Claim No. HP-2019-000006

IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
INTELLECTUAL PROPERTY LIST (ChD)
PATENTS COURT

B E T W E E N:

(1) OPTIS CELLULAR TECHNOLOGY LLC

(A company incorporated under the laws of the State of Delaware)

(2) OPTIS WIRELESS TECHNOLOGY LLC

(A company incorporated under the laws of the State of Delaware)

(3) UNWIRED PLANET INTERNATIONAL LIMITED

(A company incorporated under the laws of the Republic of Ireland)

Claimants

-and-

(1) APPLE RETAIL UK LIMITED

(2) APPLE DISTRIBUTION INTERNATIONAL LIMITED

(A company incorporated under the laws of the Republic of Ireland)

(3) APPLE INC

(A company incorporates under the laws of the State of California)

Defendants

ANNEX A
TO THE STATEMENT OF GROUNDS FOR AMENDMENT OF EP(UK) 2,229,744

Claims

1. Method in a first node (110) for requesting a status report from a second node (120), the method being applied in LTE, the first node (110) and the second node (120) both being comprised within a wireless communication network (100), the status report comprising positive and/or negative acknowledgement of data sent from the first node (110) to be received by the second node (120), wherein the method comprises the steps of:

   transmitting (306) a sequence of data units or data unit segments to be received by the second node (120), the method further comprises the steps of:

      counting (307) the number of transmitted data units and the number of transmitted data bytes of the transmitted data units, and

      requesting (310) a status report from the second node (120) if the counted number of transmitted data units exceeds or equals a first predefined value, or the counted number of transmitted data bytes of the transmitted data units exceeds or equals a second predefined value.

2. Method according to claim 1, wherein:

   the first node (110) comprises a first counter (421) configured to count the number of transmitted data units, and a second counter (422) configured to count the number of transmitted data bytes of the transmitted data units, the step of counting (307) comprises adjusting the first counter (421) according to the transmitted amount of data units and adjusting the second counter (422) according to the transmitted amount of data bytes of the transmitted data units, and wherein the method comprises the further steps of:

      obtaining (304) a first predefined value related to the number of transmitted data units,

      obtaining (305) a second predefined value related to the number of transmitted data bytes of the transmitted data units,

      comparing (308) the value of the first counter (421) either with the first predefined value, if the first counter (421) has been incremented according to the transmitted amount of data units, or with zero, if the first counter (421) has been decreased according to the transmitted amount of data units, and

      comparing (309) the value of the second counter (422) either with the second predefined value if the second counter (422) has been incremented according to the transmitted amount of data bytes of the transmitted data units, or with zero, if the second counter (422) has been decreased according to the transmitted amount of data bytes of the transmitted data units.

3. Method according to any of claim 1 or claim 2, wherein the first predefined value and the second predefined value are configured by, and obtained (304, 305) from, a higher layer, e.g. the Radio Resource Control, "RRC".

4. Method according to any of the previous claims 1-3, wherein the step of counting (307) comprises incrementing the first counter (421) according to the transmitted amount of data units and incrementing the second counter (422) according to the transmitted amount of data bytes of the transmitted data units, and wherein the step of requesting (310) a status report from the second node (120) is performed if the first predefined value is reached or exceeded by the first counter (421) or if the second predefined value is reached or exceeded by the second counter (422).

5. Method according to any of the previous claims 1-4, further comprising the steps of:
   initialising (301) the first counter (421) to zero, and
   initialising (302) the second counter (422) to zero.

6. Method according to any of the previous claims 1-5, further comprising the steps of:
   resetting (311) the first counter (421) to zero, and
   resetting (312) the second counter (422) to zero.

7. Method according to any of the previous claims 1-3, further comprising the steps of:
   initialising (301) the first counter (421) to the first predefined value,
   initialising (302) the second counter (422) to the second predefined value,
   resetting (311) the first counter (421) to the first predefined value,
   resetting (312) the second counter (422) to the second predefined value, and wherein the step of counting (307) comprises decreasing the first counter (421) according to the transmitted amount of data units and decreasing the second counter (422) according to the transmitted amount of data bytes of the transmitted data units, and wherein the step of requesting (310) a status report from the second node (120) is performed if zero is reached or fallen below by the first counter (421) or if zero is reached or fallen below by the second counter (422).

8. Method according to any of the previous claims 1-7, further comprising the step of:
   obtaining (303) the number of configured or active radio bearers, and wherein the step of obtaining (305) the second predefined value comprises obtaining a parameter value representing a bytes threshold limit value and dividing that parameter value with the obtained number of configured or active radio bearers.

9. Method according to any of the previous claims 6-8, wherein the steps of resetting (311,312) the first counter (421) and the second counter (422) is performed when the first predefined value is reached or exceeded by the first counter (421) or when the second predefined value is reached or exceeded by the second counter (422).

10. Method according to any of the claims 1-9 wherein the first node (110) is a user equipment.

11. Method according to any of the claims 1-9 wherein the first node (110) is a base station, or a Radio Network Controller, "RNC", or an evolved NodeB, "eNodeB".

12. A first node (110) comprising an arrangement (400) for requesting a status report from a second node (120), the arrangement being adapted for use in LTE, the first node (110) and the second node (120) both used for a wireless communication network (100), the status report comprising positive and/or negative acknowledgement of data sent from the first node (110) to be received by the second node (120), wherein the arrangement (400) comprises:

    a transmitter (406), adapted to transmit a sequence of data units or data unit segments to be received by the second node (120),

    the arrangement (400) further comprises:

        a counting mechanism (407), adapted to count the number of transmitted data units and the number of transmitted data bytes of the transmitted data units, and

        a requesting unit (410), adapted to request a status report from the second node (120) if the counted number of transmitted data units exceeds or equals a first predefined value, or the counted number of transmitted data bytes of the transmitted data units exceeds or equals a second predefined value.

13. The first node (110) according to claim 12, wherein the first node (110) is a user equipment.

14. The first node (110) according to claim 12, wherein the first node (110) is a base station or an evolved NodeB, "eNodeB".

15. The first node (110) according to claim 12, wherein the first node (110) is a control node or a Radio Network Controller, “RNC”.