

**Amendments to the Claims:**

This listing of the claims will replace all prior versions of the claims in the application:

1. (Currently amended) A method for active scanning of a first scanning target for use in a first station (STA), the method comprising:

determining to perform active scanning, wherein active scanning includes generating a first probe request by the first STA, wherein the first probe request includes an indication of the first scanning target;

while waiting to access a wireless medium to transmit the first probe request, detecting, at the first STA, a second probe request transmitted from a second STA, wherein the second probe request includes an indication of a ~~same~~ second scanning target; and

on a condition that the indication of the first scanning target of the first probe request is the same as the indication of the second scanning target of the second probe request ~~indicates the same scanning target~~, determining, by the first STA, to not transmit the first probe request by the first STA to the first scanning target.

2. (Previously presented) The method of claim 1, wherein the detecting requires that a relative received signal strength indicator (RSSI) of the second probe request is above a pre-defined threshold.

3. (Currently amended) The method of claim 1, wherein the first scanning target comprises an access point.

4. (Previously presented) The method of claim 1, further comprising: stopping active scanning of a current channel, on a condition that the second probe request is detected by the first STA.

5. (Currently amended) The method of claim 1, further comprising:  
transmitting the first probe request to the scanning target from the first STA  
on a condition that the indication of the first scanning target of the first probe  
request is not the same as the indication of the second scanning target of the second  
probe request ~~first STA does not detect the second probe request with the same  
scanning target.~~

6. (Currently amended) A method for active scanning of a first  
scanning target for use in a first station (STA), the method comprising:

determining to perform active scanning, wherein active scanning includes  
generating a first probe request by the first STA, wherein the first probe request  
includes an indication of the first scanning target;

while waiting to access a wireless medium to transmit the first probe request,  
receiving, at the first STA, a probe response, wherein the probe response is  
responsive to a second probe request associated with a second STA, and the probe  
response includes an indication of a second scanning target; and

on a condition that the indication of the first scanning target of the first probe  
request is the same as the indication of the second scanning target of the probe  
response ~~includes an indication of a same scanning target,~~ determining, by the first  
STA, to not transmitting the first probe request by the first STA to the first  
scanning target.

7.-8. (Canceled)

9. (Currently amended) The method of claim 6, wherein the first  
scanning target comprises an access point.

10. (Currently amended) The method of claim 6, further comprising:  
stopping active scanning of the first scanning target, on a condition that the probe response is received by the first STA.

11. (Currently amended) The method of claim 6, further comprising:  
transmitting the first probe request to the first scanning target on a condition that the indication of the first scanning target of the first probe request is not the same as the indication of the second scanning target of the probe response ~~first STA does not receive the probe response with the same scanning target.~~

12.-20. (Canceled)

21. (Previously presented) The method of claim 1, further comprising:  
on a condition that it is determined to not transmit the first probe request, performing the method for active scanning on a next channel for a predetermined time period.

22. (Currently amended) The method of claim 1, further comprising:  
receiving, at the first STA, a probe response in response to the second probe request; and  
stopping active scanning of the first scanning target.

23. (Currently amended) The method of claim 10, wherein stopping active scanning of the first scanning target includes~~[:]~~generating a MLME-SCAN.confirm primitive, wherein the MLME-SCAN.confirm primitive includes a BSSDescriptionSet containing information of the scanning target.

24. (Previously presented) The method of claim 1, wherein the first probe request includes information of other channels.

25. (Previously presented) The method of claim 22, wherein the probe response includes information of other channels.

26. (Previously presented) The method of claim 6, wherein the probe response includes information of other channels.