

## Sales Law Autumn 2009 Certification Mark Activity

Group Number: 5  
Group Members: Le Tian  
Erica Koscher  
David Goldstein  
Fang Lo  
Andrew Melton

### Certification Mark & Sample

The WiFi Certified certification mark was found on a Linksys (Cisco) wireless internet router. The router can be purchased at Best Buy.

“Wi-Fi Alliance is a global, non-profit industry association of hundreds of member companies devoted to promoting the growth of wireless Local Area Networks (WLANs).”<sup>1</sup> Wi-Fi Alliance “certif[ies] interoperability of wireless LAN products based on IEEE [Institute of Electrical and Electronics Engineers] 802.11 specifications.”<sup>2</sup> Wi-Fi Alliance “[c]ertification programs include basic connectivity, security, authentication, and Quality of Service (QoS).”<sup>3</sup>

#### 1. Legal Status

The Wi-Fi Alliance standards are voluntary and private. The primary goal of the alliance is to test products for “interoperability to improve the user experience.”<sup>4</sup>

Since the creation of the Alliance in 2000, over 3,000 products have been Wi-Fi Certified<sup>5</sup>, and some 200 foreign and domestic companies have become members.<sup>6</sup> This marked increase in certification is not legally mandated, market conditions have made it difficult for products not conforming to the standard.

#### 2. Standard Setting

The Wi-Fi Alliance supports multiple certification programs, which ensure the interoperability of WLAN products based on the IEEE 802.11 specification.<sup>7</sup> The IEEE develops and publishes these standards.<sup>8</sup> IEEE is the world’s largest professional association advancing

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<sup>1</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/files/WFA\\_Certification\\_Overview\\_WP\\_en.pdf](http://www.wi-fi.org/files/WFA_Certification_Overview_WP_en.pdf)

<sup>2</sup> Institute of Electrical and Electronics Engineers: Wireless Fidelity-WiFi, <http://www.ieee.org/portal/site/emergingtech/index.jsp?techId=48>

<sup>3</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/files/WFA\\_Certification\\_Overview\\_WP\\_en.pdf](http://www.wi-fi.org/files/WFA_Certification_Overview_WP_en.pdf)

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> Institute of Electrical and Electronics Engineers: Wireless Fidelity-WiFi, <http://www.ieee.org/portal/site/emergingtech/index.jsp?techId=48>

<sup>7</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/files/WFA\\_Certification\\_Overview\\_WP\\_en.pdf](http://www.wi-fi.org/files/WFA_Certification_Overview_WP_en.pdf)

<sup>8</sup> Wikipedia: Wi-Fi Protected Access, <http://en.wikipedia.org/wiki/Wi-Fi>

innovation and technological excellence for the benefit of humanity. It has more than 375,000 members in more than 160 countries; 45 percent of whom are from outside the United States.<sup>9</sup> It also publishes nearly a third of the world's technical literature in electrical engineering, computer science and electronics.<sup>10</sup>

## **2. Standard Adoption**

The Wi-Fi Certified certification mark has been adopted by numerous private companies for thousands of products in several different areas of technology since its inception in 2000.<sup>11</sup> The companies adopting the certification mark have used it on products in the areas of core technology, networking equipment (such as the Linksys router), consumer electronics (such as camera, audio devices, video devices, data storage, computers, printers, and scanners), and even barcode scanners.<sup>12</sup> “Wi-Fi Certified products offer benefits to all players in the value chain. Certified interoperability supports lower return rates, reduced support costs, higher consumer satisfaction and increased sales volumes.”<sup>13</sup>

## **3. Standard Implementation**

Because Cisco is the company that is conforming to the standard and applying it to its own operations, Cisco is implementing the standard. Although it is unknowing whether Cisco manufactures its own component parts, if such parts are procured through outside suppliers, these suppliers would be implementing the standard as well.

## **4. Conformity Assessment**

The Wi-Fi Alliance implements a testing program that measures basic connectivity, security, authentication, and Quality of Service. Products are tested at a laboratory in North America, Europe, or Asia.<sup>14</sup> Basic connectivity standards are based on IEEE radio standards (802.11a, 802.11b, 802.11g in dual mode, or multiband 2.4 Ghz and 5 Ghz products). Security standards must conform to either WPA (Wi-Fi Protected Access) or WPA2 (Wi-Fi Protected Access 2), both of which are government-grade security mechanisms. Authentication requires conformity with EAP (Extensible Authentication Protocol), which is an authentication mechanism used to validate the identity of network devices.<sup>15</sup> A brief overview of the methodologies used in the

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<sup>9</sup> Institute of Electrical and Electronics Engineers, <http://www.ieee.org/web/aboutus/home/index.html>

<sup>10</sup> *Id.*

<sup>11</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/certified\\_benefits.php](http://www.wi-fi.org/certified_benefits.php)

<sup>12</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/search\\_products.php](http://www.wi-fi.org/search_products.php)

<sup>13</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/certified\\_benefits.php](http://www.wi-fi.org/certified_benefits.php)

<sup>14</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/knowledge\\_center\\_overview.php?type=2](http://www.wi-fi.org/knowledge_center_overview.php?type=2)

<sup>15</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/certification\\_programs.php](http://www.wi-fi.org/certification_programs.php)

conformity assessment tests is available online for member companies that use the certification mark.<sup>16</sup>

## 5. Enforcement

Wi-Fi Alliance inspects samples submitted by certificate marker users. If certified products fail materially to conform to the standard requirement, marker users must stop using the certification marker on undistributed products. Moreover, the users must notify all distributors and customers who have the non-compliant certified products.<sup>17</sup>

### Appendix: Graphics



Wi-Fi Certified

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<sup>16</sup> Wi-Fi Alliance: Wi-Fi Certified Makes It Wi-Fi, [http://www.wi-fi.org/login.php?file=wfa\\_certification\\_overview\\_nov2009.pdf](http://www.wi-fi.org/login.php?file=wfa_certification_overview_nov2009.pdf)

<sup>17</sup> Wi-Fi Alliance, Wi-Fi License Agreement, [http://www.wi-fi.org/files/Wi-Fi\\_Certification\\_Mark\\_License\\_Agreement\\_Form\\_11.09.06.pdf](http://www.wi-fi.org/files/Wi-Fi_Certification_Mark_License_Agreement_Form_11.09.06.pdf)