

**EXHIBIT A-3 – CHEN**

**Invalidity Chart for U.S. Patent No. 10,051,556 Based On U.S. Patent No. 8,503,390**

This chart is subject to all reservations, objections, and disclaimers in Cisco’s Invalidation Contentions and any amendment, supplement, or modification thereof, which are incorporated herein by reference in their entirety.

U.S. Patent No. 8,503,390 (“Chen”) was filed on September 19, 2007 and issued on August 6, 2013. Thus, Chen is prior art under at least pre-AIA 35 U.S.C. § 102(e). Chen anticipates and/or renders obvious the Asserted Claims of U.S. Patent No. 10,051,556, at least as Cisco understands Golden Eye’s application of the Asserted Claims in an effort to show infringement.

To the extent Golden Eye argues that any element below is not disclosed by Chen, a person of ordinary skill in the art would have found it obvious to combine the teachings of Chen with the background knowledge of a person of ordinary skill in the art and/or the additional references, and exemplary teachings, set forth in Cisco’s Invalidation Contentions and accompanying charts. The chart below provides representative examples of where each element of each claim is found within Chen. Citations are meant to be exemplary, not exhaustive, and Cisco reserves the right to identify and discuss additional portions of the reference in support of their contentions and/or to rebut arguments made by Golden Eye. Citations to figures, drawings, tables, and the like include reference to any accompanying or related text. All internal cross references are meant to incorporate the cross-referenced material as if fully set forth therein. Where Cisco states that Chen “discloses” a limitation, that disclosure may be express, implicit, and/or inherent.

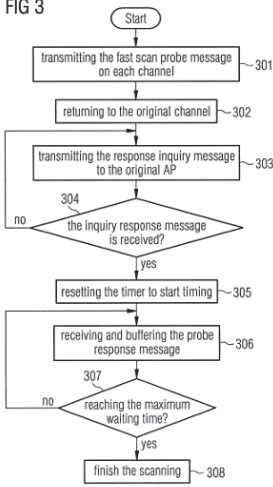
It is Cisco’s position that Golden Eye’s Invalidation Contentions have not established that any accused product or service infringes any valid claim. Thus, Cisco’s statements below should not be treated as an admission, implication, or suggestion that Cisco agrees with Golden Eye regarding either the scope, construction, or interpretation of any of the Asserted Claims or the infringement theories advanced by Golden Eye in its Invalidation Contentions, including whether any Asserted Claim satisfies 35 U.S.C. §§ 101 or 112.

Golden Eye has yet to identify any limitation of the Asserted Claims that they contend is not anticipated and/or rendered obvious by Chen. Cisco therefore expressly reserves the right to respond to any such contention, including by identifying additional obviousness combinations, if Golden Eye makes any such contention.

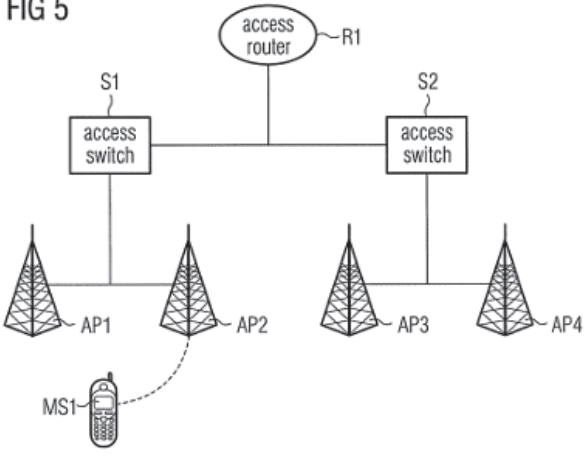
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Claim Element	Disclosure of Claim Element in Chen
<p>9[pre] A method for active scanning performed by an access point, the method comprising:</p>	<p>To the extent the preamble is limiting, Chen discloses, either expressly or inherently, a method for active scanning performed by an access point.</p> <p><i>See, e.g.,</i></p> <p>The embodiments disclose a method for scanning in a radio communication system, in particular in a WLAN (Wireless Local Area Network), including transmitting by a MS on all channels a probe message containing the IP address of the original AP of the MS and an MAC address of the MS; switching to the original channel; transmitting a response inquiry message to the original AP; and receiving a probe response message within a predetermined period, wherein, if the AP of the probe message received on the channel is not the original AP, then the AP transmits the probe response message containing the MAC address to the original AP according to the IP address; and the original AP buffers the probe response message received, and transmits the probe response message to the MS according to the MAC address after the response inquiry message sent by the MS has been received. The embodiments further disclose a scanning system in a WLAN. By using the method and system, not only the time delay during the scanning is reduced, but also the network security is improved and the difficulty for realization is decreased.</p> <p>Chen at Abstract.</p> <p>A core concept of the embodiments is that: the MS transmits on all channels a probe message containing the IP address of the original AP of the MS and the MAC address of the MS, switches to the original channel, transmits the response inquiry message to the original AP, and receives the probe response message within a predetermined period; if the AP receiving the probe message on the channel is not the original AP, then that AP transmits the probe response message containing the MAC address to the original AP according to the IP address; the original AP buffers the probe response message received by it, and transmits the probe response message to the MS according to the MAC address after the response inquiry message sent by the MS has been received. Therefore, the time delay of the whole scanning process is reduced, and the network security is improved. Hereinafter the method is further described with reference to an embodiment.</p> <p>Chen at 5:36–52.</p>

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	<p>An MS roams in a WLAN and when the communication quality between the MS and the original AP decreases to a certain degree, the MS will switch from the original AP to a new AP. After a switching process is activated, the MS will perform a scan probing process, and FIG. 4 shows the flowchart of the scan probe response method on the MS side in the present invention.</p> <p>Chen at 5:53–59.</p> <p>FIG 3</p>  <pre> graph TD     Start([Start]) --&gt; 301[transmitting the fast scan probe message on each channel]     301 --&gt; 302[returning to the original channel]     302 --&gt; 303[transmitting the response inquiry message to the original AP]     303 --&gt; 304{the inquiry response message is received?}     304 -- no --&gt; 303     304 -- yes --&gt; 305[resetting the timer to start timing]     305 --&gt; 306[receiving and buffering the probe response message]     306 --&gt; 307{reaching the maximum waiting time?}     307 -- no --&gt; 306     307 -- yes --&gt; 308[finish the scanning]     </pre> <p>Chen at Fig. 3.</p> <p>When the MS starts the scan–probing, it first transmits in the step 301 (FIG. 3) a fast scan probe message on each of the channels in sequence. The difference from the current scan probe message is that the FSIE contains the MAC (Medium Access Control) address of the MS and the IP address of</p>

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	<p>the original AP of the MS, but does not contain the IP address and the response latency information of the MS. Since at the time the MS was connected the original AP, according to the requirements of the IEEE 802.11 specifications, the original AP has informed the MS of its IP address, the IP address of the original AP has therefore already been obtained and stored when the MS was connected to the original AP.</p> <p>Chen at 5:60–6:4.</p> <p><b>FIG 5</b></p>  <p>The diagram, labeled FIG 5, illustrates a network configuration. At the top center is an oval labeled 'access router' with 'R1' next to it. Below it, two rectangular boxes labeled 'access switch' are shown, 'S1' on the left and 'S2' on the right. A horizontal line connects S1 and S2, and a vertical line connects this line to R1. Below S1, two antenna icons are labeled 'AP1' and 'AP2'. Below S2, two antenna icons are labeled 'AP3' and 'AP4'. A mobile station icon labeled 'MS1' is positioned below AP2, with a dashed line connecting it to AP2.</p> <p>Chen at Fig. 5.</p> <p>FIG. 5 is an illustrative diagram of the network configuration of a WLAN, in which access points AP1 and AP2 are physically connected, and both are physically connected to a switch S1; access points AP3 and AP4 are physically connected, and both are physically connected to a access switch S2; the</p>

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<b>Claim Element</b>	<b>Disclosure of Claim Element in Chen</b>
	<p>access switch S1 and S2 are connected, and both are connected to a router R1. It is assumed that a mobile station MS1 is currently located in the service range of the AP2, the MS1 communicates with the AP2 via a channel 4, then the AP2 is the original AP of the MS1, and the channel 4 is the original channel of the MS1.</p> <p>Chen at 7:52–62.</p> <p>The MS1 roams in a WLAN, when the communication quality between the MS1 with the AP2 deteriorates to a certain degree, the MS1 will switch from the AP2 to a new AP. The MS1 transmits a fast scan probe message on each channel in sequence, assuming that the IEEE 802.11b is followed, then the MS1 needs to transmit the fast scan probe message on 14 channels in sequence, the fast scan probe message contains a MAC address of the MS1 and a IP address of the AP2, but does not contain the IP address and the response latency information of the MS1. The MS1 switches back to the channel 4 after having transmitted the fast scan probe message on all channels, so that it can continue communicating with the AP2.</p> <p>Chen at 7:63–8:8.</p> <p>The MS1 transmits the response inquiry message to the AP2 to inquire from the AP2 whether the probe response message is received; and it waits for the inquiry message from the AP2, and decides whether the probe response message is received. Assuming the MS1 does not receive the inquiry response message within 0.1 ms, which indicates that the response inquiry message is not received by the AP2, the MS continues to transmit the response inquiry message to the AP2, assuming the MS can retransmit the response inquiry message to the AP2 5 times.</p> <p>Chen at 8:9–19.</p> <p>If the MS1 receives the inquiry response message within 0.1 ms, which indicates that AP2 has received the response inquiry message, the MS1 resets the timer to start timing, and begins to receive and buffer the probe response message transmitted by the AP2. At the same time, the AP2 monitors the timer, and decides whether the maximum waiting time is reached, assuming the maximum waiting time is 1 ms. If the time for the MS1 to receive and buffer the probe response message reaches 1 ms, then the</p>

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	<p>MS1 finishes the scanning; otherwise, the MS1 continues to receive and buffer the probe response message from the AP2.</p> <p>Chen at 8:20–30.</p> <p>On the network side, assuming the AP3 uses the channel 6, and AP3 receives the scan probe message transmitted by the MS1 on the channel 6, then the AP3 detects whether the probe scan message contains a FSIE. If the scan probe message received does not contain the FSIE, it is processed as an ordinary scan probe message. If the scan probe message received contains the FSIE, then it indicates that the probe message is the fast scan probe message, the FSIE thereof is analyzed to obtain the IP address therein, and the IP address is the IP address of the AP2.</p> <p>Chen at 8:31–40.</p> <p>The AP3 directly transmits the probe response message to the AP2 without waiting for the time delay. The probe response message contains the signal quality information of the fast scan probe message, and the MAC address of the MS1. Wherein, the signal quality of the fast scan probe message is obtained by the AP3 by computing according to the fast scan probe message received, which is either strength information of the message signal or an SNR of the message signal.</p> <p>Chen at 8:41–49.</p> <p>Hereinabove, AP3 is used by way of example to explain the method for the probed AP to transmit the probe response message, the method is the same as to the other probed AP, and the explanation is not repeated here.</p> <p>Chen at 8:50–53.</p> <p>When the AP2 receives the probe response message from the AP3, it buffers and analyzes the probe response received to obtain the MAC address of the MS1, so that the AP2 knows that the probe response message should be transmitted to the MS1. Then the AP2 inquires whether a response inquiry message transmitted by the MS1 is received. If the AP2 has received the response inquiry message</p>

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	<p>transmitted by the MS1, the corresponding probe response message received is transmitted to the MS1 according to the MAC address of the MS1; otherwise, the AP2 buffers the received probe response message, which is the feedback to the MS1. Then, the AP2 continues to inquire whether the response inquiry message transmitted by the MS1 is received, until the response inquiry message transmitted by the MS1 is received.</p> <p>Chen at 8:54–67.</p> <p>In the MS1, if it reaches the maximum waiting time, then the MS1 finishes the scanning. Now it is assumed that the MS1 receives the probe response message from the channel 6, the channel 3 and the channel 14 after the scanning being finished. Wherein, the channel 6, the channel 3 and the channel 14 correspond to AP3, AP1 and AP4 respectively. The MS1 will compare the signal quality information of each of the probe response message, assuming the signal quality of the probe response message from the channel 3 is the best, then the MS1 selects the AP1 corresponding to the probe response message from the channel 3 as a new AP.</p> <p>Chen at 9:1–11.</p> <p>If the MS1 has not received the probe response message, which indicates that no available AP is found, then the MS1 stops switching and continues communicating with the AP2.</p> <p>Chen at 9:12–14.</p> <p>It can be seen that, when using the method to scan, the probed AP, after having received the scan probe message, can transmit the probe response message immediately without waiting for a time delay, so that the time delay of the whole scanning is reduced. When the probe response message reaches the original AP of the MS prior to the MS, the original AP will buffer the probe response message, until the MS transmits a message to inquire, so as to avoid losing the probe response message.</p> <p>Chen at 9:15–23.</p>

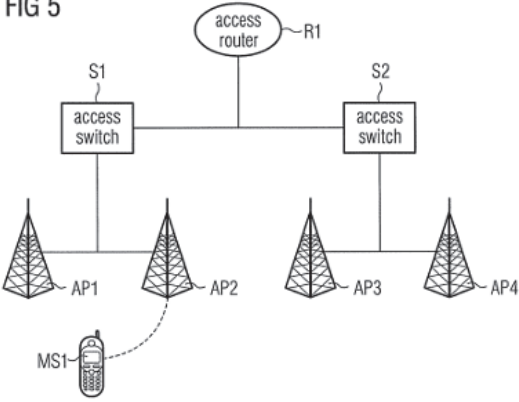
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<b>Claim Element</b>	<b>Disclosure of Claim Element in Chen</b>
	To the extent Golden Eye argues that Chen does not disclose this limitation, it would have been obvious in view of the knowledge of a person of ordinary skill in the art and in view of the reference(s) identified in Cisco's Invalidity Contentions and the associated Exhibits, incorporated by reference herein. A person of ordinary skill would have been motivated to combine Chen with the identified reference(s) for the reasons discussed in the cover pleadings and associated Exhibits.
9[a] receiving, from a station, a probe request frame including information on a signal strength; and	Chen discloses, either expressly or inherently, receiving, from a station, a probe request frame including information on a signal strength.  <i>See, e.g.,</i>  After the scanning is finished, the MS can compare the signal quality information in all of the probe response messages, and select the AP corresponding to the probe response message with the best signal quality as a new AP. If the MS has not received any probe response message, which indicates that there is no AP available, then the MS stops the switching and continues to communicate with the original AP.  Chen at 6:34–40.

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Claim Element	Disclosure of Claim Element in Chen
	<p>FIG 4</p> <pre> graph TD     401[the scan probe message is received] --&gt; 402{the probe message includes a FSIE?}     402 -- no --&gt; 403[process as an ordinary scan probe message]     402 -- yes --&gt; 404[analyzing the FSIE to obtain the IP address]     404 --&gt; 405[transmitting the probe response message to the AP corresponding to said IP address]     405 --&gt; 406[said AP buffers the probe response message received]     406 --&gt; 407[said AP analyzes the probe response message]     407 --&gt; 408{said AP receives the corresponding response inquiry message?}     408 -- yes --&gt; 409[said AP transmits the probe response message to the corresponding MS]     408 -- no --&gt; 410[said AP buffers the probe response message received]     410 --&gt; 407     </pre> <p>Chen at Fig. 4.</p> <p>In the step 401, if the probed AP receives a scan probe message transmitted by the MS on the channel used by it, then in the step 402 it detects whether the scan probe message contains the FSIE. If the scan probe message received does not contain the FSIE, then in the step 403 it processes the scan probe message as an ordinary scan probe message. If the scan probe message received contains the FSIE, which indicates that the probe message is a fast scan probe message, then it analyzes the FSIE in the</p>

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	<p>step 404 to obtain the IP address thereof. The IP address is that of the original AP of the MS transmitting the scan probe message.</p> <p>Chen at 6:59–7:2.</p> <p>In the step 405, the probed AP transmits a probe response message to the AP corresponding to the IP address without waiting for a time delay. The probe response message contains the signal quality information of the fast scan probe message and the MAC address of the MS.</p> <p>Chen at 7:3–7.</p> <p><b>FIG 5</b></p>  <p>The diagram, labeled FIG 5, illustrates a network topology. At the top center is an oval labeled 'access router' with the reference numeral 'R1'. Below it, two rectangular boxes labeled 'access switch' are shown, 'S1' on the left and 'S2' on the right. A horizontal line connects S1 and S2, and a vertical line connects R1 to this horizontal line. Below S1, two triangular tower icons represent access points 'AP1' and 'AP2'. Below S2, two more triangular tower icons represent 'AP3' and 'AP4'. A dashed line connects a mobile station icon labeled 'MS1' to AP2.</p> <p>Chen at Fig. 5.</p>

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	<p>FIG. 5 is an illustrative diagram of the network configuration of a WLAN, in which access points AP1 and AP2 are physically connected, and both are physically connected to a switch S1; access points AP3 and AP4 are physically connected, and both are physically connected to a access switch S2; the access switch S1 and S2 are connected, and both are connected to a router R1. It is assumed that a mobile station MS1 is currently located in the service range of the AP2, the MS1 communicates with the AP2 via a channel 4, then the AP2 is the original AP of the MS1, and the channel 4 is the original channel of the MS1.</p> <p>Chen at 7:52–62.</p> <p>The MS1 roams in a WLAN, when the communication quality between the MS1 with the AP2 deteriorates to a certain degree, the MS1 will switch from the AP2 to a new AP. The MS1 transmits a fast scan probe message on each channel in sequence, assuming that the IEEE 802.11b is followed, then the MS1 needs to transmit the fast scan probe message on 14 channels in sequence, the fast scan probe message contains a MAC address of the MS1 and a IP address of the AP2, but does not contain the IP address and the response latency information of the MS1. The MS1 switches back to the channel 4 after having transmitted the fast scan probe message on all channels, so that it can continue communicating with the AP2.</p> <p>Chen at 7:63–8:8.</p> <p>The MS1 transmits the response inquiry message to the AP2 to inquire from the AP2 whether the probe response message is received; and it waits for the inquiry message from the AP2, and decides whether the probe response message is received. Assuming the MS1 does not receive the inquiry response message within 0.1 ms, which indicates that the response inquiry message is not received by the AP2, the MS continues to transmit the response inquiry message to the AP2, assuming the MS can retransmit the response inquiry message to the AP2 5 times.</p> <p>Chen at 8:9–19.</p> <p>If the MS1 receives the inquiry response message within 0.1 ms, which indicates that AP2 has received the response inquiry message, the MS1 resets the timer to start timing, and begins to receive and buffer</p>

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	<p>the probe response message transmitted by the AP2. At the same time, the AP2 monitors the timer, and decides whether the maximum waiting time is reached, assuming the maximum waiting time is 1 ms. If the time for the MS1 to receive and buffer the probe response message reaches 1 ms, then the MS1 finishes the scanning; otherwise, the MS1 continues to receive and buffer the probe response message from the AP2.</p> <p>Chen at 8:20–30.</p> <p>On the network side, assuming the AP3 uses the channel 6, and AP3 receives the scan probe message transmitted by the MS1 on the channel 6, then the AP3 detects whether the probe scan message contains a FSIE. If the scan probe message received does not contain the FSIE, it is processed as an ordinary scan probe message. If the scan probe message received contains the FSIE, then it indicates that the probe message is the fast scan probe message, the FSIE thereof is analyzed to obtain the IP address therein, and the IP address is the IP address of the AP2.</p> <p>Chen at 8:31–40.</p> <p>The AP3 directly transmits the probe response message to the AP2 without waiting for the time delay. The probe response message contains the signal quality information of the fast scan probe message, and the MAC address of the MS1. Wherein, the signal quality of the fast scan probe message is obtained by the AP3 by computing according to the fast scan probe message received, which is either strength information of the message signal or an SNR of the message signal.</p> <p>Chen at 8:41–49.</p> <p>Hereinabove, AP3 is used by way of example to explain the method for the probed AP to transmit the probe response message, the method is the same as to the other probed AP, and the explanation is not repeated here.</p> <p>Chen at 8:50–53.</p>

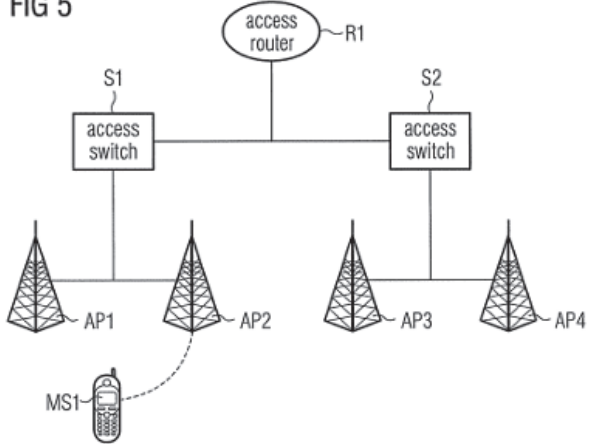
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	<p>When the AP2 receives the probe response message from the AP3, it buffers and analyzes the probe response received to obtain the MAC address of the MS1, so that the AP2 knows that the probe response message should be transmitted to the MS1. Then the AP2 inquires whether a response inquiry message transmitted by the MS1 is received. If the AP2 has received the response inquiry message transmitted by the MS1, the corresponding probe response message received is transmitted to the MS1 according to the MAC address of the MS1; otherwise, the AP2 buffers the received probe response message, which is the feedback to the MS1. Then, the AP2 continues to inquire whether the response inquiry message transmitted by the MS1 is received, until the response inquiry message transmitted by the MS1 is received.</p> <p>Chen at 8:54–67.</p> <p>In the MS1, if it reaches the maximum waiting time, then the MS1 finishes the scanning. Now it is assumed that the MS1 receives the probe response message from the channel 6, the channel 3 and the channel 14 after the scanning being finished. Wherein, the channel 6, the channel 3 and the channel 14 correspond to AP3, AP1 and AP4 respectively. The MS1 will compare the signal quality information of each of the probe response message, assuming the signal quality of the probe response message from the channel 3 is the best, then the MS1 selects the AP1 corresponding to the probe response message from the channel 3 as a new AP.</p> <p>Chen at 9:1–11.</p> <p>If the MS1 has not received the probe response message, which indicates that no available AP is found, then the MS1 stops switching and continues communicating with the AP2.</p> <p>Chen at 9:12–14.</p> <p>It can be seen that, when using the method to scan, the probed AP, after having received the scan probe message, can transmit the probe response message immediately without waiting for a time delay, so that the time delay of the whole scanning is reduced. When the probe response message reaches the original AP of the MS prior to the MS, the original AP will buffer the probe response message, until the MS transmits a message to inquire, so as to avoid losing the probe response message.</p>

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	<p>Chen at 9:15–23.</p> <p>To the extent Golden Eye argues that Chen does not disclose this limitation, it would have been obvious in view of the knowledge of a person of ordinary skill in the art and in view of the reference(s) identified in Cisco’s Invalidity Contentions and the associated Exhibits, incorporated by reference herein. A person of ordinary skill would have been motivated to combine Chen with the identified reference(s) for the reasons discussed in the cover pleadings and associated Exhibits.</p>
<p>9[b] transmitting, to the station, a probe response frame in response to the probe request frame based on the information on the signal strength,</p>	<p>Chen discloses, either expressly or inherently, transmitting, to the station, a probe response frame in response to the probe request frame based on the information on the signal strength.</p> <p><i>See, e.g.,</i></p> <p>After the scanning is finished, the MS can compare the signal quality information in all of the probe response messages, and select the AP corresponding to the probe response message with the best signal quality as a new AP. If the MS has not received any probe response message, which indicates that there is no AP available, then the MS stops the switching and continues to communicate with the original AP.</p> <p>Chen at 6:34–40.</p> <p>The original AP of the MS can also generate a response message and directly buffers the probe response message after the probe message has been received by the original AP of the MS, so that it further transmits the probe response message to the MS according to the MAC address after the response inquiry message transmitted by the MS has been received. The useful effect of having the original AP of the MS to perform the operation is that after the scanning is finished the MS can compare the signal quality information of all the probe response messages, including the signal quality information of the original AP, so as to avoid any unnecessary switching according to the results of the signal quality comparison.</p> <p>Chen at 7:33–45.</p>

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	<p data-bbox="521 653 586 684"><b>FIG 5</b></p>  <p data-bbox="461 1157 610 1184">Chen at Fig. 5.</p> <p data-bbox="461 1213 1466 1409">FIG. 5 is an illustrative diagram of the network configuration of a WLAN, in which access points AP1 and AP2 are physically connected, and both are physically connected to a switch S1; access points AP3 and AP4 are physically connected, and both are physically connected to a access switch S2; the access switch S1 and S2 are connected, and both are connected to a router R1. It is assumed that a mobile station MS1 is currently located in the service range of the AP2, the MS1 communicates with the AP2 via a channel 4, then the AP2 is the original AP of the MS1, and the channel 4 is the original channel of the MS1.</p> <p data-bbox="461 1440 634 1467">Chen at 7:52–62.</p>

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	<p>The MS1 roams in a WLAN, when the communication quality between the MS1 with the AP2 deteriorates to a certain degree, the MS1 will switch from the AP2 to a new AP. The MS1 transmits a fast scan probe message on each channel in sequence, assuming that the IEEE 802.11b is followed, then the MS1 needs to transmit the fast scan probe message on 14 channels in sequence, the fast scan probe message contains a MAC address of the MS1 and a IP address of the AP2, but does not contain the IP address and the response latency information of the MS1. The MS1 switches back to the channel 4 after having transmitted the fast scan probe message on all channels, so that it can continue communicating with the AP2.</p> <p>Chen at 7:63–8:8.</p> <p>The MS1 transmits the response inquiry message to the AP2 to inquire from the AP2 whether the probe response message is received; and it waits for the inquiry message from the AP2, and decides whether the probe response message is received. Assuming the MS1 does not receive the inquiry response message within 0.1 ms, which indicates that the response inquiry message is not received by the AP2, the MS continues to transmit the response inquiry message to the AP2, assuming the MS can retransmit the response inquiry message to the AP2 5 times.</p> <p>Chen at 8:9–19.</p> <p>If the MS1 receives the inquiry response message within 0.1 ms, which indicates that AP2 has received the response inquiry message, the MS1 resets the timer to start timing, and begins to receive and buffer the probe response message transmitted by the AP2. At the same time, the AP2 monitors the timer, and decides whether the maximum waiting time is reached, assuming the maximum waiting time is 1 ms. If the time for the MS1 to receive and buffer the probe response message reaches 1 ms, then the MS1 finishes the scanning; otherwise, the MS1 continues to receive and buffer the probe response message from the AP2.</p> <p>Chen at 8:20–30.</p> <p>On the network side, assuming the AP3 uses the channel 6, and AP3 receives the scan probe message transmitted by the MS1 on the channel 6, then the AP3 detects whether the probe scan message</p>

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	<p>contains a FSIE. If the scan probe message received does not contain the FSIE, it is processed as an ordinary scan probe message. If the scan probe message received contains the FSIE, then it indicates that the probe message is the fast scan probe message, the FSIE thereof is analyzed to obtain the IP address therein, and the IP address is the IP address of the AP2.</p> <p>Chen at 8:31–40.</p> <p>The AP3 directly transmits the probe response message to the AP2 without waiting for the time delay. The probe response message contains the signal quality information of the fast scan probe message, and the MAC address of the MS1. Wherein, the signal quality of the fast scan probe message is obtained by the AP3 by computing according to the fast scan probe message received, which is either strength information of the message signal or an SNR of the message signal.</p> <p>Chen at 8:41–49.</p> <p>Hereinabove, AP3 is used by way of example to explain the method for the probed AP to transmit the probe response message, the method is the same as to the other probed AP, and the explanation is not repeated here.</p> <p>Chen at 8:50–53.</p> <p>When the AP2 receives the probe response message from the AP3, it buffers and analyzes the probe response received to obtain the MAC address of the MS1, so that the AP2 knows that the probe response message should be transmitted to the MS1. Then the AP2 inquires whether a response inquiry message transmitted by the MS1 is received. If the AP2 has received the response inquiry message transmitted by the MS1, the corresponding probe response message received is transmitted to the MS1 according to the MAC address of the MS1; otherwise, the AP2 buffers the received probe response message, which is the feedback to the MS1. Then, the AP2 continues to inquire whether the response inquiry message transmitted by the MS1 is received, until the response inquiry message transmitted by the MS1 is received.</p> <p>Chen at 8:54–67.</p>

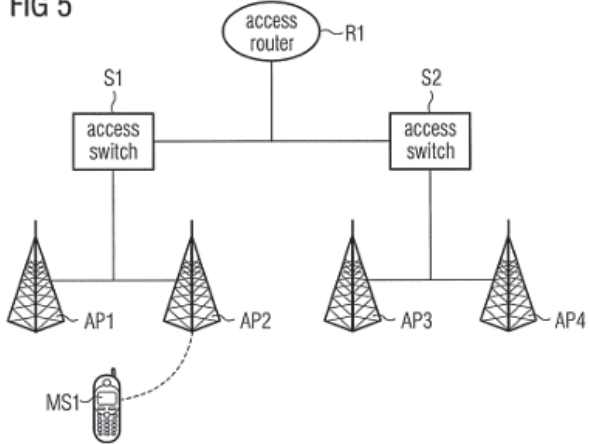
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Claim Element	Disclosure of Claim Element in Chen
	<p>In the MS1, if it reaches the maximum waiting time, then the MS1 finishes the scanning. Now it is assumed that the MS1 receives the probe response message from the channel 6, the channel 3 and the channel 14 after the scanning being finished. Wherein, the channel 6, the channel 3 and the channel 14 correspond to AP3, AP1 and AP4 respectively. The MS1 will compare the signal quality information of each of the probe response message, assuming the signal quality of the probe response message from the channel 3 is the best, then the MS1 selects the AP1 corresponding to the probe response message from the channel 3 as a new AP.</p> <p>Chen at 9:1–11.</p> <p>If the MS1 has not received the probe response message, which indicates that no available AP is found, then the MS1 stops switching and continues communicating with the AP2.</p> <p>Chen at 9:12–14.</p> <p>It can be seen that, when using the method to scan, the probed AP, after having received the scan probe message, can transmit the probe response message immediately without waiting for a time delay, so that the time delay of the whole scanning is reduced. When the probe response message reaches the original AP of the MS prior to the MS, the original AP will buffer the probe response message, until the MS transmits a message to inquire, so as to avoid losing the probe response message.</p> <p>Chen at 9:15–23.</p> <p>To the extent Golden Eye argues that Chen does not disclose this limitation, it would have been obvious in view of the knowledge of a person of ordinary skill in the art and in view of the reference(s) identified in Cisco’s Invalidity Contentions and the associated Exhibits, incorporated by reference herein. A person of ordinary skill would have been motivated to combine Chen with the identified reference(s) for the reasons discussed in the cover pleadings and associated Exhibits.</p>
9[c] wherein an access of the station to the access point is based on the probe	Chen discloses, either expressly or inherently, an access of the station to the access point is based on the probe response frame and a maximum probe response time.

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Claim Element	Disclosure of Claim Element in Chen
<p>response frame and a maximum probe response time.</p>	<p><i>See, e.g.,</i></p> <p>If the MS receives the inquiry response message within a predetermined period which indicates that the original AP has received the response inquiry message, then in the step 305 (FIG. 3), the MS sets a timer to zero to start timing, and receives and buffers the probe response message transmitted by the original AP in the step 306; in the step 307, the MS decides whether the timer reaches a pre-set maximum waiting time maxReplyWait, that is, whether the timer exceeds or equals to the maxReplyWait.</p> <p>Chen at 6:21–29.</p> <p>If it has reached the maximum waiting time, the MS performs the step 308 and finishes the scanning; otherwise, the MS continues to receive and buffer the probe response message from the original AP.</p> <p>Chen at 6:30–33.</p> <p>After the scanning is finished, the MS can compare the signal quality information in all of the probe response messages, and select the AP corresponding to the probe response message with the best signal quality as a new AP. If the MS has not received any probe response message, which indicates that there is no AP available, then the MS stops the switching and continues to communicate with the original AP.</p> <p>Chen at 6:34–40.</p>

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Claim Element	Disclosure of Claim Element in Chen
	<p data-bbox="521 653 586 684"><b>FIG 5</b></p>  <p data-bbox="461 1157 610 1184">Chen at Fig. 5.</p> <p data-bbox="461 1213 1466 1409">FIG. 5 is an illustrative diagram of the network configuration of a WLAN, in which access points AP1 and AP2 are physically connected, and both are physically connected to a switch S1; access points AP3 and AP4 are physically connected, and both are physically connected to a access switch S2; the access switch S1 and S2 are connected, and both are connected to a router R1. It is assumed that a mobile station MS1 is currently located in the service range of the AP2, the MS1 communicates with the AP2 via a channel 4, then the AP2 is the original AP of the MS1, and the channel 4 is the original channel of the MS1.</p> <p data-bbox="461 1440 634 1467">Chen at 7:52–62.</p>

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<b>Claim Element</b>	<b>Disclosure of Claim Element in Chen</b>
	<p>The MS1 roams in a WLAN, when the communication quality between the MS1 with the AP2 deteriorates to a certain degree, the MS1 will switch from the AP2 to a new AP. The MS1 transmits a fast scan probe message on each channel in sequence, assuming that the IEEE 802.11b is followed, then the MS1 needs to transmit the fast scan probe message on 14 channels in sequence, the fast scan probe message contains a MAC address of the MS1 and a IP address of the AP2, but does not contain the IP address and the response latency information of the MS1. The MS1 switches back to the channel 4 after having transmitted the fast scan probe message on all channels, so that it can continue communicating with the AP2.</p> <p>Chen at 7:63–8:8.</p> <p>The MS1 transmits the response inquiry message to the AP2 to inquire from the AP2 whether the probe response message is received; and it waits for the inquiry message from the AP2, and decides whether the probe response message is received. Assuming the MS1 does not receive the inquiry response message within 0.1 ms, which indicates that the response inquiry message is not received by the AP2, the MS continues to transmit the response inquiry message to the AP2, assuming the MS can retransmit the response inquiry message to the AP2 5 times.</p> <p>Chen at 8:9–19.</p> <p>If the MS1 receives the inquiry response message within 0.1 ms, which indicates that AP2 has received the response inquiry message, the MS1 resets the timer to start timing, and begins to receive and buffer the probe response message transmitted by the AP2. At the same time, the AP2 monitors the timer, and decides whether the maximum waiting time is reached, assuming the maximum waiting time is 1 ms. If the time for the MS1 to receive and buffer the probe response message reaches 1 ms, then the MS1 finishes the scanning; otherwise, the MS1 continues to receive and buffer the probe response message from the AP2.</p> <p>Chen at 8:20–30.</p> <p>On the network side, assuming the AP3 uses the channel 6, and AP3 receives the scan probe message transmitted by the MS1 on the channel 6, then the AP3 detects whether the probe scan message</p>

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Claim Element	Disclosure of Claim Element in Chen
	<p>contains a FSIE. If the scan probe message received does not contain the FSIE, it is processed as an ordinary scan probe message. If the scan probe message received contains the FSIE, then it indicates that the probe message is the fast scan probe message, the FSIE thereof is analyzed to obtain the IP address therein, and the IP address is the IP address of the AP2.</p> <p>Chen at 8:31–40.</p> <p>The AP3 directly transmits the probe response message to the AP2 without waiting for the time delay. The probe response message contains the signal quality information of the fast scan probe message, and the MAC address of the MS1. Wherein, the signal quality of the fast scan probe message is obtained by the AP3 by computing according to the fast scan probe message received, which is either strength information of the message signal or an SNR of the message signal.</p> <p>Chen at 8:41–49.</p> <p>Hereinabove, AP3 is used by way of example to explain the method for the probed AP to transmit the probe response message, the method is the same as to the other probed AP, and the explanation is not repeated here.</p> <p>Chen at 8:50–53.</p> <p>When the AP2 receives the probe response message from the AP3, it buffers and analyzes the probe response received to obtain the MAC address of the MS1, so that the AP2 knows that the probe response message should be transmitted to the MS1. Then the AP2 inquires whether a response inquiry message transmitted by the MS1 is received. If the AP2 has received the response inquiry message transmitted by the MS1, the corresponding probe response message received is transmitted to the MS1 according to the MAC address of the MS1; otherwise, the AP2 buffers the received probe response message, which is the feedback to the MS1. Then, the AP2 continues to inquire whether the response inquiry message transmitted by the MS1 is received, until the response inquiry message transmitted by the MS1 is received.</p> <p>Chen at 8:54–67.</p>

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Claim Element	Disclosure of Claim Element in Chen
	<p>In the MS1, if it reaches the maximum waiting time, then the MS1 finishes the scanning. Now it is assumed that the MS1 receives the probe response message from the channel 6, the channel 3 and the channel 14 after the scanning being finished. Wherein, the channel 6, the channel 3 and the channel 14 correspond to AP3, AP1 and AP4 respectively. The MS1 will compare the signal quality information of each of the probe response message, assuming the signal quality of the probe response message from the channel 3 is the best, then the MS1 selects the AP1 corresponding to the probe response message from the channel 3 as a new AP.</p> <p>Chen at 9:1–11.</p> <p>If the MS1 has not received the probe response message, which indicates that no available AP is found, then the MS1 stops switching and continues communicating with the AP2.</p> <p>Chen at 9:12–14.</p> <p>It can be seen that, when using the method to scan, the probed AP, after having received the scan probe message, can transmit the probe response message immediately without waiting for a time delay, so that the time delay of the whole scanning is reduced. When the probe response message reaches the original AP of the MS prior to the MS, the original AP will buffer the probe response message, until the MS transmits a message to inquire, so as to avoid losing the probe response message.</p> <p>Chen at 9:15–23.</p> <p>To the extent Golden Eye argues that Chen does not disclose this limitation, it would have been obvious in view of the knowledge of a person of ordinary skill in the art and in view of the reference(s) identified in Cisco’s Invalidity Contentions and the associated Exhibits, incorporated by reference herein. A person of ordinary skill would have been motivated to combine Chen with the identified reference(s) for the reasons discussed in the cover pleadings and associated Exhibits.</p>
11[pre] An access point configured to perform an	See 9[pre] above.

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Claim Element	Disclosure of Claim Element in Chen
<p>active scanning, the access point comprising: 11[a] a transceiver; and</p>	<p>Chen discloses, either expressly or inherently, an access point comprising a transceiver.</p> <p><i>See, e.g.,</i></p> <p>The embodiments discussed herein relate to the technical field of a radio communication system, in particular in the technical field of WLAN (Wireless Local Area Network), and specifically to a method and a system for scanning in a radio communication system.</p> <p>Chen at 1:15–20.</p> <p>In the step 401, if the probed AP receives a scan probe message transmitted by the MS on the channel used by it, then in the step 402 it detects whether the scan probe message contains the FSIE. If the scan probe message received does not contain the FSIE, then in the step 403 it processes the scan probe message as an ordinary scan probe message. If the scan probe message received contains the FSIE, which indicates that the probe message is a fast scan probe message, then it analyzes the FSIE in the step 404 to obtain the IP address thereof. The IP address is that of the original AP of the MS transmitting the scan probe message.</p> <p>Chen at 6:59–7:2.</p> <p>The system also includes permanent or removable storage, such as magnetic and optical discs, RAM, ROM, etc. on which the process and data structures can be stored and distributed. The processes can also be distributed via, for example, downloading over a network such as the Internet. The system can output the results to a display device, printer, readily accessible memory or another computer on a network.</p> <p>Chen at 11:8–14.</p> <p>To the extent Golden Eye argues that Chen does not disclose this limitation, it would have been obvious in view of the knowledge of a person of ordinary skill in the art and in view of the</p>

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Claim Element	Disclosure of Claim Element in Chen
	reference(s) identified in Cisco’s Invalidation Contentions and the associated Exhibits, incorporated by reference herein. A person of ordinary skill would have been motivated to combine Chen with the identified reference(s) for the reasons discussed in the cover pleadings and associated Exhibits.
11[b] a processor, a	<p>Chen discloses, either expressly or inherently, a processor.</p> <p><i>See, e.g.,</i></p> <p>The embodiments discussed herein relate to the technical field of a radio communication system, in particular in the technical field of WLAN (Wireless Local Area Network), and specifically to a method and a system for scanning in a radio communication system.</p> <p>Chen at 1:15–20.</p> <p>In the step 401, if the probed AP receives a scan probe message transmitted by the MS on the channel used by it, then in the step 402 it detects whether the scan probe message contains the FSIE. If the scan probe message received does not contain the FSIE, then in the step 403 it processes the scan probe message as an ordinary scan probe message. If the scan probe message received contains the FSIE, which indicates that the probe message is a fast scan probe message, then it analyzes the FSIE in the step 404 to obtain the IP address thereof. The IP address is that of the original AP of the MS transmitting the scan probe message.</p> <p>Chen at 6:59–7:2.</p> <p>The system also includes permanent or removable storage, such as magnetic and optical discs, RAM, ROM, etc. on which the process and data structures can be stored and distributed. The processes can also be distributed via, for example, downloading over a network such as the Internet. The system can output the results to a display device, printer, readily accessible memory or another computer on a network.</p> <p>Chen at 11:8–14.</p>

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Claim Element	Disclosure of Claim Element in Chen
	To the extent Golden Eye argues that Chen does not disclose this limitation, it would have been obvious in view of the knowledge of a person of ordinary skill in the art and in view of the reference(s) identified in Cisco’s Invalidation Contentions and the associated Exhibits, incorporated by reference herein. A person of ordinary skill would have been motivated to combine Chen with the identified reference(s) for the reasons discussed in the cover pleadings and associated Exhibits.
11[c] wherein the processor is configured to:	<i>See</i> 11[b] above.
11[d] cause the transceiver to receive, from a station, a probe request frame including information on a signal strength; and	<i>See</i> 9[a], 11[a] above.
11[e] cause the transceiver to transmit, to the station, a probe response frame in response to the probe request frame based on the information on the signal strength,	<i>See</i> 9[b], 11[a] above.
11[f] wherein an access of the station to the access point is based on the probe response frame and a maximum probe response time.	<i>See</i> 9[c] above.