

Patent Privateers: An Empirical Assessment

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Joint work with Jay Kesan and David Schwartz

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Non-Practicing Entities Come in Many Forms

- Patent Acquisition Entities (PAEs, e.g., Intellectual Ventures)
- Patent Defense funds (e.g., RPX)
- R&D firms (e.g., InterDigital)
- Individual Inventor
- Universities
- Failed start up or PE
- Hybrid PAE, or Privateer



Research Motivation

- Lots of theories that Privateers are anticompetitive/harmful
 - Are more likely to engage in “holdup”
 - Bring frivolous lawsuits over “weak” patents
 - Help PEs avoid infringement counterclaims
 - Help PEs avoid reputational backlash
 - Target PE’s competitors to raise rivals’ costs
- But no empirical research on privateering
 - Do privateers acquire below average quality patents?
 - Do patents acquired by a privateer look different than those held by PEs?
Or by other PAEs?
 - Does acquisition by a privateer increase the odds of litigation?

Data

- Round 1 relied on patent litigation dataset created by Kesan and Schwartz plus 20% sample of Stanford data
 - Bloomberg law/ PACER, hand coded plaintiffs and defendants, added business models
 - Forthcoming in *Journal of Empirical Legal Studies*
- Round 2 relies on Stanford patent litigation data
- Linked with patent demographics and reassignment data
- Matched each litigated patent with a “twin”
- Identified Hybrid PAEs using news reports, press releases
- Categorize patents by technology class
 - Modified version of Hall et al. (2001)
 - Drop design, plant, and miscellaneous “other” categories

Round 1 Results: Quality

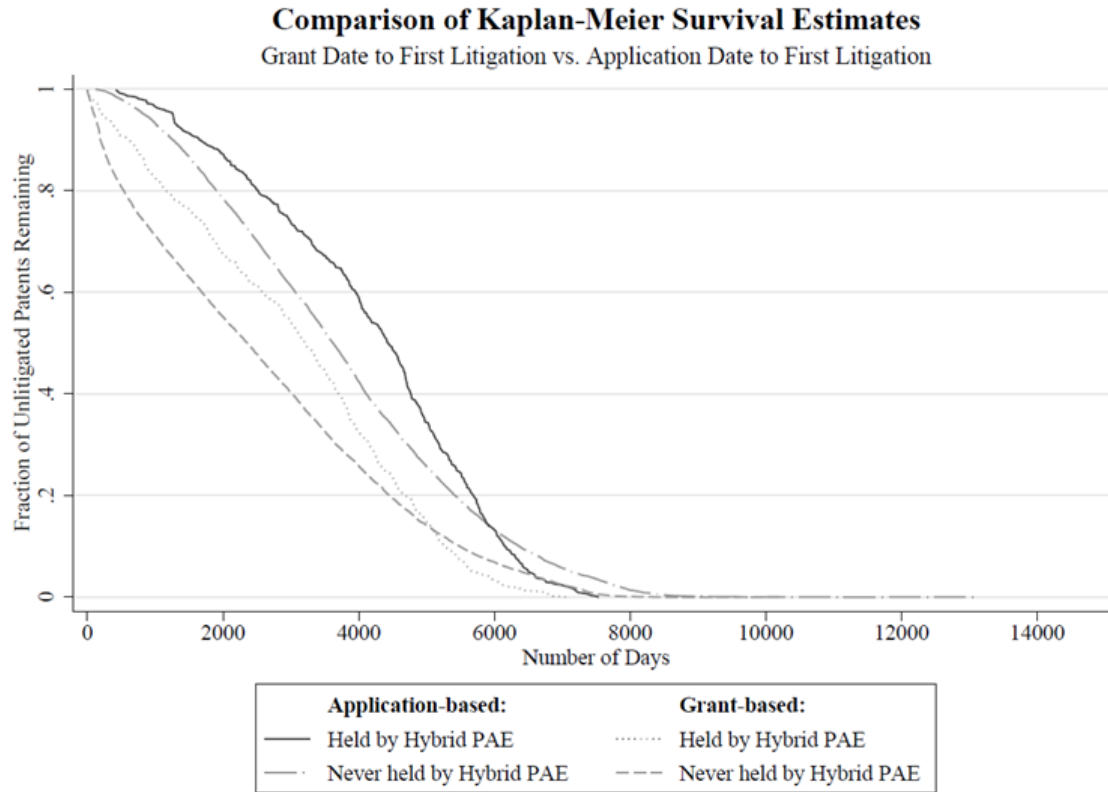
- We found the following:
 - Average # of reassignments per patent: 3
 - Categories with highest % privateer assignments: IT 3.6%, Surgery & Medical Instruments 2.8%
 - Within tech class, privateers have high quality measures
 - IT example:

Metric	Privateer	Other PAE	Litigated	Non-Litig.
For. Cites	173	161	127	36
# Claims	29	31	29	14
Originality	0.76	0.79	0.78	0.62
Generality	0.81	0.81	0.79	0.72

Round 1 Results: Assignments & Litigation

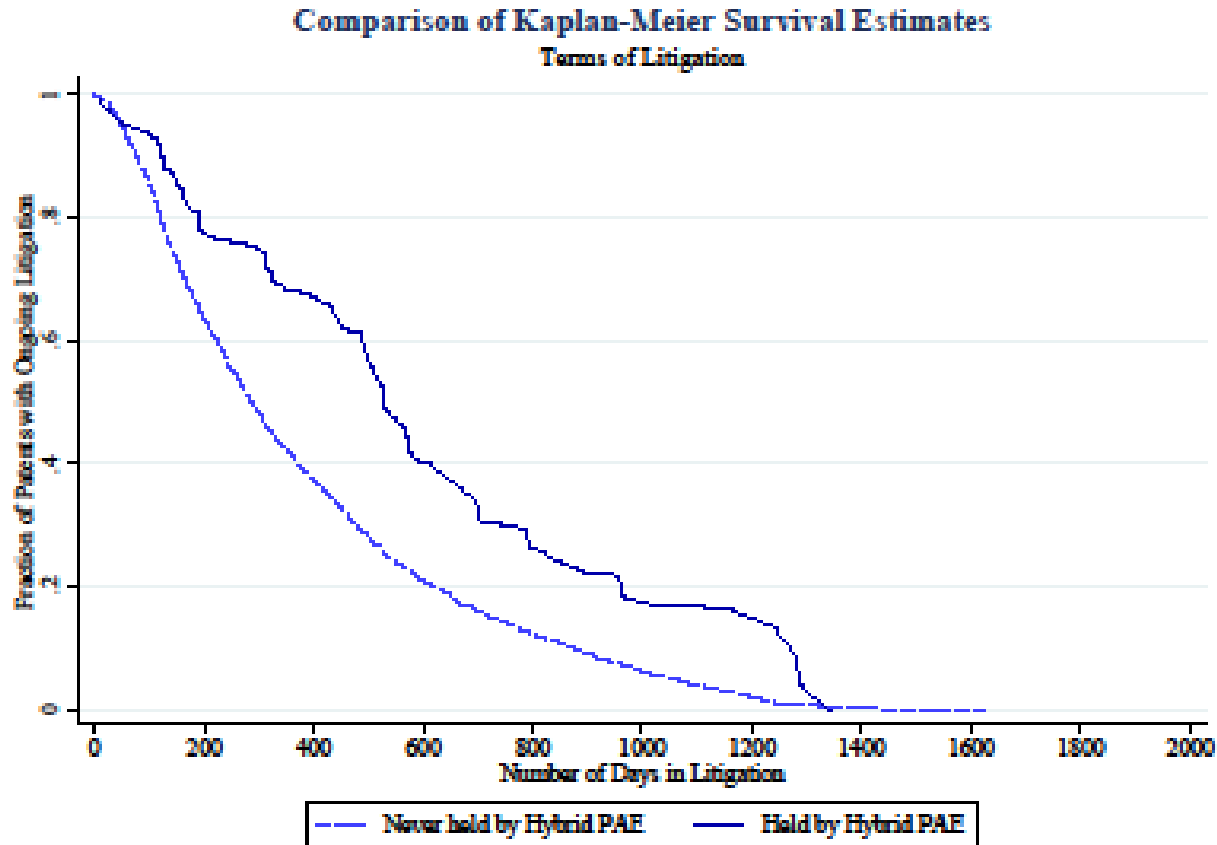
- Logit regressions establish
 - Odds of being held by a privateers increased by
 - » Been reassigned more than once
 - » Relatively higher forward cites
 - » More claims
 - » Shorter independent claims
 - Odds of litigation increased by
 - » Being reassigned multiple times
 - » Being held by a privateer
 - » Having higher quality measures (Originality)
 - » Having broader scope (length of shortest independent claim)

Round 1 Results: Litigation Timing



Statistically significant at 95% level

Round 2 Results: Litigation Length



Round 2 Results:

Assignor Category	# Re-assign	Avg Re-assign	Grant to Hybrid	Grant to Litig	Hybrid to Litig
Indiv Invent	857	2	-	8.7	-
Op Co	22,813	4	4.9	6.8	2.8
Patent Holding Co	6,364	4	6.9	9.3	2.3
Innov Co	698	3	-	5.2	-
University	219	3	-	9.3	-
Failed Co	333	3	14.8	6.8	-

Planned Analysis:

- Do privateers “target” patent assignor’s rivals?
 - Have data on litigation defendants; will look first at #s of defendants
- Privateers take longer to litigate after grant
 - Is it solely due to waiting for reassignment? How old are patents when reassigned to privateers?
 - How many times are patents reassignments before going to a privateer?
- Does assignor business model affect the speed of reassignment or litigation?
- Are privateers more likely to settle litigation?
- Do privateers receive multiple rounds of reassignments?
- Are privateer held patents more likely to be renewed at USPTO?
 - Are reassignments to a privateer more likely to occur just after a renewal payment is made?