

## **Internet inventions and the on-sale bar: When is your web application "ready for patenting?"**

By Steve Shumaker

United States patent law prohibits the patenting of an invention that is "offered for sale" more than one year before the filing of a patent application.<sup>1</sup> If a company shops its new technology around, and then waits more than one year to file a patent application, it can lose its patent rights. The so-called "on-sale bar" is a serious concern for companies operating in the quick-to-market internet industry. The pursuit of customers and revenue can kill any patent rights an internet company may hope to obtain. In the rush for short-term commercial success, internet companies must "stop to smell the patents" or risk sacrificing the long-term competitive advantage afforded by patent protection.

The on-sale bar balances different policy objectives. In particular, the on-sale bar restricts the time available for commercial exploitation of an invention in advance of patent filing, and thereby counters efforts to prolong the patent term and the exclusivity that comes with it. In this manner, the on-sale bar promotes prompt filing and early disclosure of inventions to the benefit of the public. At the same time, the on-sale bar offsets such interests against the inventor's need to test the commercial appeal of an invention, providing a one-year grace period for patent filing.

In its most recent case on the topic, *Pfaff v. Wells Electronics*, the Supreme Court held that the on-sale bar might apply to a product that is not yet in existence. The Court proclaimed that the on-sale bar applies to an invention that is "ready for patenting" even if the inventor has not reduced it to practice by producing a physical embodiment.<sup>2</sup> Thus, the one-year clock imposed by the on-sale bar now begins to tick when two conditions are met. First, the invention must be the subject of an offer for sale. Second, the invention must be "ready for patenting."

While *Pfaff* has raised concerns for all technology companies, it is especially troublesome for providers of internet technology, which is characterized by swift movement from conception to commercialization. Internet inventions are often "ready for patenting" much earlier in the development process than inventions in more conventional technology areas.

To avoid forfeiture of potential patent rights, internet companies should consider early filing of patent applications for inventions that can be readily implemented. As an invention becomes more refined, additional patent applications can be filed. In the meantime, the filing of an early application can preserve patent protection for the basic concepts. The ability to identify a potential on-sale bar, and understand its scope in light of *Pfaff*, will be important to internet companies in safeguarding their patent rights.

***Offer for Sale -- Any commercially motivated activity is suspect***

According to the courts, little is required to create an “offer for sale.” A single offer may be enough,<sup>3</sup> and whether or not the offer is accepted is completely irrelevant.<sup>4</sup> Moreover, whether the offer is made on a confidential basis or to only a single customer is generally immaterial.<sup>5</sup> If an invention is “ready for patenting,” the one-year clock may begin to tick as soon as a company attempts to take commercial advantage of it.<sup>6</sup> Failure to file a patent application within the one-year period results in the loss of patent rights.

A basic example of an offer for sale is the marketing of a commercially available web application to end-users. Other less conspicuous activities can rise to the level of an on-sale bar, even when the end user does not immediately receive the product or service. At an industry trade show, for example, the mere mention of price for a future web application can unwittingly start the on-sale bar clock.<sup>7</sup> Similarly, an advertisement or invoice that mentions pricing for an on-line search service may constitute an offer for sale even if no details of the underlying invention are disclosed.<sup>8</sup> Although it is important to whet customers’ appetites for new products and services, a company’s *best* sales representative could be its *worst* enemy in preserving patent rights.

Another area for concern is the business of web application development. When a company contracts for custom development, specification of the product to be developed and the cost of development could raise offer for sale concerns. If the developer and customer discuss a price, the on-sale bar issue would seem to involve the extent to which the parties have specified the features of the product. In other words, the level of detail in the development specification could provide the measure of whether the underlying inventive concepts are “ready for patenting.” Thus, an offer for sale could take shape very early in the development cycle and, quite possibly, at the very beginning. The process of commercial development, by itself, does not constitute an exception to the on-sale bar.<sup>9</sup>

Beta testing of web applications is another activity that could raise on-sale bar implications. This is particularly the case when a license fee or other payment is required, or when the beta testing program is designed to promote early enlistment of customers for the commercial release. Even when a fee is not charged, the beta test could trigger another statutory “bar” based on public use.<sup>10</sup> In this case, the developmental nature of the beta test may provide an exception to the public use bar, as an experimental use. For this exception to apply, the product should be in a pre-commercial form that genuinely requires real-world exposure for completion.<sup>11</sup> For this reason, solicitation of user comments and error reports may be advisable to reinforce the experimental nature of the beta test.

Even when a commercial activity does not qualify as an offer for sale, an accused infringer will nevertheless attempt to raise it to that level in an effort to prove patent invalidity. Indeed, one of the challenger’s first objectives in discovery will be to seek information concerning early commercial activity by the patent owner. Thus, at the very least, the combination of early commercial activity with late patent filing can result in the expenditure of substantial time and money defending patent validity in the litigation arena. This may be reason enough to give careful attention to early patent filing.

### ***Ready for Patenting: Is it easy to implement?***

Even if an invention is offered for sale, a company's patent rights may survive provided the invention was *not* "ready for patenting" at the time of the offer. An invention is "ready for patenting" when it has been reduced to practice<sup>12</sup> or when the inventor has produced a description that demonstrates that the invention will work for its intended purpose.<sup>13</sup> In the latter case, a physical embodiment is not necessary.<sup>14</sup> Instead, it is sufficient that the inventor possess drawings, flowcharts, specifications, or other documentation that convey a sufficient level of detail for production of the invention.

In *Pfaff*, at the time the invention was offered for sale, the inventor had prepared only drawings. The invention was not physically produced until an order from a customer actually was fulfilled. However, the Court held that the level of detail provided in the drawings made the invention ready for patenting. In particular, the Court found that the drawings were sufficiently clear and precise to enable production of the device.<sup>15</sup> The Court noted that the filing of a patent application requires no actual reduction to practice.<sup>16</sup> Rather, the Court recognized that many patent applications are filed before a physical embodiment of the invention is produced.

For many inventions, the requirement that the invention be "ready for patenting" significantly limits application of the on-sale bar. The extensive efforts often required to conceptualize an invention in the chemical or biotech arts may, in at least the early stages of development, support the notion that the invention is *not* ready for patenting. Determining the formulation and efficacy of a new pharmaceutical, for example, may require years of experimentation. Similarly, proper formulations for a new paint or adhesive may be apparent only upon field testing under real-world conditions. In each case, without further work, the inventor cannot be sure whether the invention will work for its intended purpose, and may have insufficient information to enable production of the device.

Internet inventions, on the contrary, may satisfy the "ready for patenting" condition much earlier in the development process. Upon development of a functional specification, or even the mapping of a flow diagram on a whiteboard, the architecture and operability of a particular web application may be readily apparent. Realization of the operable concept may come long before programmers actually begin producing code to implement it.<sup>17</sup> Nevertheless, the functional concept often will enable production of the invention, albeit with an investment of time and effort in the coding process. Consequently, following *Pfaff*, it appears that the "ready for patenting" condition could be more hostile to internet inventions than to inventions in less predictable arts such as chemistry and biotechnology.

Indeed, the functionality of a software product, and not the code that supports it, ordinarily is the essence of the invention. This is especially the case with the basic e-

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commerce methodologies many internet companies are now seeking to patent. In theory, a wish list prepared on a cocktail napkin could satisfy the ready for patenting condition if a programmer could readily implement the desired functionality. Contrast this with the Dilbert-esque manager's request for a time machine, where the details sufficient to realize it are absent. For most internet inventions, variation in the code used to implement the invention, the programming language used, or even the platform on which the invention operates often will be irrelevant. Instead, the basic concept, or business method, will be at the root of patentability. Unfortunately, this means that the conceptualization of an internet invention could trigger the on-sale bar at a very early stage, despite the need to produce an extensive body of code for implementation.

The characteristic that distinguishes internet inventions from inventions residing in more traditional fields of endeavor is the short trip from conception to reduction to practice. This explains the potential for different outcomes for internet inventions under the on-sale bar test set forth in *Pfaff*. For some internet inventions, conception and reduction may simply merge with one another. In the biotechnology field, some have suggested that, for extremely unpredictable inventions, conception occurs only upon actual reduction to practice.<sup>18</sup> In other words, it is not possible to conceive the invention until it is physically embodied and its operability verified. This notion has been referred to as simultaneous conception and reduction to practice.<sup>19</sup>

Internet inventions represent the opposite end of the spectrum in terms of predictability. In particular, the functional concept underlying a new web application may be so simple that reduction to practice is a rote exercise, relying on invocation of existing code in commercially available libraries. In this case, conception essentially completes the inventive process; the remainder is mere implementation. All of the components necessary for implementation fall into place not at the time of reduction, but at the time of conception. Of course, the shorter development cycles associated with internet inventions are consistent with a shorter period from conception to reduction. Consequently, this type of invention accedes more readily to the "ready for patenting" standard, and escalates on-sale bar concerns for internet companies.

***Conclusion: Monitor the sales force***

Internet companies concerned about patenting their inventions should be on the watch for potential on-sale bar issues. The clock begins running when an invention is "ready for patenting" and has been "offered for sale." In the internet industry, an invention could be ready to patent as soon as it has been conceived. At the same time, an offer for sale can occur at any time, without the knowledge of a company's legal counsel. A company should train and monitor its sales and marketing force to avoid on-sale bars. The safest course, however, is to file patent applications quickly following conception when commercially valuable patent coverage is at stake. Only then may a company rest assured that the on-sale bar is not lurking behind its patent rights.

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[1] 35 U.S.C. §102(b).

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- [2] Pfaff v. Wells Electronics, Inc., 119 S.Ct. 304, 312 (1998).
- [3] A.B. Chance Co. v. RTE Corp., 854 F.2d 1307 (Fed. Cir. 1988).
- [4] UMC Electronics Co. v. United States, 816 F.2d 647 (Fed. Cir. 1987).
- [5] See Buildex Inc. v. Kason Indus., Inc., 849 F.2d 1461 (Fed. Cir. 1988).
- [6] See Mahurkar v. Impra, Inc., 71 F.3d 1573, 1577 (Fed. Cir. 1995) (acknowledging that the "court has stressed that commercialization is the central focus for determining whether the patented invention has been placed on sale.").
- [7] See Sonoscan Inc. v. Sonotek, Inc., 936 F.2d 1261 (Fed. Cir. 1991) (concluding that price quotations are an offer for sale).
- [8] RCA Corp. v. Data General Corp., 887 F.2d 1056 (Fed. Cir. 1988).
- [9] See Buildex, 849 F.2d at 1465 (denying the existence of a "joint development" exception to the on-sale bar).
- [10] 35 U.S.C. §102(b).
- [11] See In re Smith, 714 F.2d 1127 (Fed. Cir. 1983) (finding that the experimental use exception did not apply where internal, rather than public, testing would have sufficed).
- [12] Reduction to practice ordinarily requires a physical embodiment of the invention, such as a working prototype. See Pfaff, at 309.
- [13] Id. at 312.
- [14] Id.
- [15] Id.
- [16] Pfaff, at 309.
- [17] Notably, only the function, and not the code, underlying a software invention is required to satisfy the requirement that the inventor disclose the best mode for practice of the invention. 35 U.S.C. § 112, ¶ 1. It is generally presumed that skilled programmers will have little difficulty producing code to implement the necessary functions. See Fonar Corp. v. General Elec. Co., 107 F.3d 1543, 1549 (Fed. Cir. 1997).
- [18] See John M. Lucas, "The Doctrine of Simultaneous Conception and Reduction to Practice in Biotechnology: A Double Standard for the Double Helix," *AIPLA Quarterly Journal*, Vol. 26, No. 4 (1998).
- [19] Id.