

# CAN BEAUREGARD CLAIMS SHOW YOU THE MONEY?

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## I. INTRODUCTION

This article will explore the potential pitfalls of using certain claim types for protection of computerized systems or devices that include functionality enabled software. Through a demonstration of the potential shortcomings of method claims, particularly in the area of damages awarded, it will discuss why a computer-readable medium claim may be a good alternative to a standard method claim.<sup>1</sup> In addition, it will illustrate how a computer-readable medium claim can provide a claim scope similar to a method claim without having to prove actual use to obtain damages.<sup>2</sup>

Attached to the end of this article are three appendices. Appendix A portrays statistical analysis of the use of *Beauregard* claims, while Appendices B and C respectively provide an overview of basic claim types used within patent applications and types of patent infringement.

### A. Background

Today's economy has become very dependent on computer software because of the role it plays in nearly everything we do, from simple everyday tasks all the way up to our nation's complex infrastructure.<sup>3</sup> The increased reliance on computers and computer programs powering electronic devices is accompanied by a desire to patent those programs. Patentability of software has been a sticking point for the courts and the United States Patent and Trademark Office ("USPTO") for many years.<sup>4</sup> In 1995, the USPTO responded to the emergence of computer software and began allowing computer-readable medium claims.<sup>5</sup> In the years that have followed, however, patents focused on computerized devices have often been written by claiming "a process" in what are commonly referred to as method claims.<sup>6</sup>

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<sup>1</sup> See *infra* text accompanying notes 41-77.

<sup>2</sup> See *infra* text accompanying notes 54-**Error! Bookmark not defined.**

<sup>3</sup> See, e.g., U.S. CENSUS BUREAU, Internet Use in the United States: October 2009 (the statistics reveal that 68.7% of all householders (defined as the person (or one of the persons) in whose name the housing unit is owned or rented) reported using the internet at home, and 76.7% reported using the internet from some location (either inside or outside the home)).

<sup>4</sup> See Andrei Iancu & Jeremiah Helm, *Code on Disks and Hat Tricks – Is Computer Software on a Medium Really Patentable?*, 90 J. PAT. & TRADEMARK OFF. SOC'Y 97, 97 (2008); see also U.S. PATENT & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, MPEP § 2106.01 (8th ed. Rev. 8, July 2010) (discussing computer-related nonstatutory subject matter).

<sup>5</sup> See *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995).

<sup>6</sup> See 1 R. CARL MOY, MOY'S WALKER ON PATENTS § 5.35 (4th ed. 2010) (discussing general patentability of computer related inventions).

Because of the potential for enormous sums of money, the recovery of damages has become one of the most important aspects of a patent.<sup>7</sup> Since the Supreme Court's decision in *eBay, Inc. v. MercExchange, L.L.C.*,<sup>8</sup> the ability for a patent owner to obtain an injunction to stop an infringer from conducting the infringing behavior has been limited.<sup>9</sup>

Accordingly, patent claims that provide a patent owner the best opportunity to recover damages are increasingly important. Recent cases involving computerized devices highlight potential pitfalls in relying on claiming methods of operation (e.g., method claims) to cover devices or systems.<sup>10</sup> In order for a method claim to be infringed, all steps of the process must be carried out.<sup>11</sup> As a result, patent holders may be losing out on a portion of the damages to which they are entitled when a device is merely *capable* of infringement.<sup>12</sup> When asserting a method claim against a system or device that is capable of infringing, the patent owner will only be able to recover damages for those systems or devices shown to have *actually performed* the claimed method.<sup>13</sup> In a world of programmable devices, those devices that have been programmed to actually perform the claimed method may be far fewer than those devices including software providing the capability to perform the claimed method.

Moreover, these issues are not limited only to computer software. For example, medical device manufacturers spend a great deal of time and money developing, testing, and marketing products. Accordingly, strong patent protection for unique features of a medical device can help provide competitive advantages in this industry.<sup>14</sup> Modern medical devices include electromechanical devices that can contain embedded software. In an infringement suit that only asserts method claims, the device (e.g., embedded software) must have executed the claimed method or it will not have been found to infringe.<sup>15</sup>

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<sup>7</sup> See *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp.2d 437, 438-39 (E.D. Tex. 2006)(damages of \$115 million awarded against Microsoft and \$18 million against Autodesk); see *infra* 46-51 and discussion.

<sup>8</sup> 547 U.S. 388 (2006).

<sup>9</sup> See *Id.* at 393.

<sup>10</sup> See *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197 (Fed. Cir. 2010); *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 576 F.3d 1348 (Fed. Cir. 2009).

<sup>11</sup> See *Lucent Techs. v. Gateway, Inc.*, 580 F.3d 1301, 1317 (Fed. Cir. 2009); see also *Joy Techs., Inc. v. Flakt, Inc.*, 6 F.3d 770, 775 (Fed. Cir. 1993).

<sup>12</sup> See *Cardiac Pacemakers, Inc.*, 576 F.3d at 1358-59.

<sup>13</sup> See *Lucent Techs.*, 580 F.3d at 1317.

<sup>14</sup> E.g., the ability to keep a competitor from exploiting the invention or the generate revenue through a licensing agreement.

<sup>15</sup> See *Cardiac Pacemakers, Inc.*, 576 F.3d at 1354.

## II. SHORTCOMINGS OF VARIOUS CLAIMS IN PROTECTING SYSTEMS OR DEVICES

Computerized systems or devices have become commonplace in the last few decades. As a result, companies that design and manufacture such devices have increasingly sought out patent protection for the computerized aspects of these systems or devices.<sup>16</sup> An excellent example of computerization can be seen in the development of implantable medical devices, such as pacemakers. A large number of medical devices on the market today are a mixture of both hardware and software.<sup>17</sup>

Patents written to protect the intellectual property embodied within medical devices (or any computerized system) typically include a mixture of method and system claims.<sup>18</sup> It is not uncommon for the method claims to represent, at least facially, the broadest scope of coverage.<sup>19</sup> By only focusing on method claims to protect their intellectual property, device manufacturers may not be protecting themselves fully when the patented device is infringed.<sup>20</sup> For example, in *Cardiac*, the plaintiff had its damages drastically reduced during an appeal to the Federal Circuit in 2009 due to the infringement requirements of method claims.<sup>21</sup>

The dispute between *Cardiac* and St. Jude centered on an implantable cardioverter defibrillator (“ICD”).<sup>22</sup> “ICDs are small devices that detect and correct abnormal heart rhythms that can be fatal if left untreated.”<sup>23</sup> The ICDs are implantable cardiac devices that can be programmed to administer different types of electrical shocks.<sup>24</sup> The patent in question<sup>25</sup> claimed a method of heart stimulation using an implantable heart stimulator that is capable of detecting heart arrhythmias or irregular heart rhythms, and of being programmed to treat the arrhythmia through either single or multimode operation.<sup>26</sup>

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<sup>16</sup> U.S. PATENT & TRADEMARK OFFICE, PATENT TECHNOLOGY MONITORING TEAM (PTMT), *Patenting by Organizations (2010)*(IBM was granted 5,866 patents in 2010 and the Microsoft Corporation received 3086 patents.)

<sup>17</sup> An implantable cardioverter defibrillator is one example. *See infra* discussion notes 22-24

<sup>18</sup> *See* U.S. Patent No. 4,407,288 (filed Mar. 16, 1981). *See infra* text accompanying notes 25-29

<sup>19</sup> E.g., the ‘288 patent at issue in *Cardiac* where the protection was derived from a method claim, and the system claim was dropped.

<sup>20</sup> *See Cardiac Pacemakers, Inc.*, 576 F.3d at 1354.

<sup>21</sup> *Id.* at 1358.

<sup>22</sup> *Id.* at 1351.

<sup>23</sup> *Id.* at 1352.

<sup>24</sup> *Id.*

<sup>25</sup> U.S. Patent No. 4,407,288 (filed Mar. 16, 1981).

<sup>26</sup> *Cardiac Pacemakers, Inc.*, 576 F.3d at 1352.

The patent was held to be valid and infringed, so the focus turned to a determination of damages.<sup>27</sup> The district court granted St. Jude's motion to limit damages to ICDs that actually performed the claimed steps.<sup>28</sup> This is where asserting only a method claim fell short.

Originally the jury was presented with two claims: an apparatus claim, and a method claim.<sup>29</sup> During litigation, the plaintiff abandoned the apparatus claim.<sup>30</sup> The apparatus claim, if infringed, may have provided the plaintiff with a better basis to maintain their original damages award for all devices sold with the capability of performing in a manner that infringed the claims.<sup>31</sup> However, by dropping the assertion of infringement of the apparatus (e.g., system) claim, the plaintiff was left with damages limited to only those devices that had actually been user-programmed to perform the patented method, rather than damages for all devices sold that infringed on the apparatus claim by being user-programmable to provide the functionality to infringe the apparatus claim.<sup>32</sup>

The plaintiff sought royalties for infringement of its method claim.<sup>33</sup> The problem that the plaintiff faced was that “a method claim is directly infringed only by one practicing the patented method.”<sup>34</sup> Additionally, the court held that “the sale of the apparatus is not the sale of the method. A method claim is *directly* infringed only by one practicing the patented method.”<sup>35</sup> As a result, the plaintiff was unable to retain damages for royalties on those devices that were sold and merely capable of completing the process.<sup>36</sup> The damages finally

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<sup>27</sup> *Id.* at 1351.

<sup>28</sup> *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 418 F.Supp.2d 1021, 1040 (S.D. Ind. 2006).

<sup>29</sup> *Cardiac Pacemakers, Inc.*, 576 F.3d at 1358.

<sup>30</sup> *See Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 381 F.3d 1371, 1380-83 (Fed. Cir. 2004). Cardiac had originally asserted two claims in the 4,407,288 patent. *Id.* The jury initially returned a verdict of valid claims that were not infringed by St. Jude. *Id.* Cardiac only appealed the method claim arguing that it was incorrectly construed and the jury was therefore given improper instructions with respect to infringement. *Id.* At this point in the trial, Cardiac discontinued pursuit of the apparatus claim. *Id.*

<sup>31</sup> *See Cardiac Pacemakers Inc.*, 576 F.3d at 1358.

<sup>32</sup> *Id.*

<sup>33</sup> *Id.* at 1359.

<sup>34</sup> *Id.* at 1359 (citing *Joy Techs. v. Flakt, Inc.*, 6 F.3d 770 (Fed. Cir. 1993)). In *Joy Technologies* the court held that sales of equipment capable of performing a patented process were not direct infringement. *Id.* at 744-75. Method patents used in areas other than software must fulfill the same requirements. Sale of equipment capable of performing a process is only an issue when that process is actually executed since it is the process, not the apparatus that is patented. *Id.*

<sup>35</sup> *Joy Techs.*, 6 F.3d at 775.

<sup>36</sup> *Cardiac Pacemakers, Inc.*, 576 F.3d at 1366.

obtained by the plaintiff were limited to those devices that *actually performed* the patented method during the relevant infringement period.<sup>37</sup>

It is interesting to note that the apparatus claim was not pursued on appeal in *Cardiac*.<sup>38</sup> It is not entirely clear from the case history why this is so, but the petitioner's brief on appeal only requests the court to either apply the jury's damage award or allow for a new trial due to the incorrect interpretation of claim 4 (a method claim) of the '288 Patent.<sup>39</sup> The petitioners did not discuss any issue with the apparatus claim.<sup>40</sup> Potentially this could result from the fact that even though the software of the accused devices may have infringed the hardware, the defendant's manufactured product did not meet the limitations of claim 13 of the '288 patent.

### III. *BEAUREGARD* CLAIMS AS AN ALTERNATIVE

*Beauregard* claims are a viable alternative to method and apparatus claims for protection of intellectual property embodied within computerized systems or devices. Recent Federal Circuit decisions provide legitimacy to assertion of *Beauregard* claims as well as areas of caution with using *Beauregard* claims for protection of computerized systems and devices (e.g., medical devices).<sup>41</sup>

#### A. *Successful Assertion of a Beauregard Claim*

*Beauregard* claims can be included in a patent to provide protection for computerized systems or devices by claiming executable instructions contained on a computer-readable medium that cause the system or device to perform a certain function.<sup>42</sup> As a result, the patent holder can pursue infringement charges against other manufacturers as direct infringers without having to show actual use.<sup>43</sup> Additionally, the patentee can recover damages from the manufacturer for sales of the actual system or device that directly infringe without having to prove indirect infringement (i.e., where a user must perform the claimed method).<sup>44</sup> By using a *Beauregard* claim instead of an apparatus claim, the patent holder can

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<sup>37</sup> *See id.* at 1359.

<sup>38</sup> *See id.* at 1380-83.

<sup>39</sup> Brief of Plaintiff-Appellant at 55, *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 381 F.3d 1371 (Fed. Cir. 2004) (Nos. 02-1532, 02-1559).

<sup>40</sup> *See id.*

<sup>41</sup> *See infra* text accompanying notes 42-95.

<sup>42</sup> *See, e.g., Ex parte Bo Li*, No. 2008-1213 (B.P.A.I. Nov. 6, 2008) (finding a typical *Beauregard* claim to be statutory subject matter).

<sup>43</sup> *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197 (Fed. Cir. 2010).

<sup>44</sup> *Id.* at 1212.

focus on proving functionality not proving that an infringing device includes structure analogous to the structure recited by an apparatus claim.<sup>45</sup>

In 2007, the Federal Circuit affirmed a jury verdict that granted z4 Technologies, Inc. (“z4”) \$115 million in damages against the Microsoft Corporation (“Microsoft”) and \$18 million in damages against Autodesk, Inc. (“Autodesk”).<sup>46</sup> One of the claims asserted by z4 was the *Beauregard* claim reproduced below.<sup>47</sup> z4 accused both Microsoft and Autodesk of infringing claim 32 of United States Patent 6,044,471.<sup>48</sup> The claim states:

A computer readable storage medium having data stored therein representing software executable by a computer, the software including instructions to reduce use of the software by unauthorized users, the storage medium comprising: instructions for requiring a password associated with the software; instructions for enabling the software after the password has been communicated to the software; instructions for subsequently requiring a new password to be communicated to the software for continued operation of the software; and instructions for automatically contacting an authorized representative of the software to communicate registration information and obtaining authorization for continued operation of the software.<sup>49</sup>

This is a prototypical *Beauregard* claim, as evidenced by the language at the preamble of the claim. During the jury trial, the jury returned a verdict of willful infringement by Microsoft and Autodesk and awarded damages of \$115 million and \$18 million respectively.<sup>50</sup> Microsoft challenged the validity of the patents, but the district court held them to be valid and enforceable.<sup>51</sup> The court's finding that the '471 Patent was valid and enforceable supported the notion that *Beauregard* claims are a valid tool in writing claims for patents that include software.<sup>52</sup> The validity of *Beauregard* claims do not appear to have been

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<sup>45</sup> *Id.* at 1205.

<sup>46</sup> z4 Techs., Inc. v. Microsoft Corp., 507 F.3d 1340, 1356 (Fed. Cir. 2007).

<sup>47</sup> *Id.* at 1345.

<sup>48</sup> U.S. Patent No. 6,044,471 (filed June 4, 1998).

<sup>49</sup> *Id.*

<sup>50</sup> z4 Techs., Inc., 507 F.3d at 1346.

<sup>51</sup> *Id.*

<sup>52</sup> *See id.*; *see also* Creative Internet Advert. Corp. v. Yahoo! Inc., No. 6:0704354, 2009 WL 2382132, at \*1 (E.D. Tex. 2009). The Creative Internet Advertising Corp. asserted infringement by Yahoo! Inc. of claim 45 of U.S. Patent 6,205,432 (filed Nov. 16, 1998) which was a *Beauregard*-style claim. *Id.* at \*1. The U.S. District Court for the Eastern District of Texas upheld the jury verdict. *Id.*

seriously disputed within the courts since being recognized as statutory subject matter by the USPTO in 1995.<sup>53</sup>

In a more recent case, *Finjan, Inc. v. Secure Computing Corp.*, the Federal Circuit upheld a jury finding of infringement for the sale of software that was capable of infringing, even though the infringing features were disabled.<sup>54</sup> In *Finjan*, the plaintiff sued for infringement of United States Patents Nos. 6,092,194 (“194 Patent”),<sup>55</sup> 6,804,780 (“780 Patent”),<sup>56</sup> and 7,058,822 (“822 Patent”).<sup>57</sup> Each of the patents contains both method and system claims. In addition, the ‘780 Patent and the ‘194 Patent include computer-readable storage medium claims.<sup>58</sup> In a jury trial, the district court held that the defendant willfully infringed all asserted claims of the plaintiff’s patents.<sup>59</sup> The defendant sold three allegedly infringing products, each of which included multiple modules that required the separate purchase of an activation key by the end-user.<sup>60</sup> The defense argued that its software, as delivered, did not infringe because the potentially infringing software was not activated.<sup>61</sup> However, the Federal Circuit disagreed, at least in regard to the system and computer-readable storage medium claims asserted by the plaintiff.<sup>62</sup> For example, claim 65 of the ‘194 Patent recited a computer-readable storage medium.<sup>63</sup> The Federal Circuit stated that there was nothing in the statement of claim 65 that “require[s] program code be ‘active’, only that it be written ‘for causing’ a server (‘194 patent claim 65) . . . to perform certain steps.”<sup>64</sup> The Federal Circuit made it quite clear that the deciding question is whether the capability is present within the code, not whether that code is actually active or even used.<sup>65</sup>

By asserting *Beauregard*-style claims, the plaintiff in *Finjan* was able to secure a finding of direct infringement simply by convincing the jury that the defendant shipped software that included the capability of performing infringing

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<sup>53</sup> See *In re Beauregard*, 53 F.3d 1583, 1584 (Fed. Cir. 1995). A check of cases citing to this case reveals only three cases as of the date this article was written.

<sup>54</sup> 626 F.3d 1197, 1203-1205 (Fed. Cir. 2010).

<sup>55</sup> U.S. Patent No. 6,092,194 (filed Nov. 6, 1997).

<sup>56</sup> U.S. Patent No. 6,804,780 (filed Mar. 30, 2000).

<sup>57</sup> U.S. Patent No. 7,058,822 (filed May 17, 2001).

<sup>58</sup> *Finjan*, 626 F.3d at 1201.

<sup>59</sup> *Id.* at 1200.

<sup>60</sup> *Id.* at 1202.

<sup>61</sup> *Id.* at 1203.

<sup>62</sup> *Id.* at 1203-05.

<sup>63</sup> *Id.* at 1205. See also U.S. Patent No. 6,092,194 cl. 65 (filed Nov. 6, 1997) (claiming a “computer-readable storage medium storing program code for causing a server that serves as a gateway to a client to perform the steps of . . .”).

<sup>64</sup> *Finjan*, 626 F.3d at 1205.

<sup>65</sup> *Id.*

functions.<sup>66</sup> In reference to both system and computer-readable medium claims, the Court stated “we have held that, to infringe a claim that recites capability and not actual operation, an accused device ‘need only be capable of operating’ in the described mode.”<sup>67</sup> Additionally, the Federal Circuit held that “an accused device may be found to infringe if it is reasonably capable of satisfying the claim limitations, even though it may also be capable of noninfringing modes of operation.”<sup>68</sup> The *Finjan* decision, which was approximately six months old at the time of this writing, is further proof that *Beauregard*-type claims can provide enhanced protection for computerized systems or devices when compared to an equivalent method claim.

As noted within the *Finjan* case, apparatus claims can also be successfully asserted against devices or systems that are merely capable of infringing.<sup>69</sup> However, apparatus claims must include structural or means-plus-function elements that limit application of the claim to potentially infringing devices.<sup>70</sup> For example, it would appear from the history of the *Cardiac* case, discussed above,<sup>71</sup> that the originally asserted apparatus claim included some form of structure not necessarily present in the accused devices.<sup>72</sup> If an apparatus claim is written in means-plus-function form, the claim itself can be, at least facially, focused on functional operations.<sup>73</sup> However, it is well known that means-plus-function claims are narrowly construed to only cover the structure (and equivalents) discussed within the specification as being capable of performing the recited functional operations.<sup>74</sup> Thus, apparatus claims are limited by structure, while method and *Beauregard* type claims need not be so limited.

Medical devices such as the ICDs that were at issue in *Cardiac*<sup>75</sup> typically contain memory with embedded software code. The memory that is contained in the medical device is a medium upon which computer executable code is being

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<sup>66</sup> *Id.*

<sup>67</sup> *Id.* at 1204 (citing *Intel Corp. v. U.S. Int’l Trade Comm’n*, 946 F.2d 821, 832 (Fed. Cir. 1991)).

<sup>68</sup> *Finjan*, 626 F.3d at 1204 (citing *Hilgraeve Corp. v. Symantec Corp.*, 265 F.3d 1336, 1343 (Fed. Cir. 2001)).

<sup>69</sup> *See Finjan*, 626 F.3d at 1203-05.

<sup>70</sup> *Id.*

<sup>71</sup> *Supra* text accompanying notes 21-40.

<sup>72</sup> *Id. See also generally* *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 381 F.3d 1371, 1380-83 (Fed. Cir. 2004); Brief of Plaintiff-Appellant at 55, *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 381 F.3d 1371 (Fed. Cir. 2004) (Nos. 02-1532, 02-1559). This case is used as an example only. The record does not clarify the exact reasons for not pursuing the apparatus claim.

<sup>73</sup> Cite – or provide example

<sup>74</sup> *See* 35 U.S.C. § 112, ¶ 6(2006); *In re Donaldson Co., Inc.*, 16 F.3d 1189, 1193 (Fed. Cir. 1994)(en banc).

<sup>75</sup> 576 F.3d 1348 (Fed. Cir. 2009); *see also supra* notes 21-40 and accompanying text.

stored (i.e., a computer-readable medium). As a result, such medical device patents can be written utilizing *Beauregard* claims rather than just method and apparatus claims. By patenting the software on a tangible medium, rather than patenting the software as an intangible process, patent holders may be able to avoid limiting damages.<sup>76</sup> Yet, a *Beauregard* style claim can capture scope that is often, at least arguably, as broad as a similar method claim. In *Cardiac*, if the claim at issue had been a *Beauregard* claim reciting similar functional operations, then the plaintiff may not have been limited to damages for only those devices that could be shown to have actually performed the process.<sup>77</sup> On the contrary, the plaintiff may have been able to collect damages from St. Jude as a direct infringer for *every* device that was sold that contained the set of software instructions *capable* of infringing the protected functionality.

### B. Question of Validity

The validity of *Beauregard* claims has generally not been litigated in the years since the Federal Circuit affirmed the USPTO decision to make computer-readable medium statutory subject matter in *In re Beauregard*.<sup>78</sup> One case in particular *Cybersource Corp. v. Retail Decisions, Inc.*,<sup>79</sup> one of the few cases that cites back to *In re Beauregard*,<sup>80</sup> questioned the validity of the *Beauregard* holding itself.<sup>81</sup> The *Cybersource* court stated that the “footing of the so-called *Beauregard* doctrine is anything but sure.”<sup>82</sup> While this is a note of caution to the use of *Beauregard* claims, the lack of other litigation on validity implicates the opposite conclusion.<sup>83</sup> More specifically, patent holders are asserting *Beauregard* claims,<sup>84</sup> and the claims are being litigated to successful conclusions.<sup>85</sup> The only major claim-related issue with the litigation asserting *Beauregard*-type claims seems to be focusing on general claim construction issues that have no relation to the fact that the claims are *Beauregard* claims.<sup>86</sup>

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<sup>76</sup> See *Finjan*, 626 F.3d at 1197. See *supra* text accompanying notes 54-74.

<sup>77</sup> As discussed throughout the paper, the plaintiff would not have had to prove execution of the method, just sale of the ICD if using a *Beauregard* claim to obtain the protection instead of a method claim.

<sup>78</sup> 53 F.3d 1583 (Fed. Cir. 1995).

<sup>79</sup> 620 F.Supp.2d 1068 (N.D. Cal. 2009).

<sup>80</sup> 53 F.3d 1583 (Fed. Cir. 1995).

<sup>81</sup> See *Cybersource*, 620 F.Supp.2d at 1078-79.

<sup>82</sup> *Id.* at 1079.

<sup>83</sup> See *z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340 (Fed. Cir. 2007); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1205 (Fed. Cir. 2010).

<sup>84</sup> See, e.g., *Finjan*, 626 F.3d 1197. See also *infra* app. A.

<sup>85</sup> For examples of cases that include successful assertion of *Beauregard* claims with multi-million dollar damage awards, see *z4 Techs.*, 507 F.3d 1340; *Finjan*, 626 F.3d at 1205.

<sup>86</sup> See *Oracle Corp. v. Parallel Networks, L.L.C.*, 375 Fed.Appx. 36, 2010 WL 1709308 (Fed. Cir. 2010). The Court of Appeals reversed a summary judgment finding by the district court which

The lack of litigation directly attacking *Beauregard* claims is a positive sign. The court in *Cybersource* suggested that the footing of *Beauregard* claims was unsure,<sup>87</sup> making any litigation potentially troublesome. However, the absence of such litigation suggests that these claims are valid and are not being challenged on the basis of citing non-statutory subject matter. The only caveat with using this method of claiming, as evidenced by the litigation, is that the claim must be properly constructed.<sup>88</sup> This is nothing new in practice, however, since the language of any claim must be carefully chosen to provide the most protection while safeguarding against the risk of invalidation during litigation. The mere fact that it is a *Beauregard* claim apparently does not add to that issue.

### C. Assertion as a Dependent Claim

While *Beauregard* claims are generally inserted as independent claims, they can also be inserted into a patent as dependent claims.<sup>89</sup> In *Schumer v. Laboratory Computer Systems, Inc.*, the Court of Appeals for the Federal Circuit overturned the district court's decision to treat a dependent *Beauregard* claim as invalid because the independent claim was determined to be invalid.<sup>90</sup> The court reasoned that "when determining the validity of the claims of a patent, each claim must be separately considered."<sup>91</sup> The *Schumer* court based its decision on the idea that:

Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim.... The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting invalidity.<sup>92</sup>

Since a claim is scrutinized on its own it is important that the claim be carefully constructed. If not, the issue that arises is one that came up in *IPXL*

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had found in favor of non-infringement. One of the claims asserted was a *Beauregard* claim, but the litigation focused on specific interpretation of a limitation within the claim. *Id.* See also *IEX Corp. v. Blue Pumpkin Software, Inc.*, 122 Fed.Appx. 458 (Fed. Cir. 2005); *Sw. Tech. Innovations, LLC v. Symantec Corp.*, C-09-1063 MMC, 2010 WL 1729405 (N.D. Cal. 2010); *Irise v. Axure Software Solutions, Inc.*, CV 08-03601 SJO, 2009 WL 3615075 at \*36 (C.D. Cal. 2009).

<sup>87</sup> *Cybersource Corp. v. Retail Decisions, Inc.*, 620 F.Supp.2d 1068 (N.D. Cal. 2009).

<sup>88</sup> See generally *IEX Corp.*, 122 Fed.Appx. at 464 (following the standard procedures for claim construction and carefully analyzing the claim's language).

<sup>89</sup> See *Schumer v. Lab. Computer Sys., Inc.*, 308 F.3d 1304 (Fed. Cir. 2002).

<sup>90</sup> *Id.*

<sup>91</sup> *Id.* at 1316.

<sup>92</sup> *Id.* (citing 35 U.S.C. § 282 (2000)).

*Holdings, LLC v. Amazon.com, Inc.*<sup>93</sup> In *IPXL*, the court held invalid a method claim that was dependent to a system claim because it was indefinite.<sup>94</sup> The court held that drafting claims in this manner is indefinite because it is unclear whether infringement occurred when the system was created or when the method was actually executed.<sup>95</sup> In light of the *IPXL* holding it is better practice to write *Beauregard* claims as independent claims, rather than as dependent claims.

#### IV. CONCLUSION

Method claims are used commonly in patents for software and computerized systems and devices. Medical devices that include embedded software are often patented using both method claims and apparatus claims. In an infringement suit, however, where the method claim is at issue and not the apparatus claim, patent holders risk losing a portion of the damages to which they are entitled. It is clear that a properly drafted patent should cover a device that is merely capable of infringement when it comes to calculating damages or obtaining an injunction. To accomplish this, *Beauregard* claims can be used in patents covering these electromechanical devices so that any sale of a device would qualify as infringement. By including *Beauregard* claims in device patents, patent holders can enhance the protection of their intellectual property.

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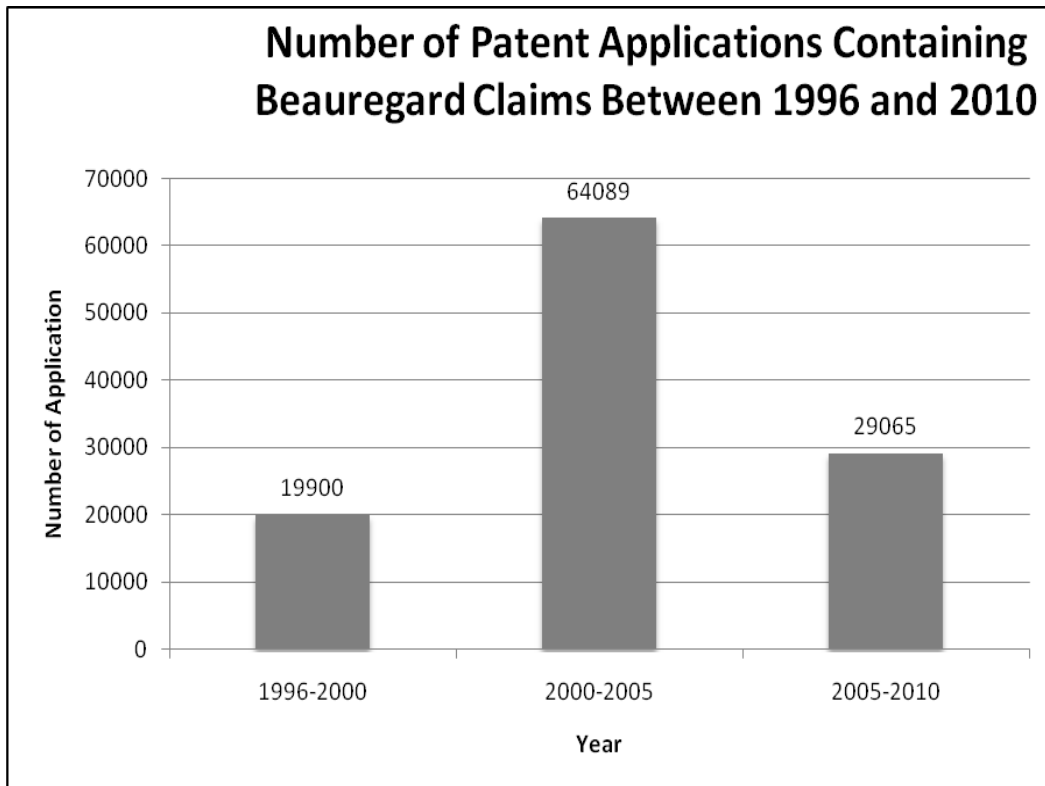
<sup>93</sup> *IPXL Holdings, LLC v. Amazon.com, Inc.*, 430 F.3d 1377 (Fed. Cir. 2005).

<sup>94</sup> *Id.*

<sup>95</sup> *Id.* at 1384.

APPENDIX A: *BEAUREGARD* CLAIM TREND INFORMATIONA. *Application Statistics*

In the immediate period after *In re Beauregard*<sup>96</sup> there was an abundant growth in the use of this style of claims. The growth, however, has dropped off significantly in the last five years. The last five years have seen a decline to a level that is similar to what it was in the period immediately following the case (See Figure 1).



**Figure 1** – The Calculated Number of Patent Applications Containing Beauregard Claims Between 1996 and 2010

A method for pulling statistics had to be created in order to determine the frequency at which practitioners are submitting patent applications that include *Beauregard* claims. The United States Patent office has a database that can be queried for specific language in the claims. The time ranges were queried using claim language that is typical in a *Beauregard* claim and the results from each

<sup>96</sup> 53 F.3d 1583 (Fed. Cir. 1995).

phase were combined to obtain the number of patents over each five-year period that contained these claims (See Table 1).

Search Phrase	Date Range	Number of Patents
computer readable medium	1996-2000	9785
	2000-2005	28780
	2005-2010	10713
computer-readable medium	1996-2000	5096
	2000-2005	13609
	2005-2010	5081
computer readable media	1996-2000	728
	2000-2005	3225
	2005-2010	1277
computer-readable media	1996-2000	320
	2000-2005	1691
	2005-2010	713
computer readable storage medium	1996-2000	2502
	2000-2005	9865
	2005-2010	6489
computer-readable storage medium	1996-2000	1297
	2000-2005	5632
	2005-2010	3713
computer readable storage media	1996-2000	125
	2000-2005	827
	2005-2010	650
computer-readable storage media	1996-2000	47
	2000-2005	460
	2005-2010	429

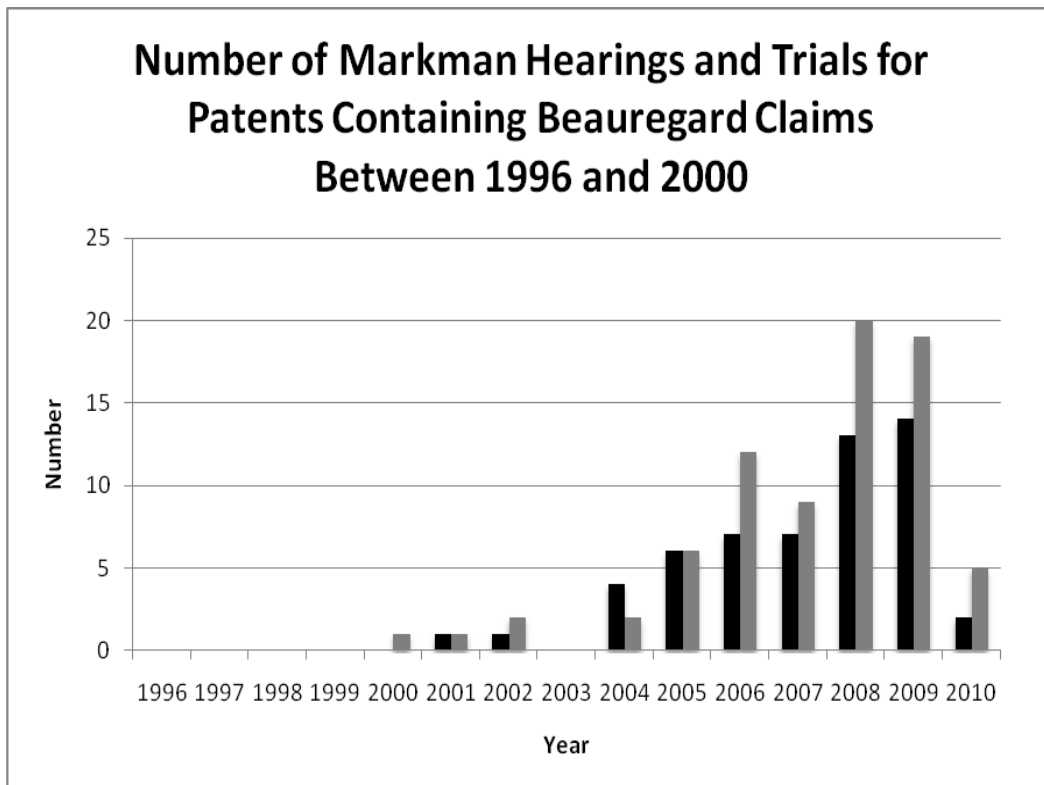
**Table 1** – Breakdown of Search Phrases by Time Range and Resulting Number of Patent Applications

#### B. *Markman Hearing and Litigation Statistics*

There has been a limited amount of litigation of *Beauregard* claims in the fifteen years since the decision was made. In order to track the frequency with which *Beauregard* claims have been both asserted and litigated, a method of tracking was created. Figure 2 shows a breakdown of the number of *Markman*<sup>97</sup>

<sup>97</sup> See *Markman v. Westview Instruments Inc.*, 52 F.3d 967 (Fed. Cir. 1995).

hearings on a yearly basis, compared with the number of cases that have been litigated over the past fifteen years. The search was based on Westlaw results on a query that was run for each year.<sup>98</sup> The majority of the cases were decided in 2008 and 2009.



**Figure 2** – Number of Markman Hearings and Trials for Patents Containing Beauregard Claims

<sup>98</sup> The following search string was used: “(READABLE +2 MEDI!) & da(aft 1/1/1996 & bef 12/31/1996).” The dates were adjusted and ran for each year between 1995 and 2010. The query was run in the Westlaw database containing only Markman hearings and then again in the Federal IP cases database to determine the number of cases being litigated.

## APPENDIX B: BASIC CLAIM TYPES

The United States Patent Act provides that an inventor may receive a patent for any new and useful process, machine, manufacture, or composition of matter.<sup>99</sup> Descriptions of the different ways to claim devices that contain both software and hardware follow.

A. *Method Claims*

A method claim is used to reduce an invention to a series of steps or acts for performing a function to accomplish a result. The Supreme Court held that a method, or process, is a mode of treatment of certain materials to produce a given result.<sup>100</sup> Method claims define the invention in terms of what it does, or how it is done, as opposed to its structural definition.<sup>101</sup> Method claims are ideal for patenting an invention that does not have a unique apparatus but still completes a unique process. Because method claims focus on function rather than structure they are often the broadest type of claim that can be used for patenting software.<sup>102</sup>

B. *Apparatus Claims*

Apparatus claims are those claims that are tied directly to a device. A typical apparatus claim describes the invention in terms of its components. In this sense it is described in terms of what it is, not what it does.<sup>103</sup> A more limiting type of apparatus claim is the means-plus-function apparatus claim. These claims describe the device in terms of what it does, not what it is.<sup>104</sup> Apparatus claims are typically included along with method claims when there are both hardware and software components to an invention.<sup>105</sup>

C. *Computer-Readable Medium Claims*

Computer-readable medium claims are also known as *Beauregard* claims.<sup>106</sup> This type of claim allows for patenting software that is embedded onto a “computer-readable medium” such as a disk, CD, or other medium. By using a *Beauregard* claim, the patent-holder protects itself from other manufacturers as

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<sup>99</sup> 35 U.S.C. § 101 (2006).

<sup>100</sup> *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972).

<sup>101</sup> STEVEN W. LUNDBERG & STEPHEN C. DURANT, *ELECTRONIC AND SOFTWARE PATENTS: LAW AND PRACTICE* 6-16 (2nd ed. 2005).

<sup>102</sup> *Id.* at 6-28.

<sup>103</sup> *Id.* at 6-16.

<sup>104</sup> *Id.*

<sup>105</sup> *Id.* at 6-29.

<sup>106</sup> *See In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995).

direct infringers rather than as contributory infringers. This actually allows a software manufacturer to collect damages for infringement from a distributor of the computer-readable medium, rather than going after the end-user who is executing the software, which is often impractical or even impossible.

## APPENDIX C: TYPES OF INFRINGEMENT

Section 271 of the Patent Act defines the various types of patent infringement.<sup>107</sup> A patent holder can accuse an infringer of violating its patent rights in three different ways: (1) directly infringing; (2) inducing infringement; or (3) contributing to infringement.

A. *Direct Infringement*

“Direct infringement” is defined as:

[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.<sup>108</sup>

Under this rule, the patentee may bring an action against a defendant who commits acts that infringe. “The making, using, or selling of a patented invention is the usual meaning of the expression 'direct infringement'.”<sup>109</sup> However, when infringement is asserted for a patent that contains only method claims there is a different standard that must be followed. “Method claims are only infringed when the claimed process is performed, not by the sale of an apparatus that is capable of infringing use.”<sup>110</sup> Thus the direct infringement of method claims happens when the end-user fully executes the process, and does not happen simply when the manufacturer sells a device that is capable of infringing.

B. *Indirect Infringement*

A patent holder may also sue for indirect infringement. There are two different types of indirect infringement: inducing infringement and contributory infringement. They are defined by 35 U.S.C. subsections 271(b) and (c) respectively. Indirect infringement (both inducing and contributory) is dependent on direct infringement existing as well.<sup>111</sup>

1. *Inducing Infringement*

Inducement of infringement is defined as “[w]hoever actively induces infringement of a patent shall be liable as an infringer.”<sup>112</sup> In addition to direct

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<sup>107</sup> See 35 U.S.C. § 271 (2006).

<sup>108</sup> 35 U.S.C § 271(a) (2006).

<sup>109</sup> Joy Techs., Inc. v. Flakt, Inc., 6 F.3d 770, 773 (Fed. Cir. 1993).

<sup>110</sup> Ormco Corp. v. Align Tech., Inc., 463 F.3d 1299, 1311 (Fed. Cir. 2006).

<sup>111</sup> See Standard Havens Prods., Inc. v. Gencor Indus., Inc., 953 F.2d 1360, 1374 (Fed. Cir. 1991).

<sup>112</sup> 35 U.S.C. § 271(b) (2006).

infringement, for inducement of infringement there must be proof that the accused party actively and knowingly assisted an act of direct infringement.<sup>113</sup> In a recent case, the Federal Circuit further held that an agency relationship or a contractual obligation to perform the claimed steps is required for two parties to be held jointly liable when the claim infringed is a method claim.<sup>114</sup>

## 2. *Contributory Infringement*

Contributory infringement is defined as:

Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.<sup>115</sup>

In order to prove contributory infringement, a patentee must prove that the defendant knew that the product was specifically made for use in infringing the patented method, and that the product sold to the direct infringer was a material part of the invention.<sup>116</sup>

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<sup>113</sup> *Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 668 (Fed. Cir. 1988).

<sup>114</sup> *See Akamai Techs., Inc. v. Limelight Networks, Inc.*, 629 F.3d 1311, 1320 (Fed. Cir. 2010).

<sup>115</sup> 35 U.S.C. § 271(c) (2006).

<sup>116</sup> *See Veritas Operating Corp. v. Microsoft Corp.*, 562 F.Supp.2d 1141, 1157 (W.D. Wash. 2008).