solution:

Farrell & Merges (2004); Hall & Harhoff (2004);
 Farrell & Shapiro (2008)

EPO Oppositions:

- Available during first 9 months post-grant
- Can be anonymous
- Parties can join together to split cost
- ~6% of EPO grants are challenged



US now has a very similar procedure: "Post-Grant Review"

- Slowly becoming available (for patents with priority date > March 16, 2013)
- So far



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- Slowly becoming available (for patents with priority date > March 16, 2013)
- So far only 71 of them



Inter partes review serving a similar role:

- Coordination through third-parties:
 - Defensive aggregators: RPX and Unified Patents
 - Industry associations (a few)
 - Non-profits (EFF)
 - Manufacturers, when customers sued

Lots of avenues for study of "strategic" use of PTAB.