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Technology Law - IP Prosecution - Transactions

Skelley Snapshots

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"Do you wanna develop an app?"

Previously I posted about an automated CPC-based lookup tool I created to inspire folks to find deal partners, given Covid-19's deleterious effects upon networking, to which I promised this follow up.

A fair number of MIT / Stanford / Venture Capital friends looked over the CPC tool, emailed / called me to expound upon possible personal use cases and then, in accordance with the mandatory Silicon Valley patellar reflex, parroted the refrain: "Why not make it into an app / into a startup?"

Let's discuss why that would be a . . . *very* . . . *bad* . . . idea . . . by first asking a different question:

"What patents does Tesla have?"

Simple question, though a very important question if you're going to, for example,

- Approach Tesla with a deal . . .
- Create a competing product . . .
- Invest in (or short) Tesla stock . . .
- Invest in (or short) a competitor's stock . . .
- Give a loan to Tesla . . .
- Enter a joint venture with Tesla . . .
- Award Tesla a tax subsidy . . .
- Probably any of the same questions that would have brought you to the CPC tool . . .

RECENT UPDATES

DMCA Study

Skelley Snapshots

CPC Based Deal Search (i.e., not a COVID post)

NAVIGATION

- Etc.

Let's call these the "**common queries**." Most engineers / attorneys / professional wrestlers would answer the **common queries** by:

- Step 1, going onto PATFT's advanced search;
- Step 2, inputting "Tesla" as the assignee search query ("AN/('TESLA')");
- Step 3, hitting search; and
- Step 4, duly reporting that these are the ~535 assets owned by Tesla, which should be considered in your analysis (acknowledging that searching "TESLA" simply like this will include some things you probably didn't intend).

Wrong.

Wrong, wrong, "find me a rolled-up newspaper and get back here" wrong.

Why?

The weasel-word is "have," ambiguously construed by Steps 1-4 as "owns."   *No one cares what Tesla "owns"* (technically, the above search wouldn't even find that, as it omits pending items). It's what Tesla "*can field*" that concerns us for the **common queries**. Focusing on ownership rather than upon fielding ability is like dismissing Great Britain's military ability because it's an island. Context and relationships matter.

Ok, what can Tesla "field"?

> *Skelley's "Fielding Postulate"*: *An entity may "field" any asset which the entity has the capacity to assert at a time, place, and manner of its discretion to that entity's advantage.*

This postulate alone should suggest to you why my automated CPC tool is *just the tiniest, tiniest tip* of the analysis iceberg. Let's summarize the Fielding Postulate visually:
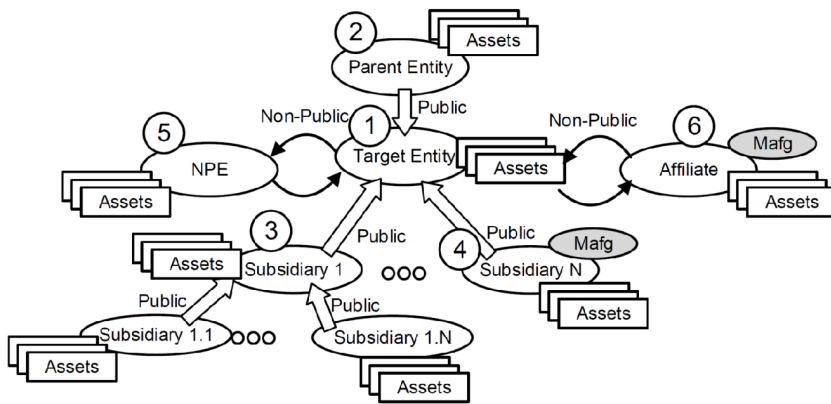
FIG. 1 – Visual Representation of the "Fielding Postulate"

Your "target entity" for analysis (e.g., Tesla) [1] may be a subsidiary of a parent [2] (though shown as a "public" relation in the figure, it may not be). Naturally that parent (usually) has an incentive to use its assets for the Target, or move those assets to the Target, when the Target has need of them. The Target may have non-public relations with non-practicing entities [5] and various affiliates [6] with asset sharing / joint defense agreements. Also, the Target may have subsidiaries [3], [4] with assets that the Target can field, as with the parent, upon necessity, either vicariously through the subsidiary or by transfer to the target. ALL of [1]-[6] need to be part of your analysis. Many Targets won't celebrate under-the-table peer relations for obvious reasons – see I.18.

And, no, this isn't just James being paranoid. Organizations *really do* move patents around like this, e.g.: to facilitate joint venture deals, affect stock valuations, coordinate poison pills, handle bankruptcies, coordinate loans / security agreements, avoid taxes, etc.
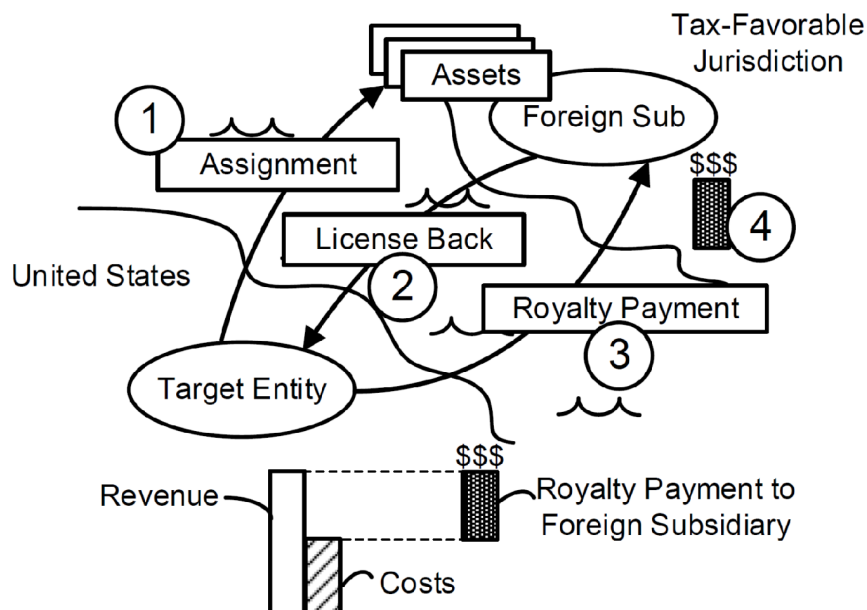
Wait, avoid taxes? How?

FIG. 2 – Revenue Reallocation by Inter-Jurisdiction Licensing

Briefly, the Target [1] assigns a bunch of their domestic IP to a foreign subsidiary in a tax-favorable jurisdiction (it used to be Ireland, though I think Jersey or the Caymans are now the preferred place . . . some folks used Luxembourg, but I understand the EU took exception to that . . . I digress). The Foreign sub then [2] grants a license back to the Target in exchange for a [3] Royalty payment which . . . drum roll please . . . . coincidentally (typically) matches domestic revenue over costs for the Target – so, lacking a profit, the Target pays no domestic taxes.   All the money made domestically gets to sit overseas in a tax-favorable jurisdiction.

(I'm not a tax guy, so if you do tax and I just gutted this . . . *I regret nothing*)

These tax arrangements, like many of the other possible arrangements, aren't created equally and many have potential, sometimes dramatic, consequences for our "can field" analysis. There are too many "gotchas" to discuss here, but even a *minor* grammatical error in the license back [2], or a seemingly innocuous apportioning of the royalty [3], can murder the target's options when, e.g., seeking an injunction (hint: standing) or past royalties (hint: Georgia Pacific Factor #1).

Ok, so, Alfred Korzybski's sepulchral rotations aside, when it comes to these legal fictions the "map is the territory" and we need to map all this out as in FIG.1 to complete our "can field" analysis.

Let's continue with our Tesla example.

For public companies, like Tesla, we can (ostensibly) find their subsidiaries at the SEC. For example, in Tesla's February 10-K they listed their subsidiaries in **Exhibit 21.1**. We look and see . . .

Three . . . hundred . . . and seventy . . . eight . . . distinct companies.

That's three-hundred-and-seventy-eight places the default analysis <u>failed</u> to consider. And we haven't even *started* to investigate [5] and [6] for Tesla . . . let alone for [5] and [6] of each of its subsidiaries . . . or looked at the patent families to . . . wait . . .

. . . *378 times about two to three hours per online search and then I'll need to organize and consolidate, so add another two to three hours . . . so if I don't sleep and I don't eat for 125 days . . .*
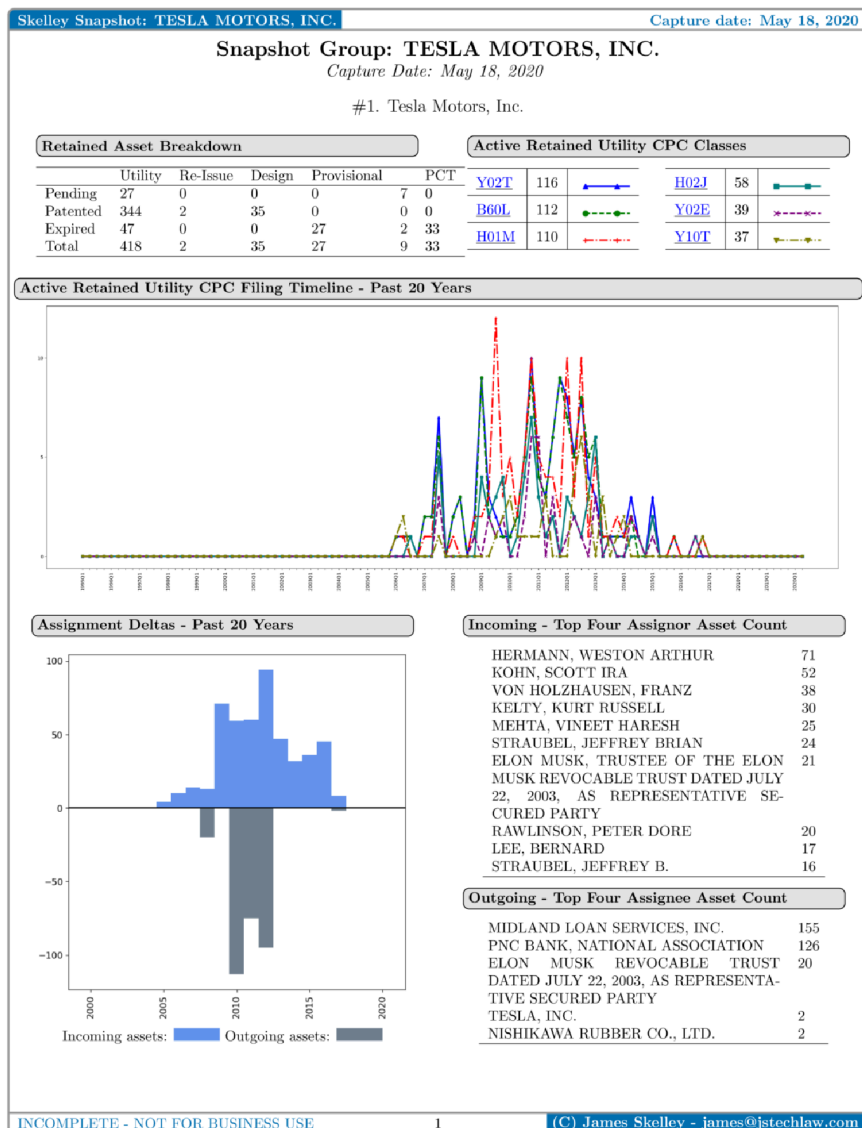
Confronted with such complexity many folks either give up and do the PATFT thing, convince themselves that some vendor's incomplete analysis is as good as it's going to get, or resign themselves to weeks or to months of slogging through data.

And no, don't tell me that "AI's the answer" with a second Pavlovian jerk of the other Silicon Valley knee – yes, scripting and signal processing may be of help to us, but statistics is not semiotics – if it was, I could teach my neighbor's cat calculus. <u>This is an important point</u>. It is why I think apps in this space are a dumb, and often dangerous, idea. The semantic barriers and legal nuances here are formidable, even for a human, and *even if* you had some oracular device that could perfectly answer your questions, simply <u>phrasing the right question</u> (way to go **Xenophon**) is a nontrivial art in itself. It's analogous to why advertisers **don't automate localization**.

Well if we can't automate and we don't want to slog for months at a time (which isn't useful anyway, if we want moderately real-time monitoring), our only remaining option is a human-in-the-loop iterative approach.

I built a tool for myself to do just this, which, in my boundless modesty and seraphic humility, have dubbed a "Skelley Snapshot."

The tool takes as input a group of entities and outputs a summary PDF and monolithic Excel spreadsheet. Here's a screenshot of the PDF I generated yesterday morning for "Tesla Motors, Inc."

Snapshot Group: TESLA MOTORS, INC.
Capture Date: May 18, 2020

#1. Tesla Motors, Inc.

Retained Asset Breakdown

	Utility	Re-Issue	Design	Provisional		PCT
Pending	27	0	0	0	7	0
Patented	344	2	35	0	0	0
Expired	47	0	0	27	2	33
Total	418	2	35	27	9	33

Active Retained Utility CPC Classes

Y02T	116		H02J	58	
B60L	112		Y02E	39	
H01M	110		Y10T	37	

Active Retained Utility CPC Filing Timeline - Past 20 Years

Assignment Deltas - Past 20 Years

Incoming assets: � Outgoing assets: ▰

Incoming - Top Four Assignor Asset Count

HERMANN, WESTON ARTHUR	71
KOHN, SCOTT IRA	52
VON HOLZHAUSEN, FRANZ	38
KELTY, KURT RUSSELL	30
MEHTA, VINEET HARESH	25
STRAUBEL, JEFFREY BRIAN	24
ELON MUSK, TRUSTEE OF THE ELON MUSK REVOCABLE TRUST DATED JULY 22, 2003, AS REPRESENTATIVE SECURED PARTY	21
RAWLINSON, PETER DORE	20
LEE, BERNARD	17
STRAUBEL, JEFFREY B.	16

Outgoing - Top Four Assignee Asset Count

MIDLAND LOAN SERVICES, INC.	155
PNC BANK, NATIONAL ASSOCIATION	126
ELON MUSK REVOCABLE TRUST DATED JULY 22, 2003, AS REPRESENTATIVE SECURED PARTY	20
TESLA, INC.	2
NISHIKAWA RUBBER CO., LTD.	2

IMPORTANT – the USPTO databases began undergoing maintenance last Friday afternoon (as of noon Tuesday 5/19, they seem to be back up). I only managed to generate this example during a serendipitous ~20 minute window yesterday morning when, for whatever reason, the USPTO database was briefly online again (it promptly died again thereafter, possibly on the tail end of the analysis). SO DO NOT TRUST THIS EXAMPLE AS BEING IN ANY WAY ACCURATE OR DISPOSITIVE.

Anyway, if those tables look like Latex tables, it's because they are (and yes, most of this is tikz). In the above example, there's only one entity name "Tesla Motors, Inc." in the entity search group. The ability to rapidly and iteratively enlarge or contract the search group is important so that we can map out FIG. 1 (consider Tesla and its 378 subsidiaries).

In the top left you'll see the "Retained Asset Breakdown"

	Utility	Re-Issue	Design	Provisional		PCT
Pending	27	0	0	0	7	0
Patented	344	2	35	0	0	0
Expired	47	0	0	27	2	33
Total	418	2	35	27	9	33

Retained Asset Breakdown

Part of the reason to change the search groups is to observe different entities' and groups of entities' character. Are we looking at a holding company? A genuine research arm? A joint venture proxy? etc. Generally, "pass-through" holding organizations won't "retain" much – here, we're seeing a fair number of "retained" items, so this looks like a genuine R&D entity (though the assignment pane we'll discuss in a minute will provide more conclusive data).
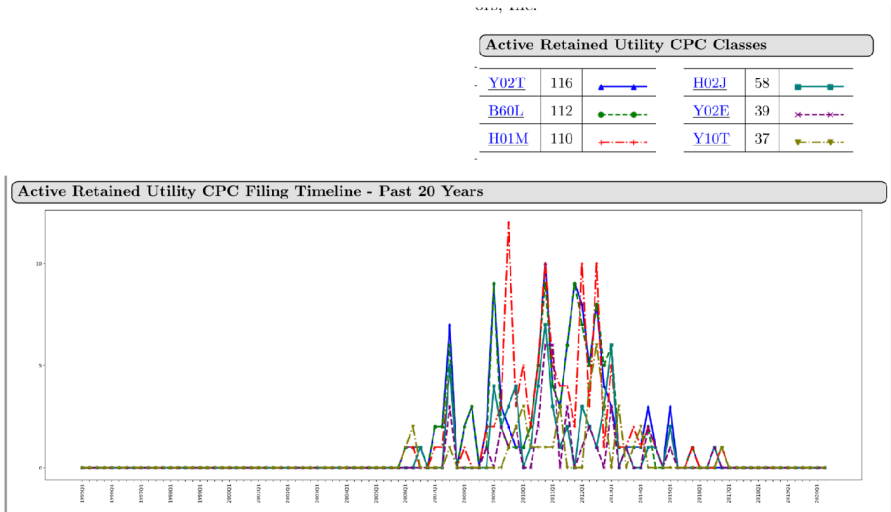
Now this is odd. Why's the title in the fifth column empty, but it found 7 pending and 2 expired of this "nothing" assets? Jeepers Scooby . . it's a mystery . . .

Actually, it's not.

If we consult the Excel spreadsheet we see that all nine of these items were detected in a change of name assignment, but not in the original PAIR search (hence why their type was unclear to the tool). When corporate attorneys do triangle mergers, changes in corporate form, etc. I've found that they're fond of using similar names for intermediate companies, sometimes (and I *really* prefer that they didn't do this) they just change a comma or a period.   So, "IBM inc." and "IBM, inc." may be two different entities. So until we find out otherwise, the tool really shouldn't assume they're the same entity (this is particularly true as folks often file assignments, ADSs, etc., with liberal sprinklings of periods and commas – many startups don't appreciate the importance of using the exact same characters everywhere).

Here, they apparently changed the company name from "Tesla Motors, Inc." to "Tesla, Inc." at some point (there are a lot of "Tesla Motor X" subsidiaries, so it's probably part of a bookkeeping taxonomy). Since "Tesla, Inc." wasn't in the search group, it wasn't included in the PAIR results (by the time the database published, the 9 missing items were marked as "Tesla, Inc." not "Tesla Motors, Inc" so their types weren't pulled from PAIR). If this were a real analysis, now I'd go back and add "Tesla, Inc." to the search group and run it again.
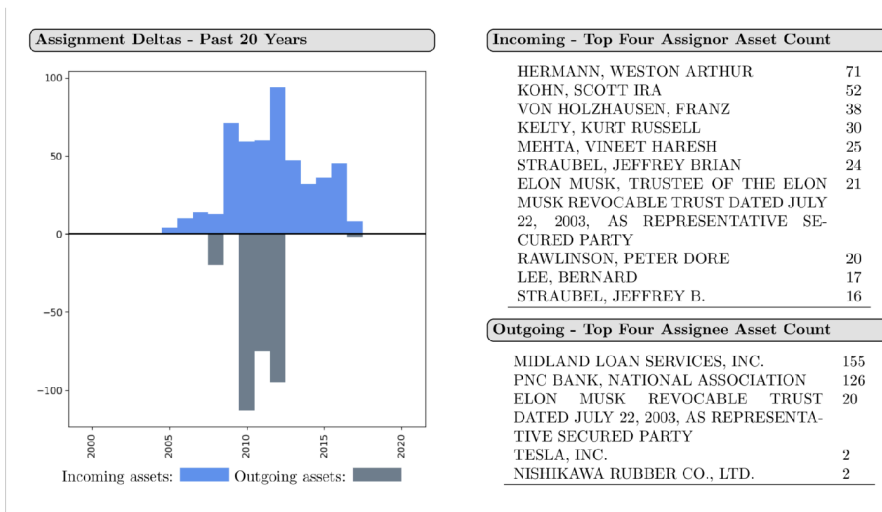
The Active Retained CPC Utility Timeline gives a "crude" flavor of the search group's filings over time.

Active Retained Utility CPC Classes					
Y02T	116		H02J	58	
B60L	112		Y02E	39	
H01M	110		Y10T	37	

Active Retained Utility CPC Filing Timeline - Past 20 Years

This is useful for getting a quick idea of what the entities have focused on over time. Here, Y02T is, unsurprisingly, CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO TRANSPORTATION and B60L is PROPULSION OF ELECTRICALLY-PROPELLED VEHICLES.

CPCs are only assigned after the asset is published / patented, so there's always a bit of a delay before the present in the timeline. USPCs are usually available during that time if you really need to know, but the USPTO database is (to my understanding) usually updated quarterly, so it's best to switch to a different tool if you're looking for near-real time results (e.g., I would never use a snapshot tool like this to manage a live portfolio).

Finally the assignment portion at bottom summarizes the largest incoming and outgoing assignors / assignees over time, i.e., the folks sending the most assets to the search group and the folks receiving the most assets from the search group.

Assignment Deltas - Past 20 Years		Incoming - Top Four Assignor Asset Count	
		HERMANN, WESTON ARTHUR	71
		KOHN, SCOTT IRA	52
		VON HOLZHAUSEN, FRANZ	38
		KELTY, KURT RUSSELL	30
		MEHTA, VINEET HARESH	25
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Outgoing - Top Four Assignee Asset Count	
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Incoming assets: ▉ Outgoing assets: ▉

(Yes, I realize it says "Top Four" in the subtitles . . . it _was_ four, but then I realized Latex would let me fit in more and I got greedy . . .)

This can be useful if you want to quickly discern whether the group is self-contained or if it's passing through assets. A holding company (e.g., the Irish tax example above) won't usually have a human as its top assignor, whereas a genuine engineering company (as here) probably would.

Now, what constitutes "outgoing" and "incoming" is subject to context. Is a security agreement "outgoing" (here it is)? If you want to check for deals that may lock up an asset, then you'd probably treat it as such. Otherwise, only a pure "assignment" would be outgoing. Again, an AI can only answer questions that you know how to ask – so if you're not sure what to ask here, you're going to need to do some footwork, which, once completed, will itself obviate the need for the AI.

As indicated, there are two outgoing assets via assignment to Tesla, Inc. Either there was a brief period when two companies existed or maybe somebody goofed (or, as mentioned, the PTO database was still being updated when I did the data pull).

In closing, if you've done a brief CPC exploration and want to dig deeper, or just have general questions about monitoring, I'm happy to chat about generating and using snapshots in greater detail for different purposes. If you encounter anyone offering a one-size-fits-all app or AI solution in this space, though, I'd advise extreme caution. For as much as we may love apps, at least with respect to semantically intensive analyses like this one, in the end . . .

"**. . . it looks like you and I . . . are all we got.**"