Update on Rush to Judgment? Trial Length & Outcomes in Patent Cases

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Results from 1st Paper

- Short trials do not benefit patentees
 No length effect on outcome at all
- Predictors of Success
 - Juries more pro-patentee than judges
 - Juries in some "suspect" districts modestly more pro-patentee than juries in the average district

Updated Study

- Data:
 - Old: 624 trials and 679 judgments (1/1/2000 6/30/2011)
 - New: 972 trials and 1,031 judgments (1/1/2000 12/31/2015)
- Additional variables in new study:
 - Patent technology (based on 3-digit PTO class)
 - Patentee type (from Stanford NPE Lit Dataset)

National Trial Outcomes

| | Ν | % of Total | Mean Time | S.D. | p value |
|------------------|-----|------------|-----------|------|----------|
| Total Bench | 262 | 27.0% | 5.9 | 4.7 | 0.000*** |
| Total Jury | 710 | 73.0% | 8.3 | 4.4 | |
| | | | | | |
| Bench – C Win | 140 | 53.4% | 5.8 | 4.0 | 0.268 |
| Bench – CD Win | 104 | 39.7% | 5.3 | 3.8 | |
| Bench – C;CD Win | 18 | 6.9% | 10.3 | 9.7 | |
| | | | | | |
| Jury – C Win | 441 | 62.1% | 8.2 | 4.5 | 0.956 |
| Jury – CD Win | 228 | 32.1% | 8.2 | 4.1 | |
| Jury – C;CD Win | 41 | 5.8% | 9.9 | 4.3 | |

Eastern District of Texas Trial Outcomes

| | Ν | % of Total | Mean Time | S.D. | p value |
|------------------|-----|------------|-----------|------|----------|
| Total Bench | 9 | 6.7% | 3.6 | 1.5 | 0.001*** |
| Total Jury | 126 | 93.3% | 5.9 | 2.2 | |
| | | | | | |
| Bench – C Win | 5 | 55.6% | 3.4 | 1.1 | 0.745 |
| Bench – CD Win | 3 | 33.3% | 3.0 | 1.7 | |
| Bench – C;CD Win | 1 | 11.1% | 6.0 | | |
| | | | | | |
| Jury – C Win | 83 | 65.9% | 5.9 | 1.9 | 0.726 |
| Jury – CD Win | 40 | 31.7% | 5.8 | 2.7 | |
| Jury – C;CD Win | 3 | 2.4% | 7.3 | 2.5 | |

Northern District of California Trial Outcomes

| | N | % of Total | Mean Time | S.D. | p value |
|------------------|----|------------|-----------|------|----------|
| Total Bench | 8 | 12.9% | 5.5 | 2.9 | 0.000*** |
| Total Jury | 54 | 87.1% | 12.0 | 4.9 | |
| | | | | | |
| Bench – C Win | 4 | 50.0% | 6.3 | 4.2 | 0.430 |
| Bench – CD Win | 3 | 37.5% | 4.3 | 0.6 | |
| Bench – C;CD Win | 1 | 12.5% | 6.0 | | |
| | | | | | |
| Jury – C Win | 26 | 48.1% | 13.3 | 6.2 | 0.054* |
| Jury – CD Win | 23 | 42.6% | 10.6 | 2.9 | |
| Jury – C;CD Win | 5 | 9.3% | 11.2 | 3.1 | |

Central District of California Trial Outcomes

| | Ν | % of Total | Mean Time | S.D. | p value |
|------------------|----|------------|-----------|------|----------|
| Total Bench | 10 | 22.2% | 2.7 | 1.6 | 0.000*** |
| Total Jury | 35 | 77.8% | 7.4 | 4.3 | |
| | | | | | |
| Bench – C Win | 5 | 50.0% | 2.6 | 1.1 | 0.855 |
| Bench – CD Win | 5 | 50.0% | 2.8 | 2.0 | |
| Bench – C;CD Win | 0 | 0.0% | | | |
| | | | | | |
| Jury – C Win | 21 | 60.0% | 6.6 | 3.0 | 0.502 |
| Jury – CD Win | 13 | 37.1% | 7.5 | 3.8 | |
| Jury – C;CD Win | 1 | 2.9 | 24.0 | | |

District of Delaware Trial Outcomes

| | Ν | % of Total | Mean Time | S.D. | p value |
|------------------|-----|------------|-----------|------|---------|
| Total Bench | 77 | 43.3% | 4.9 | 2.1 | 0.000 |
| Total Jury | 100 | 56.7% | 7.9 | 3.0 | |
| | | | | | |
| Bench – C Win | 49 | 63.6% | 5.1 | 2.2 | 0.137 |
| Bench – CD Win | 23 | 29.9% | 4.3 | 1.7 | |
| Bench – C;CD Win | 5 | 6.5% | 6.0 | 2.5 | |
| | | | | | |
| Jury – C Win | 55 | 55.0% | 7.7 | 2.7 | 0.937 |
| Jury – CD Win | 27 | 27.0% | 7.7 | 2.7 | |
| Jury – C;CD Win | 18 | 18.0% | 8.7 | 4.0 | |

District of New Jersey Trial Outcomes

| | Ν | % of Total | Mean Time | S.D. | p value |
|------------------|----|------------|-----------|------|---------|
| Total Bench | 37 | 75.5% | 8.2 | 3.9 | 0.111 |
| Total Jury | 12 | 24.5% | 10.5 | 4.3 | |
| | | | | | |
| Bench – C Win | 20 | 54.1% | 8.5 | 4.0 | 0.373 |
| Bench – CD Win | 14 | 37.8% | 7.3 | 3.7 | |
| Bench – C;CD Win | 3 | 8.1% | 10.0 | 4.4 | |
| | | | | | |
| Jury – C Win | 7 | 58.3% | 9.1 | 4.1 | 0.215 |
| Jury – CD Win | 5 | 41.7% | 12.4 | 4.2 | |
| Jury – C;CD Win | 0 | 0.0 | | | |

Nat'l Trial Outcomes (minus Top-5 Dists)

| | Ν | % of Total | Mean Time | S.D. | p value |
|----------------|-----|------------|-----------|------|----------|
| Total Bench | 121 | 24.0% | 6.3 | 5.9 | 0.000*** |
| Total Jury | 383 | 76.0% | 8.7 | 4.7 | |
| | | | | | |
| Bench – C Win | 57 | 50.4% | 6.0 | 4.8 | 0.584 |
| Bench – CD Win | 56 | 49.6% | 5.6 | 4.5 | |
| | | | | | |
| | | | | | |
| Jury – C Win | 249 | 67.5% | 8.7 | 4.7 | 0.930 |
| Jury – CD Win | 120 | 32.5% | 8.6 | 4.6 | |
| | | | | | |

National Trial Outcomes By Patent Tech

| | Chen | nistry | Compute | Computer & Comm | | & Med |
|----------------|----------|----------|----------|-----------------|----------|----------|
| | % (N) | Time | % (N) | Time | % (N) | Time |
| Total Bench | 39% (31) | 6.8 | 6% (18) | 6.6 | 56%(151) | 6.7 |
| Total Jury | 61% (48) | 8.7 | 94%(266) | 8.7 | 44%(117) | 9.2 |
| | | p=0.05** | | p=0.14 | | p=0.0*** |
| | | | | | | |
| Bench – C Win | 64% (18) | 6.4 | 15%(2) | 4.5 | 63%(89) | 6.9 |
| Bench – CD Win | 36% (10) | 6.1 | 85%(11) | 6.7 | 37%(54) | 5.5 |
| | | p=0.87 | | p=0.32 | | p=0.01** |
| | | | | | | |
| Jury – C Win | 72% (34) | 8.0 | 61%(151) | 9.0 | 73%(83) | 8.9 |
| Jury – CD Win | 28% (13) | 10.4 | 39%(98) | 7.9 | 27%(30) | 9.9 |
| | | p=0.04** | | p=0.05* | | p=0.42 |

National Trial Outcomes By Patent Tech

| | Elect | rical | Mechanical | | Other | |
|----------------|----------|--------|------------|-----------|----------|----------|
| | % (N) | Time | % (N) | Time | % (N) | Time |
| Total Bench | 17% (16) | 5.9 | 18% (17) | 3.7 | 25% (37) | 3.8 |
| Total Jury | 83% (78) | 8.1 | 82% (75) | 7.9 | 75%(109) | 7.2 |
| | | p=0.18 | | p=0.00*** | | p=0.0*** |
| | | | | | | |
| Bench – C Win | 62% (8) | 3.8 | 62% (10) | 4.1 | 57% (20) | 3.1 |
| Bench – CD Win | 38% (5) | 9.2 | 38% (6) | 3.2 | 17%(15) | 3.9 |
| | | p=0.29 | | p=0.31 | | p=0.43 |
| | | | | | | |
| Jury – C Win | 71% (52) | 7.8 | 62%(43) | 7.7 | 66%(65) | 6.9 |
| Jury – CD Win | 29% (21) | 8.5 | 38%(26) | 8.1 | 34%(34) | 7.3 |
| | | p=0.47 | | p=0.72 | | p=0.60 |

National Trial Outcomes By Patentee Type

| | Practicir | ng Entity | PAEs | Only | Individu | als Only |
|----------------|-----------|-----------|--------------|-----------|----------|----------|
| | % (N) | Time | % (N) | Time | % (N) | Time |
| Total Bench | 34% (207) | 6.1 | 8% (9) | 3.3 | 13% (6) | 2.3 |
| Total Jury | 66% (403) | 8.6 | 92% (110) | 7.8 | 87%(39) | 6.1 |
| | | p=0.00*** | | p=0.00*** | | p=0.0*** |
| | | | | | | |
| Bench – C Win | 61% (118) | 6.1 | 29% (2) | 1.5 | 83% (5) | 2.6 |
| Bench – CD Win | 39% (77) | 5.3 | 71% (5) | 3.6 | 17%(1) | 1.0 |
| | | p=0.12 | | p=0.05* | | p=1.00 |
| | | | | | | |
| Jury – C Win | 69% (264) | 4.2 | 56% (59) | 7.9 | 74%(29) | 6.1 |
| Jury – CD Win | 31% (117) | 4.6 | 44% (46) | 7.2 | 26%(10) | 6.0 |
| | | p=0.49 | | p=0.42 | | p=0.96 |

OLS Regressions of Trial Length

| | Beta | S.E. | Beta | S.E. | Beta | S.E. |
|----------------|--------|------|---------|------|---------|------|
| Patentee Win? | 0.14 | 0.29 | 0.31 | 0.28 | 0.28 | 0.29 |
| Jury Trial? | 2.6*** | 0.3 | 3.1*** | 0.4 | 3.1*** | 0.4 |
| TXED? | | | -3.2*** | 0.3 | -3.1*** | 0.4 |
| DED? | | | -1.2*** | 0.3 | -1.3*** | 0.3 |
| CAND? | | | 2.6*** | 0.7 | 2.5*** | 0.7 |
| CACD? | | | -2.0*** | 0.5 | -2.0*** | 0.5 |
| NJD? | | | 1.7** | 0.7 | 1.7** | 0.7 |
| Chemical? | | | -0.05 | 0.38 | -0.08 | 0.38 |
| Comp/Comm? | | | 0.90*** | 0.30 | 1.0*** | 0.3 |
| Drugs/Med? | | | 0.73** | 0.32 | 0.66** | 0.32 |
| Electrical? | | | -0.23 | 0.36 | -0.28 | 0.36 |
| Mechanical? | | | -1.3*** | 0.4 | -1.2*** | 0.4 |
| Pract. Entity? | | | | | 0.42* | 0.25 |
| PAE Only? | | | | | -0.30 | 0.25 |
| Individual? | | | | | -0.11 | 0.15 |
| Constant | 5.5*** | 0.3 | 5.2*** | 0.4 | 5.0*** | 0.4 |

Probit Regressions of Patentee Win Rate

| | Beta | S.E. | Beta | S.E. | Beta | S.E. |
|----------------|--------|------|----------|------|---------|------|
| Jury Trial? | 0.08** | 0.04 | 0.15*** | 0.04 | 0.15*** | 0.05 |
| Trial Length | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TXED? | | | 0.07 | 0.05 | 0.08 | 0.05 |
| DED? | | | 0.06 | 0.05 | 0.05 | 0.05 |
| CAND? | | | -0.12* | 0.07 | -0.13* | 0.07 |
| CACD? | | | -0.03 | 0.08 | -0.04 | 0.08 |
| NJD? | | | -0.04 | 0.08 | -0.05 | 0.08 |
| Chemical? | | | 0.06 | 0.05 | 0.06 | 0.05 |
| Comp/Comm? | | | -0.10*** | 0.03 | -0.08** | 0.03 |
| Drugs/Med? | | | 0.08** | 0.04 | 0.06* | 0.04 |
| Electrical? | | | 0.03 | 0.05 | 0.02 | 0.05 |
| Mechanical? | | | -0.03 | 0.05 | -0.03 | 0.05 |
| Pract. Entity? | | | | | 0.04 | 0.03 |
| PAE Only? | | | | | -0.06** | 0.03 |
| Individual? | | | | | 0.02 | 0.02 |

Conclusions

- Generally trial length doesn't impact outcome

 But in CAND longer trials may benefit patentees
- Juries somewhat more pro-patentee nationally and in CACD and TXED
 - But judges more pro-patentee in CAND and DED!

- And nearly identical win rates in NJD.

PAEs and individuals do worse than practicing entities, but not by much

Further Research

- Separating ANDA effects
- Qualitative study why do lawyers choose bench trials?

National Trial Outcomes (minus E.D. Tex.)

| | Ν | % of Total | Mean Time | S.D. | p value |
|----------------|-----|------------|-----------|------|----------|
| Total Bench | 253 | 30.2% | 6.0 | 4.7 | 0.000*** |
| Total Jury | 584 | 69.8% | 8.9 | 4.5 | |
| | | | | | |
| Bench – C Win | 135 | 57.2% | 5.9 | 4.0 | 0.261 |
| Bench – CD Win | 101 | 42.8% | 5.3 | 3.8 | |
| | | | | | |
| | | | | | |
| Jury – C Win | 358 | 65.6% | 8.8 | 4.7 | 0.971 |
| Jury – CD Win | 188 | 34.4% | 8.8 | 4.2 | |
| | | | | | |