In this project, we are experimentally testing the importance of burdens of proof in determining the validity of a patent in litigation. The genesis of these experiments is the Supreme Court decision in Microsoft Corp. v. i4i Limited P'ship, 131 S. Ct. 2238 (2011). In i4i, the Court rejected Microsoft's claim that a jury need only be persuaded by a preponderance of the evidence to find a patent invalid, at least when the evidence before the factfinder regarding invalidity was not considered by the PTO during the examination process. Instead, it reaffirmed that an invalidity defense must be proven by clear and convincing evidence. But the Court also concluded that if the party challenging a patent's validity relied on evidence not previously considered by the PTO, then the jury should be instructed that this burden "may be easier to sustain." Id. at 2251.

Currently, there is a dearth of evidence about whether modifying or eliminating the clear and convincing evidence presumption would result in different outcomes regarding patent validity in litigation. In this project, we have conducted a series of experiments to empirically examine this issue. In these experiments, each subject received short fact pattern simulating the information considered by a juror in a patent infringement lawsuit. The fact pattern is loosely based upon a real case involving relatively simple technology—golf ball design. See Callaway Golf Co. v. Acushnet Co., 576 F.3d 1331 (Fed. Cir. 2009). After reading the fact pattern and a summary of the parties' arguments regarding invalidity, subjects received one of three jury instructions informing them of the burden of proof: (1) a control version (clear and convincing evidence), (2) a first treatment version with the language based on the Court's decision in i4i (clear and convincing evidence, but this burden is easier to satisfy if the invalidity claim relies on evidence not previously considered by the PTO), and (3) a second treatment version (preponderance of the evidence).

Our results suggest that the effect of the Supreme Court's i4i decision may be more complicated than is apparent from an analysis of the decision itself. Following the Supreme Court's reasoning in i4i, we anticipated that the burden of proof for an i4i-type instruction would result in an intermediate standard between plain clear and convincing evidence (highest) and preponderance of the evidence (lowest), and the percentage of invalidity findings by respondents would reflect this. This expectation was partially supported by our experiment, which found a statistically significant difference in
subjects' decisions between the clear and convincing standard and the preponderance of the evidence standard, with the latter more likely to result in judgments of invalidity. However, the i4i-type instruction surprisingly resulted in invalidity decisions that were statistically indiscernible from the preponderance of the evidence standard. These findings were robust even when we made semantic changes to the wording of the i4i-type instruction. We plan to perform further experiments to understand more about the role of burden of proof instructions in patent cases. If our preliminary results hold after additional experiments, they may reshape views about the i4i decision and jury instructions in patent litigation more broadly.