never learn of the patent in the first place.<sup>16</sup>

## Ignoring Patents

To get a perspective on how strange this might seem to an outsider to the patent system—or even to an outsider to the component industries in which this behavior is common—compare it to the world of real property. If I want to build a house, I'd better be darn sure that I own the land on which the house is built. In fact, it would be foolhardy to begin construction before I owned the rights to the land, in the hopes that I would be able to obtain the rights later. Nor would a prospective homebuilder put up with significant uncertainty about the boundaries of the land on which she was building. People don't often build houses that might or might not be on their land, hoping that they would ultimately win any property dispute. And even if a few people were so reckless as to want to do one of these things, banks won't fund construction without certainty in the form of a title insur-

ance search report indicating that the able c-II. if (learbout appleted . 6 (lig) to uights. If (y a lf of (mown cT)s)2.3 (all th)-7 of property, and in particular to draw analogies to real property.

<sup>22</sup> So let's

Interestingly, the term has also been used fo

engage in a thought experiment: what if we took the analogy seriously and actually behaved with patents as we do with real property? Product manufacturers would have to stop ignoring patents. No venture capitalist or bank (or shareholder, should Intel fund the project internally) would give Intel the money to build a new manufacturing plant (or "fab") unless it could demonstrate that it had conducted an exhaustive search for patents it might infringe in manufacturing its chips and had obtained irrevocable or at least long-term licenses<sup>23</sup> to use any patent that anyone might conceivably later assert

posed on real property to justify limits on IP). But Epstein still begins with the baseline assumption—adopted implicitly from the real property model—that someone ought to own an invention. Other scholars have lamented the rise of property rhetoric and its effects, while

against the chips or the manufacturing plant. Intel, in turn, would look to a group of "patent insurance" firms that would spring up and that would conduct the search and determine what patents needed to be licensed. Unless and until all of this had happened, Intel could not start construction of its fab, much less make or sell chips produced by that fab. If there were significant disagreement over whether a party legitimately owned patent rights, perhaps Intel could bring a declaratory judgment action to try to clarify those rights, but it would hold construction in abeyance until it got an answer.<sup>24</sup> And since there is no experimental use defense to patent infringement, scientists at both universities and corporations would have to conduct a similar search and wait to get permission from all possible interested parties before they began their research, lest they infringe a patent in the lab.

Would this world be desirable? I'm skeptical. Let's begin with the benefits of such a world. Patent owners would get paid early and often. Patent litigation would decrease, or maybe even disappear entirely, because anyone who wanted to make a product would find the patent owner and enter into a deal up front, or else not make the product. And patent owners who compete in the marketplace, and rely on the patent to preserve exclusivity, would not face competition during the often-protracted period during which the patent is being litigated.

At the same time, these benefits would come at significant cost. First, both research and the manufacture of products would be regularly delayed for years and perhaps decades as potential defendants identified and cleared rights. The problem is not simply the time and cost required to find and evaluate the patents, contact the patent owner, and negotiate a license, though those costs may be significant. Rather, the legal rights in question may not even exist at the time Intel needs to make its investment decision. Many, perhaps most, patent lawsuits are filed against independent developers who themselves came up with the idea, generally at about the same time the patentee did.<sup>25</sup> The fact that it takes over three and a half years for the PTO to issue a patent, and that for at least eighteen months of that time the application isblished17.3066 211.44 657.44 79.240 Tc(24)Tj**T5**.0721 T13[(n)-7(e(may)-7.)1.5( an)]TJ15rights may be significant indeed. The problem is even worse because of the common practice of filing continuation applications, which permit applicants to change their claims in an application for up to twenty years after the application was filed and even after a patent has issued on that application.<sup>27</sup> A true title-search system would require Intel to wait until we knew for sure whether a patent would issue on any existing continuation application. Nor would the uncertainty end then; ten years of claim construction litigation have made clear that we rarely know for sure what a patent covers even after it issues.<sup>28</sup> So it is not clear that we will know even then which patents Intel must license. The significant delay of a title-search system harms consumer welfare because both innovation and product deployment occur later than they otherwise would.<sup>29</sup>

Second, a real-property patent system would replace competition with central coordination in a significant number of cases. So far we have assumed that the patent owners will be willing to license their patents. But that is likely not to be true in many cases. Patent owners who compete in the marketplace want exclusivity, and there is no license price an equally efficient competitor will be willing to pay that will compensate for the loss of monopoly rights. Even patent owners who do not compete in the marketplace may find it more lucrative to grant an exclusive rather than a nonexclusive license to someone who does make a product, for the same reasons. Nor will a competing company be particularly sympathetic to efforts by outsiders to engage in research on the invention if the effect of that research will be to design around or improve that core invention. The effect

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worked on a particular technology. If you believe, as I do, that the evidence suggests that competition is often a better spur to innovation than monopoly,<sup>30</sup> removing that contingent competition is a potentially significant cost.<sup>31</sup>

Third, and perhaps most important, a significant percentage—maybe as many as three-fourths<sup>32</sup>—of these patents turn out to be either invalid or not infringed. It is this probabilistic nature that most critically distinguishes patents from real property.<sup>33</sup> Under the current system in patent-ignoring industries, consumers benefit from competition during the time before those patents are invalidated or held not to be infringed. Under a real-property

<sup>30.</sup> For a sense of the literature on this long-running economic debate, see Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention, in* NAT'L BUREAU, ECON. RESEARCH, THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS

a particular drug after FDA approval, while not zero,<sup>45</sup> is not particularly high. Further, the patent owner identifies up front the patents that cover a particular product. It can do that because market entry is delayed for years and even decades by the FDA approval process, with the result that all parties involved will generally know what patent rights exist before the generic seeks to enter. All of these characteristics, particularly those that flow from the FDA regulatory structure, make the need for strong patent protection greater and the costs of that protection less.

Second, notwithstanding those characteristics, it is worth noting that the title-search approach creates significant problems even in the pharmaceutical industry. Patent owners have strong incentives to extend the life of their patents, whether by "evergreening"—obtaining multiple patents covering the same product<sup>46</sup>—or by "product-hopping"—changing the product they sell and restarting the regulatory clock once their patent on the existing product expires or is invalidated.<sup>47</sup> Because generic entry is regulated, they have significant incentive to enter into side deals with generics to keep them from competing, and indeed it is quite common for patent-owning pharmaceutical companies to pay their only possible competitors to stay out of the market.<sup>48</sup>

maceutical innovation if generic companies were permitted to ignore patents as well. But outside the regulated industry context, it seems likely that treating patents like real property would significantly delay entry and improvement without conferring many of the benefits asserted for the real-property approach. In those other industries, having patents but operating as if they don't constrain behavior may be better than treating the patent right as sacrosanct.<sup>49</sup>

That doesn't mean that ignoring patents is the best of all possible worlds either. In industries that ignore patents, patent owners can generally get paid only if they threaten to sue. In a real-property world, manufacturers can make products only if they pre-clear all the rights. There ought to be a middle ground between these extremes. Imagine a functioning, efficient market for patent licenses, one that incorporated the possibilities of patent invalidity and non-infringing alternatives and avoided licenses based on holdup, but which also inculcated in manufacturers norms of paying for the rights they use. Patentees could get paid a reasonable amount for their rights, but without the risks and uncertainty of the current system.<sup>50</sup> And companies interested in using innovations could seek out new ideas embodied in patents, rather than burying their heads in the sand and developing inventions entirely on their own.<sup>51</sup>

<sup>49.</sup> One might reasonably question whether, if companies in many industries deal with the patent system by ignoring patents, we would be better off simply eliminating the patent system in those industries. While the argument has some appeal, I think that conclusion is unwarranted. Not only would it require industry-specific line drawing of the kind that creates problems for legislatures, *see* DAN L. BURK & MARK A. LEMLEY, BEND OR BREAK: HOW OUR PATENT SYSTEM FOUND ITSELF IN CRISIS AND HOW

and validity of rights earlier rather than later. Second, we might want to implement an independent invention defense or at least some form of prior user right,<sup>58</sup> both as a matter of equity—manufacturers can reasonably ob-

patentees can get paid for their inventions, but would lose the ability to engage in holdup. Manufacturers would not be entitled to a free ride, but they would also be free from the significant risks of the patent anticommons.

The steps required to move from our world to this ideal one are radical, and it seems unlikely that they will happen. In the absence of fundamental changes, it is likely that companies will continue to muddle through. But they will do so in significant part by ignoring patents.