

# **EXHIBIT 18**

## UNITED STATES PATENT NO. 5,572,193

PRELIMINARY INFRINGEMENT ANALYSIS OF CLAIMS 16–19, 29–36<sup>1</sup>

**Accused Apple Products:**<sup>2</sup> iPhone, iPhone 3G, iPhone 3GS, iPhone 4, iPad, iPad 3G, iPod Touch (each generation), MacBook, MacBook Pro, MacBook Air, iMac, Mac mini, Mac Pro, Apple TV, AirPort Extreme Card, AirPort Extreme Base Station, AirPort Express Base Station, Time Capsule

'193 Patent Claim	Accused Apple Products
16. A method of authentication between a subscriber unit and a communication unit of a communication system, comprising:	<p>Upon information and belief, an iPhone 4<sup>3</sup> performs each and every step of this claim in the course of normal use. Additionally, a user of an iPhone 4 performs each and every step of this claim in the course of such use. Furthermore, Apple has performed each and every step of this claim, has actively induced users to perform such steps, and has contributed to such use at least by selling the iPhone 4 and providing directions for its use.</p> <p>The iPhone 4 is stated to be compliant with at least IEEE Std. 802.11b-1999 in the United States. <i>See, e.g.,</i> iPhone 4 Technical Specifications, available at <a href="http://www.apple.com/iphone/specs.html">http://www.apple.com/iphone/specs.html</a>; Wi-Fi Certified Interoperability Certificate for iPhone 4, available at <a href="http://certifications.wi-fi.org/pdf_certificate.php?cid=WFA8724">http://certifications.wi-fi.org/pdf_certificate.php?cid=WFA8724</a> (certifying Wi-Fi compliance). The iPhone 4 is stated to be compliant with Wi-Fi Protected Access 2 ("WPA2"). <i>See</i> Wi-Fi Certified Interoperability Certificate for iPhone 4, available at <a href="http://certifications.wi-fi.org/pdf_certificate.php?cid=WFA8724">http://certifications.wi-fi.org/pdf_certificate.php?cid=WFA8724</a> (certifying WPA2 compliance). Upon information and belief, WPA2 certification requires compliance with IEEE Std. 802.11i-2004. <i>See</i> Wi-Fi Alliance, WPA2 Q&amp;A</p>

<sup>1</sup> Motorola Mobility's investigation is ongoing and discovery and claim construction are not yet complete. Mobility reserves the right to supplement or amend these contentions with contentions arising under the doctrine of equivalents in response to any proposed or ordered claim construction, subsequent discovery response or production, or subsequent disclosure made pursuant to FRCP 26.

<sup>2</sup> This list of Accused Apple Products was created based on publicly available information. Motorola reserves the right to supplement and/or update this list of Accused Apple Products as appropriate.

<sup>3</sup> This chart provides Motorola's preliminary infringement analysis based upon the iPhone 4's stated compliance with representative standards referenced herein. Upon information and belief, the analysis set forth in this chart for claims 16–19 applies equally to each of the following identified Accused Apple Products that comply with those standards: iPhone, iPhone 3G, iPhone 3GS, iPhone 4, iPad, iPad 3G, iPod Touch (each generation), MacBook, MacBook Pro, MacBook Air, iMac, Mac mini, Mac Pro, Apple TV, AirPort Extreme Card, AirPort Base Station, AirPort Extreme Base Station, AirPort Express Base Station, Time Capsule.

EXHIBIT F

**Table 7-7—Address field contents**

To DS	From DS	Address 1	Address 2	Address 3	Address 4
0	0	RA = DA	TA = SA	BSSID	N/A
0	1	RA = DA	TA = BSSID	SA	N/A
1	0	RA = BSSID	TA = SA	DA	N/A
1	1	RA	TA	DA	SA

*See id.* § 7.2.2 ("The DA field is the destination of the MSDU . . ."). Thus, an iPhone 4 generates an authentication message as a function of the provided plurality of bits identifying the destination because the CCMP MPDU is computed in part as a function of the received destination MAC address.

Upon information and belief, the CCMP MPDU is an authentication message because the CCMP MPDU cannot be successfully decapsulated, i.e., received, unless the frame body and AAD can be authenticated. *See id.* § 8.3.3.4.1.

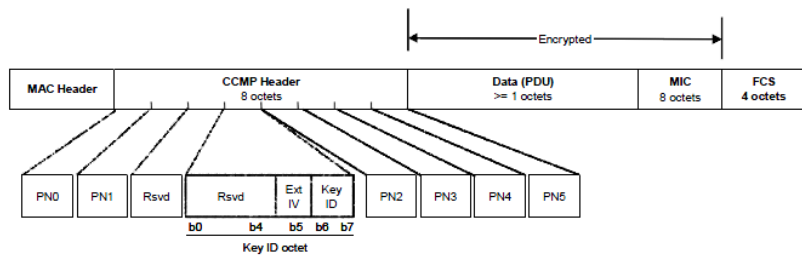
(c) transmitting the authentication message and the at least part of the plurality of information bits from the subscriber unit to the communication system.

Upon information and belief, an iPhone 4 transmits the authentication message and at least part of the plurality of information bits to the communication system because, in accordance with IEEE Std. 802.11-2007, and in compliance with WPA2 certification, an iPhone 4 transmits a CCMP MPDU using the services of the physical layer. *See IEEE Std. 802.11-2007* §§ 6.1.1, 12.1.

Upon information and belief, both the authentication message and the at least part of the plurality of the information bits from the subscriber system are transmitted because the CCMP MPDU comprises both the authentication message and the destination MAC address.

**8.3.3.2 CCMP MPDU format**

Figure 8-15 depicts the MPDU when using CCMP.



**Figure 8-15—Expanded CCMP MPDU**

*See IEEE Std. 802.11-2007* § 8.3.3.2. The CCMP MPDU comprises the authentication message because the MIC is part