

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

The Accused LGE '809 Products are those that are compatible with the WCDMA standard, and specifically with 3GPP TS 25.21125.211, 3GPP TS 25.214, and 3GPP TS 25.321. An exemplary identification of the Accused LGE '809 Products, based on the information presently available, is set forth in Plaintiff Pantech Corporation's Patent Rule 3-1 and 3-2 Infringement Contentions, at Section A.

The Exemplary Evidence of Infringement disclosed herein establishes that asserted claims 1-10 of U.S. Patent No. 9,313,809 are essential to mandatory sections of the WCDMA standard (i.e., 3GPP TS 25.21125.211, 3GPP TS 25.214, and 3GPP TS 25.321). If "a patent covers mandatory aspects of a standard," it is "enough to prove infringement by showing standard compliance." *Godo Kaisha IP Bridge 1 v. TCL Commun. Tech. Holdings Ltd.*, 967 F.3d 1380, 1383-84 (Fed. Cir. 2020) ("In cases involving standard essential patents, we have endorsed standard compliance as a way of proving infringement"). Based on publicly available information, the Accused LGE '809 Products comply with the WCDMA standard, which requires compliance with WCDMA cellular communication protocols including at least 3GPP TS 25.21125.211, 3GPP TS 25.214, and 3GPP TS 25.321 and perform cellular communications in compliance with the aforementioned WCDMA cellular communication standards. *See* Appendix 1: LGE Products Compliance with Standards.

The Exemplary Evidence of Infringement also establishes that each of the Accused LGE '809 Products contains a chipset, application processor, SoC, or system-on-chip (e.g., Qualcomm Snapdragon 888) (referred to herein as the "chipset") that incorporates a processor and/or modem. Each such chipset (and thus each accused device) complies with one or more of WCDMA cellular communication protocols including at least 3GPP TS 25.21125.211, 3GPP TS 25.214, and 3GPP TS 25.321. *See* Appendix 1: LGE Products Components. Furthermore, each of the Accused LGE '809 Products contains an antenna or antennas, memory, and transceiver or combination of transmitter and receiver that assist performing cellular communications in accordance with the WCDMA Release 8 cellular communication standard. *See* Appendix 1: LGE Products Components.

Thus, Appendix 1, taken together with the showing made herein, demonstrates infringement of U.S. Patent No. 9,313,809 by the Accused LGE '809 Products.

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
[1.pre] A method performed by a wireless transmit/receive unit (WTRU) to communicate with a base station using an	To the extent the preamble is construed as a limitation, each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit that communicates with a base station using an enhanced dedicated channel (E-DCH) resource while in a cell forward access channel (CELL_FACH) state. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
enhanced dedicated channel (E-DCH) resource while in a cell forward access channel (CELL_FACH) state, the method comprising:	with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to communicate with a base station using an enhanced dedicated channel (E-DCH) resource while in a cell forward access channel (CELL_FACH) state. <3GPP TS 25.321 v9.9.0> 3.1.2.1 General E-DCH: The Enhanced Dedicated Channel (E-DCH) is an uplink transport channel. TS 25.321 v9.9.0 at 10 4.2.3 Traffic Related Architecture - UE Side Figure 4.2.3.1 illustrates the connectivity of MAC entities. The MAC-c/sh/m controls access to all common transport channels, except the HS-DSCH transport channel and the E-DCH transport channel (FDD and 1.28Mcps TDD only). The MAC-d controls access to all dedicated transport channels, to MAC-c/sh/m and MAC-hs/ehs. The MAC-c/sh/m controls access to MAC-is/i. (FDD and 1.28Mcps TDD only for UEs in CELL_FACH state and Idle mode). The MAC-hs/ehs handles the HSDPA specific functions and controls access to the HS-DSCH transport channel. Upper layers configure which of the two entities, MAC-hs or MAC-ehs, is to be applied to handle HS-DSCH functionality. The MAC-e/es or MAC-i/is controls access to the E-DCH transport channel. Upper layers configure which of the two entities, MAC-e/es or MAC-i/is, is to be applied to handle E-DCH functionality. In case of selective combining of MTCH channels from multiple cells, the MAC-m controls access to the FACH transport channels used to carry MTCH and MSCH. TS 25.321 v9.9.0 at 16.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	11.2 Control of RACH transmissions and Enhanced Uplink in CELL_FACH state and Idle mode transmissions The MAC sublayer is in charge of controlling the timing of RACH transmissions on transmission time interval level (the timing on access slot level is controlled by L1). Note that retransmissions in case of erroneously received RACH message part are under control of higher layers, i.e. RLC, or RRC for CCCH (and SHCCH for TDD). In FDD, the MAC sublayer is in charge of controlling the timing of Enhanced Uplink transmissions in CELL_FACH state and Idle mode on transmission time interval level (the timing on access slot level is controlled by L1). Note that after common EDCH resource allocation the transmission, retransmission and collision resolution of MAC-i PDUs is under control of MAC. Retransmissions in case of erroneously received MAC-is PDUs are under control of higher layers, i.e. RLC, or RRC for CCCH. TS 25.321 v9.9.0 at 104.
[1.a] determining if a E-DCH buffer is empty;	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to determine if a E-DCH buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to determine if a E-DCH buffer is empty. <3GPP TS 25.321 v9.9.0> - Total E-DCH Buffer Status (TEBS): The TEBS field identifies the total amount of data available across all logical channels for which reporting has been requested by the RRC and indicates the amount of data in number of bytes that is available for transmission and retransmission in RLC layer. If MAC-i/is is configured, it also includes the amount of data that is available for transmission in the MAC-i/is segmentation entity. When MAC is connected to an AM RLC entity, control PDUs to be transmitted and RLC PDUs outside the RLC Tx window shall also be included in the TEBS. RLC PDUs that have been transmitted but not negatively acknowledged by the peer entity shall not be included in the TEBS.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	TS 25.321 v9.9.0 at 94. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.
[1.b] transmitting to the base station scheduling information (SI), wherein the SI includes a total E-DCH buffer status (TEBS) equal to zero when the E-DCH buffer is determined to be empty;	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to transmit to the base station scheduling information (SI), wherein the SI includes a total E-DCH buffer status (TEBS) equal to zero when the E-DCH buffer is determined to be empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to transmit to the base station scheduling information (SI), wherein the SI includes a total E-DCH buffer status (TEBS) equal to zero when the E-DCH buffer is determined to be empty.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	<3GPP TS 25.321 v9.9.0> 9.2.5.3 UL Scheduling information This control information is used by UEs to indicate to their serving E-DCH Node-B the amount of resources they require. TS 25.321 v9.9.0 at 94. 9.2.5.3.2 Scheduling Information The Scheduling Information is located at the end of the MAC-e or MAC-i PDU and is used to provide the serving Node B with a better view of the amount of system resources needed by the UE and the amount of resources it can actually make use of. The transmission of this information will be initiated due to the quantization of the transport block sizes that can be supported or based on the triggers defined in subclause 11.8.1.6. When a Scheduling Information is transmitted, its contents shall always be updated in new transmissions with the buffer status after application of the E-TFC selection procedure described in subclause 11.8.1.4. The logical channels for which a non-scheduled grant is configured shall never be taken into account when putting together this information. In addition, the RRC may restrict applicability for logical channels for which no non-scheduled grant was configured. A Scheduling Information is reported independently on each of the Activated Uplink Frequencies. This information includes the following fields: TS 25.321 v9.9.0 at 94. - Total E-DCH Buffer Status (TEBS): The TEBS field identifies the total amount of data available across all logical channels for which reporting has been requested by the RRC and indicates the amount of data in number of bytes that is available for transmission and retransmission in RLC layer. If MAC-i/is is configured, it also includes the amount of data that is available for transmission in the MAC-i/is segmentation entity. When MAC is connected to an AM RLC entity, control PDUs to be transmitted and RLC PDUs outside the RLC Tx window shall also be included in the TEBS. RLC PDUs that have been transmitted but not negatively acknowledged by the peer entity shall not be included in the TEBS. The length of this field is 5 bits. The values taken by TEBS are shown in Table 9.2.5.3.2.1. TS 25.321 v9.9.0 at 94.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	11.8.1.6 Scheduling Information reporting Scheduling information reports will be triggered differently depending on the value of the variable Serving_Grant after the Serving Grant Update function. The triggering of a report shall be indicated to the E-TFC selection function at the first new transmission opportunity. TS 25.321 v9.9.0 at 153. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.
[1.c] determining if a hybrid automatic repeat request (HARQ) buffer is empty; and	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to determine if a hybrid automatic repeat request (HARQ) buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to determine if a hybrid automatic repeat request (HARQ) buffer is empty.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	<3GPP TS 25.321 v9.9.0> If the UE is sending DTCH or DCCH data, the UE shall release the common E-DCH resource under following conditions: - a L1 synchronization failure occurs; or - the maximum period for collision resolution is reached and no E-AGCH with the UE's E-RNTI (through an E-RNTI specific CRC attachment) has been reached; or - an E-AGCH is received with a common E-DCH resource release command (INACTIVE) (explicit common E-DCH resource release) or; - "E-DCH transmission continuation back off" is not set to "infinity", the empty buffer status (TEBS = 0 byte) has been reported and no MAC-i PDU is left in a HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 156.
[1.d] releasing the E-DCH resource when the transmission of the SI with the TEBS equal to zero has been made and the HARQ buffer is empty.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to release the E-DCH resource when the transmission of the SI with the TEBS equal to zero has been made and the HARQ buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to release the E-DCH resource when the transmission of the SI with the TEBS equal to zero has been made and the HARQ buffer is empty. <3GPP TS 25.321 v9.9.0>

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	11.8.1.9 Release of common E-DCH resources (FDD only) If the UE is sending CCCH data in CELL_FACH state or Idle mode, the UE shall release the common E-DCH resource under following conditions: - the empty buffer status (TEBS = 0 byte) has been reported and no MAC-i PDU is left in a HARQ process for (re-)transmission; or - the maximum E-DCH resource allocation for CCCH is reached, or; - a L1 synchronisation failure is reported. TS 25.321 v9.9.0 at 156. If the UE is sending DTCH or DCCH data, the UE shall release the common E-DCH resource under following conditions: - a L1 synchronization failure occurs; or - the maximum period for collision resolution is reached and no E-AGCH with the UE's E-RNTI (through an E-RNTI specific CRC attachment) has been reached; or - an E-AGCH is received with a common E-DCH resource release command (INACTIVE) (explicit common E-DCH resource release) or; - "E-DCH transmission continuation back off" is not set to "infinity", the empty buffer status (TEBS = 0 byte) has been reported and no MAC-i PDU is left in a HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 156.
[2.pre] The method as in claim 1, further comprising	See citations and comments in claim 1 above.
[2.a] starting an inactivity timer when the E-DCH buffer is empty.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to start an inactivity timer when the E-DCH buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to start an inactivity timer when the E-DCH buffer is empty. <3GPP TS 25.321 v9.9.0> 11.2.2A Control of Enhanced Uplink in CELL_FACH state and Idle mode for FDD mode The transmissions in Enhanced Uplink in CELL_FACH state and Idle mode are controlled by the UE MAC sublayer as outlined in figures 11.2.2A-1, 11.2.2A-2 and 11.2.2A-3. TS 25.321 v9.9.0 at 108. - Implicit release with E-DCH transmission continuation backoff Implicit resource release is enabled only if "E-DCH transmission continuation back off" is not set to "infinity". If implicit resource release is enabled, then in case of DTCH/DCCH transmission, the timer Tb is set to "E-DCH transmission continuation back off" value, when TEBS is 0 byte and the last generated MAC-i PDU with higher layer data is provided with the PHY-data-REQ primitive to the physical layer for transmission. If TEBS > 0 byte is detected while timer Tb is running, then the timer is stopped and uplink data transmission on the common E-DCH resource continues. If a MAC-ebs PDU is received while timer Tb is running, then the timer is re-started. If the "E-DCH transmission continuation back off" value is set to "0" or if timer Tb expires the MAC-STATUS-Ind primitive indicates to RLC for each logical channel that no PDUs shall be transferred to MAC. TEBS = 0 byte is reported to the Node B MAC as SI in a MAC-i PDU. If the "E-DCH transmission continuation back off" value is set to "0", then the SI shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination is triggered when the empty buffer status has been reported and no MAC-i PDU is left in any HARQ process for (re-)transmission.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	TS 25.321 v9.9.0 at 109-110.

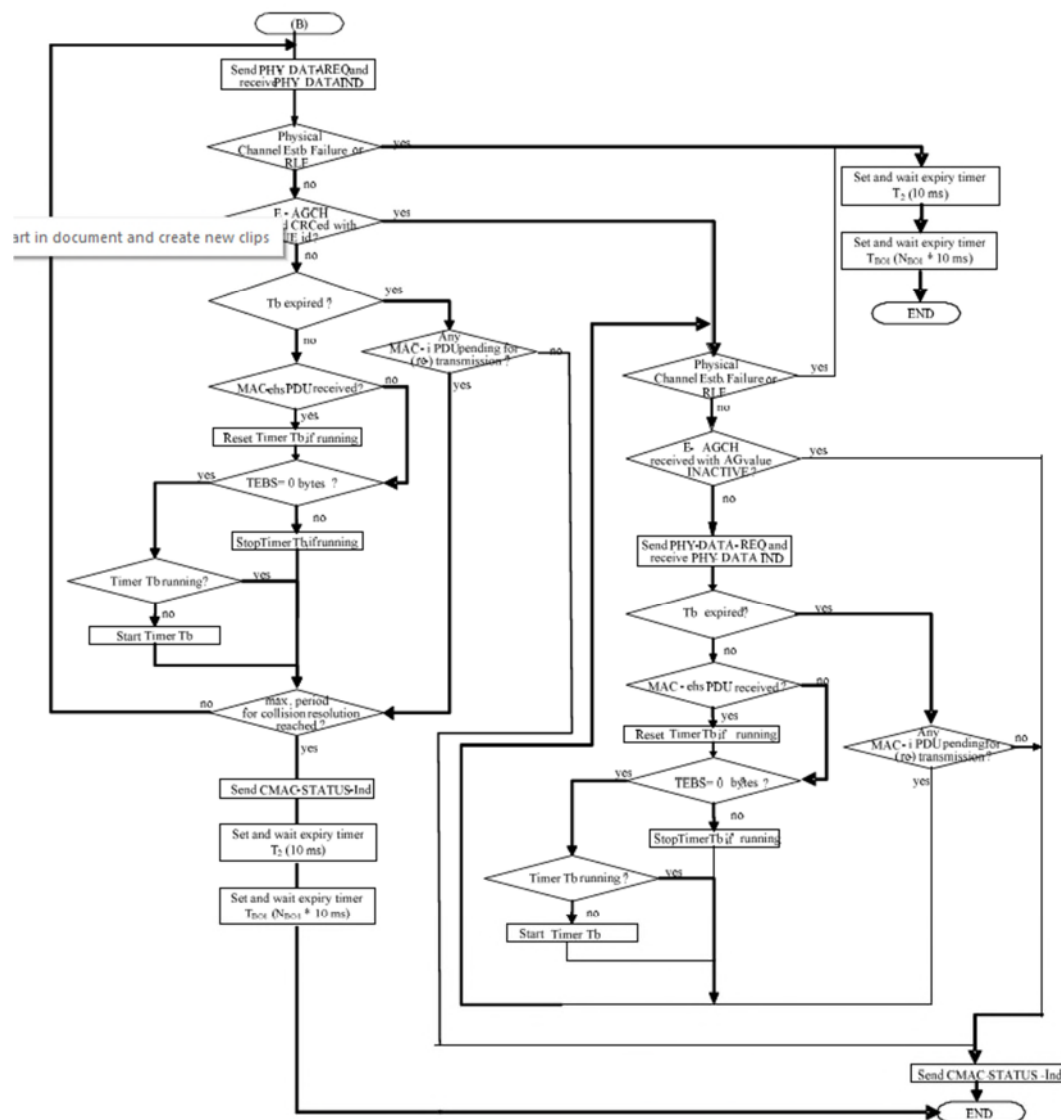


Figure 11.2.2A-3: Enhanced Uplink in CELL_FACH state and Idle mode transmission control procedure (UE side, informative), Part II for DTCH/DCCH transmission

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	TS 25.321 v.9.9.0 at 113. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.
[3.pre] The method as in claim 2, further comprising	See claim 2.
[3.a] triggering the transmission of the SI when the inactivity timer expires.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to trigger the transmission of the SI when the inactivity timer expires. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to trigger the transmission of the SI when the inactivity timer expires.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	<3GPP TS 25.321 v9.9.0>

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

	The E-DCH enhanced physical random access transmission procedure is completed with release of the allocated common E-DCH resource, if one of the following conditions is fulfilled: - If the UE according to subclause 8.5.4A in [7] failed to establish the physical channels, or if the criteria for radio link failure are met as specified in subclause 8.5.6 in [7], then the timer T_2 is started. After the expiry of T_2 a backoff timer T_{BO1} is started. Backoff timer T_{BO1} is set to an integer number N_{BO1} of 10 ms time intervals, randomly drawn within an interval $0 \leq N_{BO1min} \leq N_{BO1} \leq N_{BO1max}$ (with uniform distribution). N_{BO1min} and N_{BO1max} may be set equal when a fixed delay is desired, and even to zero when no delay other than the one due to persistency is desired. The procedure ends if timer T_{BO1} expires or the UE performs cell reselection while timer T_{BO1} is running, whatever occurs first. In case of a cell reselection, the timer T_{BO1} is stopped. - In case of CCCH transmission, if the maximum E-DCH resource allocation for CCCH has been reached, then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. - In case of CCCH transmission, when the MAC-i PDU containing the last MAC-c PDU is being transmitted, TEBS = 0 byte is reported to the Node B MAC as SI in a MAC-i PDU and the MAC-STATUS-Ind primitive indicates to RLC for each logical channel that no PDU shall be transferred to MAC. When the empty buffer status has been reported and no MAC-i PDUs are left for (re-)transmission in MAC, then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. - In case of DTCH/DCCH transmission, if no E-AGCH with UE's E-RNTI has been received (through an E-RNTI-specific CRC attachment) within the maximum period for collision resolution phase, then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. Then the timer T_2 is started. After the expiry of T_2 a backoff timer T_{BO1} is started. Backoff timer T_{BO1} is set to an integer number N_{BO1} of 10 ms time intervals, randomly drawn within an interval $0 \leq N_{BO1min} \leq N_{BO1} \leq N_{BO1max}$ (with uniform distribution). N_{BO1min} and N_{BO1max} may be set equal when a fixed delay is desired, and even to zero when no delay other than the one due to persistency is desired. The procedure ends when T_{BO1} expires. - Explicit common E-DCH resource release: In case of DTCH/DCCH transmission, if an E-AGCH with UE's E-RNTI has been received (through an E-RNTI-specific CRC attachment) with absolute grant value set to 'INACTIVE', then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. - Implicit release with E-DCH transmission continuation backoff Implicit resource release is enabled only if "E-DCH transmission continuation back off" is not set to "infinity".
--	---

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	If implicit resource release is enabled, then in case of DTCH/DCCH transmission, the timer Tb is set to "E-DCH transmission continuation back off" value, when TEBS is 0 byte and the last generated MAC-i PDU with higher layer data is provided with the PHY-data-REQ primitive to the physical layer for transmission. If TEBS $\leq$ 0 byte is detected while timer Tb is running, then the timer is stopped and uplink data transmission on the common E-DCH resource continues. If a MAC-ebs PDU is received while timer Tb is running, then the timer is re-started. If the "E-DCH transmission continuation back off" value is set to "0" or if timer Tb expires the MAC-STATUS-Ind primitive indicates to RLC for each logical channel that no PDUs shall be transferred to MAC. TEBS = 0 byte is reported to the Node B MAC as SI in a MAC-i PDU. If the "E-DCH transmission continuation back off" value is set to "0", then the SI shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination is triggered when the empty buffer status has been reported and no MAC-i PDU is left in any HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 109-110. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
[4.pre] The method as in claim 1, further comprising	See claim 1.
[4.a] transmitting using the E-DCH resource when a response is received on an E-DCH acquisition indication channel (E-AICH) to a preamble transmitted by the WTRU.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to transmit using the E-DCH resource when a response is received on an E-DCH acquisition indication channel (E-AICH) to a preamble transmitted by the WTRU. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to transmit using the E-DCH resource when a response is received on an E-DCH acquisition indication channel (E-AICH) to a preamble transmitted by the WTRU. <3GPP TS 25.214 v9.8.0> 6.1A Physical random access procedure for Enhanced Uplink in CELL_FACH state and IDLE mode The physical random access procedure described in this subclause is initiated upon request from the MAC sublayer (cf. [9]). TS 25.214 v9.8.0 at 41.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	8 If a positive acquisition indicator on AICH corresponding to the selected signature is detected in the downlink access slot corresponding to the selected uplink access slot, pass L1 status ('Ack on AICH received') with the default E-DCH resource index corresponding to the selected signature as defined in [1] to higher layers (MAC), 9 Start transmitting DPCCH (timing as specified in [1] and synchronisation according to synchronisation procedure AA). The initial transmission power of DPCCH prior to starting the E-DCH transmission should be P_{p-e} [dB] higher than the power of the last transmitted preamble. 10 Proceed to transmitting E-DPCCH and E-DPDCH as instructed by MAC layer after the defined number of TTIs of DPCCH only transmission has passed. TS 25.214 v9.8.0 at 42. <3GPP TS 25.211 v9.2.0> 5.3.3.7 Acquisition Indicator Channel (AICH) The Acquisition Indicator channel (AICH) is a fixed rate (SF=256) physical channel used to carry Acquisition Indicators (AI) and Extended Acquisition Indicators (EAI). Acquisition Indicator AI_s corresponds to signature s on the PRACH. Extended Acquisition Indicators represent a set of values corresponding to a set of E-DCH resource configurations. TS 25.211 v9.2.0 at 38.
[5.pre] The method as in claim 1, further comprising	See claim 1.
[5.a] completing an E-DCH transmission when a cell reselection or a radio link failure occurs.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to complete an E-DCH transmission when a cell reselection or a radio link failure occurs. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to complete an E-DCH transmission when a cell reselection or a radio link failure occurs.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	<3GPP TS 25.321 v9.9.0> The E-DCH enhanced physical random access transmission procedure is completed with release of the allocated common E-DCH resource, if one of the following conditions is fulfilled: - If the UE according to subclause 8.5.4A in [7] failed to establish the physical channels, or if the criteria for radio link failure are met as specified in subclause 8.5.6 in [7], then the timer T_2 is started. After the expiry of T_2 a backoff timer T_{BOI} is started. Backoff timer T_{BOI} is set to an integer number N_{BOI} of 10 ms time intervals, randomly drawn within an interval $0 \leq N_{BOImin} \leq N_{BOI} \leq N_{BOImax}$ (with uniform distribution). N_{BOImin} and N_{BOImax} may be set equal when a fixed delay is desired, and even to zero when no delay other than the one due to persistency is desired. The procedure ends if timer T_{BOI} expires or the UE performs cell reselection while timer T_{BOI} is running, whatever occurs first. In case of a cell reselection, the timer T_{BOI} is stopped. TS 25.321 v9.9.0 at 109.
[6.pre] A wireless transmit/receive unit (WTRU) capable of communicating with a base station using an enhanced dedicated channel (E-DCH) resource while in a cell forward access channel (CELL_FACH) state, the WTRU comprising:	To the extent the preamble is construed as a limitation, each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive capable of communicating with a base station using an enhanced dedicated channel (E-DCH) resource while in a cell forward access channel (CELL_FACH) state. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.212, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit capable of communicating with a base station using an enhanced dedicated channel (E-DCH) resource while in a cell forward access channel (CELL_FACH) state. <3GPP TS 25.321 v9.9.0>

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	3.1.2.1 General E-DCH: The Enhanced Dedicated Channel (E-DCH) is an uplink transport channel. TS 25.321 v9.9.0 at 10 4.2.3 Traffic Related Architecture - UE Side Figure 4.2.3.1 illustrates the connectivity of MAC entities. The MAC-c/sh/m controls access to all common transport channels, except the HS-DSCH transport channel and the E-DCH transport channel (FDD and 1.28Mcps TDD only). The MAC-d controls access to all dedicated transport channels, to MAC-c/sh/m and MAC-hs/ehs. The MAC-c/sh/m controls access to MAC-is/i. (FDD and 1.28Mcps TDD only for UEs in CELL_FACH state and Idle mode). The MAC-hs/ehs handles the HSDPA specific functions and controls access to the HS-DSCH transport channel. Upper layers configure which of the two entities, MAC-hs or MAC-ehs, is to be applied to handle HS-DSCH functionality. The MAC-e/es or MAC-i/is controls access to the E-DCH transport channel. Upper layers configure which of the two entities, MAC-e/es or MAC-i/is, is to be applied to handle E-DCH functionality. In case of selective combining of MTCH channels from multiple cells, the MAC-m controls access to the FACH transport channels used to carry MTCH and MSCH. TS 25.321 v9.9.0 at 16.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	11.2 Control of RACH transmissions and Enhanced Uplink in CELL_FACH state and Idle mode transmissions The MAC sublayer is in charge of controlling the timing of RACH transmissions on transmission time interval level (the timing on access slot level is controlled by L1). Note that retransmissions in case of erroneously received RACH message part are under control of higher layers, i.e. RLC, or RRC for CCCH (and SHCCH for TDD). In FDD, the MAC sublayer is in charge of controlling the timing of Enhanced Uplink transmissions in CELL_FACH state and Idle mode on transmission time interval level (the timing on access slot level is controlled by L1). Note that after common EDCH resource allocation the transmission, retransmission and collision resolution of MAC-i PDUs is under control of MAC. Retransmissions in case of erroneously received MAC-is PDUs are under control of higher layers, i.e. RLC, or RRC for CCCH. TS 25.321 v9.9.0 at 104.
[6.a] a E-DCH buffer;	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive including an E-DCH buffer. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit including an E-DCH buffer. <3GPP TS 25.321 v9.9.0> - Total E-DCH Buffer Status (TEBS): The TEBS field identifies the total amount of data available across all logical channels for which reporting has been requested by the RRC and indicates the amount of data in number of bytes that is available for transmission and retransmission in RLC layer. If MAC-i/is is configured, it also includes the amount of data that is available for transmission in the MAC-i/is segmentation entity. When MAC is connected to an AM RLC entity, control PDUs to be transmitted and RLC PDUs outside the RLC Tx window shall also be included in the TEBS. RLC PDUs that have been transmitted but not negatively acknowledged by the peer entity shall not be included in the TEBS.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	TS 25.321 v9.9.0 at 94. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.
[6.b] a transmitter;	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard.
[6.c] a hybrid automatic repeat request (HARQ) buffer; and	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit including a hybrid automatic repeat request (HARQ) buffer. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211/25.212, 25.213, 25.214, 25.215, 25.216, 25.217, 25.218, 25.219, 25.220, 25.221, 25.222, 25.223, 25.224, 25.225, 25.226, 25.227, 25.228, 25.229, 25.230, 25.231, 25.232, 25.233, 25.234, 25.235, 25.236, 25.237, 25.238, 25.239, 25.240, 25.241, 25.242, 25.243, 25.244, 25.245, 25.246, 25.247, 25.248, 25.249, 25.250, 25.251, 25.252, 25.253, 25.254, 25.255, 25.256, 25.257, 25.258, 25.259, 25.260, 25.261, 25.262, 25.263, 25.264, 25.265, 25.266, 25.267, 25.268, 25.269, 25.270, 25.271, 25.272, 25.273, 25.274, 25.275, 25.276, 25.277, 25.278, 25.279, 25.280, 25.281, 25.282, 25.283, 25.284, 25.285, 25.286, 25.287, 25.288, 25.289, 25.290, 25.291, 25.292, 25.293, 25.294, 25.295, 25.296, 25.297, 25.298, 25.299, 25.300, 25.301, 25.302, 25.303, 25.304, 25.305, 25.306, 25.307, 25.308, 25.309, 25.310, 25.311, 25.312, 25.313, 25.314, 25.315, 25.316, 25.317, 25.318, 25.319, 25.320, 25.321, 25.322, 25.323, 25.324, 25.325, 25.326, 25.327, 25.328, 25.329, 25.330, 25.331, 25.332, 25.333, 25.334, 25.335, 25.336, 25.337, 25.338, 25.339, 25.340, 25.341, 25.342, 25.343, 25.344, 25.345, 25.346, 25.347, 25.348, 25.349, 25.350, 25.351, 25.352, 25.353, 25.354, 25.355, 25.356, 25.357, 25.358, 25.359, 25.360, 25.361, 25.362, 25.363, 25.364, 25.365, 25.366, 25.367, 25.368, 25.369, 25.370, 25.371, 25.372, 25.373, 25.374, 25.375, 25.376, 25.377, 25.378, 25.379, 25.380, 25.381, 25.382, 25.383, 25.384, 25.385, 25.386, 25.387, 25.388, 25.389, 25.390, 25.391, 25.392, 25.393, 25.394, 25.395, 25.396, 25.397, 25.398, 25.399, 25.400, 25.401, 25.402, 25.403, 25.404, 25.405, 25.406, 25.407, 25.408, 25.409, 25.410, 25.411, 25.412, 25.413, 25.414, 25.415, 25.416, 25.417, 25.418, 25.419, 25.420, 25.421, 25.422, 25.423, 25.424, 25.425, 25.426, 25.427, 25.428, 25.429, 25.430, 25.431, 25.432, 25.433, 25.434, 25.435, 25.436, 25.437, 25.438, 25.439, 25.440, 25.441, 25.442, 25.443, 25.444, 25.445, 25.446, 25.447, 25.448, 25.449, 25.450, 25.451, 25.452, 25.453, 25.454, 25.455, 25.456, 25.457, 25.458, 25.459, 25.460, 25.461, 25.462, 25.463, 25.464, 25.465, 25.466, 25.467, 25.468, 25.469, 25.470, 25.471, 25.472, 25.473, 25.474, 25.475, 25.476, 25.477, 25.478, 25.479, 25.480, 25.481, 25.482, 25.483, 25.484, 25.485, 25.486, 25.487, 25.488, 25.489, 25.490, 25.491, 25.492, 25.493, 25.494, 25.495, 25.496, 25.497, 25.498, 25.499, 25.500, 25.501, 25.502, 25.503, 25.504, 25.505, 25.506, 25.507, 25.508, 25.509, 25.510, 25.511, 25.512, 25.513, 25.514, 25.515, 25.516, 25.517, 25.518, 25.519, 25.520, 25.521, 25.522, 25.523, 25.524, 25.525, 25.526, 25.527, 25.528, 25.529, 25.530, 25.531, 25.532, 25.533, 25.534, 25.535, 25.536, 25.537, 25.538, 25.539, 25.540, 25.541, 25.542, 25.543, 25.544, 25.545, 25.546, 25.547, 25.548, 25.549, 25.550, 25.551, 25.552, 25.553, 25.554, 25.555, 25.556, 25.557, 25.558, 25.559, 25.560, 25.561, 25.562, 25.563, 25.564, 25.565, 25.566, 25.567, 25.568, 25.569, 25.570, 25.571, 25.572, 25.573, 25.574, 25.575, 25.576, 25.577, 25.578, 25.579, 25.580, 25.581, 25.582, 25.583, 25.584, 25.585, 25.586, 25.587, 25.588, 25.589, 25.590, 25.591, 25.592, 25.593, 25.594, 25.595, 25.596, 25.597, 25.598, 25.599, 25.600, 25.601, 25.602, 25.603, 25.604, 25.605, 25.606, 25.607, 25.608, 25.609, 25.610, 25.611, 25.612, 25.613, 25.614, 25.615, 25.616, 25.617, 25.618, 25.619, 25.620, 25.621, 25.622, 25.623, 25.624, 25.625, 25.626, 25.627, 25.628, 25.629, 25.630, 25.631, 25.632, 25.633, 25.634, 25.635, 25.636, 25.637, 25.638, 25.639, 25.640, 25.641, 25.642, 25.643, 25.644, 25.645, 25.646, 25.647, 25.648, 25.649, 25.650, 25.651, 25.652, 25.653, 25.654, 25.655, 25.656, 25.657, 25.658, 25.659, 25.660, 25.661, 25.662, 25.663, 25.664, 25.665, 25.666, 25.667, 25.668, 25.669, 25.670, 25.671, 25.672, 25.673, 25.674, 25.675, 25.676, 25.677, 25.678, 25.679, 25.680, 25.681, 25.682, 25.683, 25.684, 25.685, 25.686, 25.687, 25.688, 25.689, 25.690, 25.691, 25.692, 25.693, 25.694, 25.695, 25.696, 25.697, 25.698, 25.699, 25.700, 25.701, 25.702, 25.703, 25.704, 25.705, 25.706, 25.707, 25.708, 25.709, 25.710, 25.711, 25.712, 25.713, 25.714, 25.715, 25.716, 25.717, 25.718, 25.719, 25.720, 25.721, 25.722, 25.723, 25.724, 25.725, 25.726, 25.727, 25.728, 25.729, 25.730, 25.731, 25.732, 25.733, 25.734, 25.735, 25.736, 25.737, 25.738, 25.739, 25.740, 25.741, 25.742, 25.743, 25.744, 25.745, 25.746, 25.747, 25.748, 25.749, 25.750, 25.751, 25.752, 25.753, 25.754, 25.755, 25.756, 25.757, 25.758, 25.759, 25.760, 25.761, 25.762, 25.763, 25.764, 25.765, 25.766, 25.767, 25.768, 25.769, 25.770, 25.771, 25.772, 25.773, 25.774, 25.775, 25.776, 25.777, 25.778, 25.779, 25.780, 25.781, 25.782, 25.783, 25.784, 25.785, 25.786, 25.787, 25.788, 25.789, 25.790, 25.791, 25.792, 25.793, 25.794, 25.795, 25.796, 25.797, 25.798, 25.799, 25.800, 25.801, 25.802, 25.803, 25.804, 25.805, 25.806, 25.807, 25.808, 25.809, 25.810, 25.811, 25.812, 25.813, 25.814, 25.815, 25.816, 25.817, 25.818, 25.819, 25.820, 25.821, 25.822, 25.823, 25.824, 25.825, 25.826, 25.827, 25.828, 25.829, 25.830, 25.831, 25.832, 25.833, 25.834, 25.835, 25.836, 25.837, 25.838, 25.839, 25.840, 25.841, 25.842, 25.843, 25.844, 25.845, 25.846, 25.847, 25.848, 25.849, 25.850, 25.851, 25.852, 25.853, 25.854, 25.855, 25.856, 25.857, 25.858, 25.859, 25.860, 25.861, 25.862, 25.863, 25.864, 25.865, 25.866, 25.867, 25.868, 25.869, 25.870, 25.871, 25.872, 25.873, 25.874, 25.875, 25.876, 25.877, 25.878, 25.879, 25.880, 25.881, 25.882, 25.883, 25.884, 25.885, 25.886, 25.887, 25.888, 25.889, 25.890, 25.891, 25.892, 25.893, 25.894, 25.895, 25.896, 25.897, 25.898, 25.899, 25.900, 25.901, 25.902, 25.903, 25.904, 25.905, 25.906, 25.907, 25.908, 25.909, 25.910, 25.911, 25.912, 25.913, 25.914, 25.915, 25.916, 25.917, 25.918, 25.919, 25.920, 25.921, 25.922, 25.923, 25.924, 25.925, 25.926, 25.927, 25.928, 25.929, 25.930, 25.931, 25.932, 25.933, 25.934, 25.935, 25.936, 25.937, 25.938, 25.939, 25.940, 25.941, 25.942, 25.943, 25.944, 25.945, 25.946, 25.947, 25.948, 25.949, 25.950, 25.951, 25.952, 25.953, 25.954, 25.955, 25.956, 25.957, 25.958, 25.959, 25.960, 25.961, 25.962, 25.963, 25.964, 25.965, 25.966, 25.967, 25.968, 25.969, 25.970, 25.971, 25.972, 25.973, 25.974, 25.975, 25.976, 25.977, 25.978, 25.979, 25.980, 25.981, 25.982, 25.983, 25.984, 25.985, 25.986, 25.987, 25.988, 25.989, 25.990, 25.991, 25.992, 25.993, 25.994, 25.995, 25.996, 25.997, 25.998, 25.999, 26.000, 26.001, 26.002, 26.003, 26.004, 26.005, 26.006, 26.007, 26.008, 26.009, 26.010, 26.011, 26.012, 26.013, 26.014, 26.015, 26.016, 26.017, 26.018, 26.019, 26.020, 26.021, 26.022, 26.023, 26.024, 26.025, 26.026, 26.027, 26.028, 26.029, 26.030, 26.031, 26.032, 26.033, 26.034, 26.035, 26.036, 26.037, 26.038, 26.039, 26.040, 26.041, 26.042, 26.043, 26.044, 26.045, 26.046, 26.047, 26.048, 26.049, 26.050, 26.051, 26.052, 26.053, 26.054, 26.055, 26.056, 26.057, 26.058, 26.059, 26.060, 26.061, 26.062, 26.063, 26.064, 26.065, 26.066, 26.067, 26.068, 26.069, 26.070, 26.071, 26.072, 26.073, 26.074, 26.075, 26.076, 26.077, 26.078, 26.079, 26.080, 26.081, 26.082, 26.083, 26.084, 26.085, 26.086, 26.087, 26.088, 26.089, 26.090, 26.091, 26.092, 26.093, 26.094, 26.095, 26.096, 26.097, 26.098, 26.099, 26.100, 26.101, 26.102, 26.103, 26.104, 26.105, 26.106, 26.107, 26.108, 26.109, 26.110, 26.111, 26.112, 26.113, 26.114, 26.115, 26.116, 26.117, 26.118, 26.119, 26.120, 26.121, 26.122, 26.123, 26.124, 26.125, 26.126, 26.127, 26.128, 26.129, 26.130, 26.131, 26.132, 26.133, 26.134, 26.135, 26.136, 26.137, 26.138, 26.139, 26.140, 26.141, 26.142, 26.143, 26.144, 26.145, 26.146, 26.147, 26.148, 26.149, 26.150, 26.151, 26.152, 26.153, 26.154, 26.155, 26.156, 26.157, 26.158, 26.159, 26.160, 26.161, 26.162, 26.163, 26.164, 26.165, 26.166, 26.167, 26.168, 26.169, 26.170, 26.171, 26.172, 26.173, 26.174, 26.175, 26.176, 26.177, 26.178, 26.179, 26.180, 26.181, 26.182, 26.183, 26.184, 26.185, 26.186, 26.187, 26.188, 26.189, 26.190, 26.191, 26.192, 26.193, 26.194, 26.195, 26.196, 26.197, 26.198, 26.199, 26.200, 26.201, 26.202, 26.203, 26.204, 26.205, 26.206, 26.207, 26.208, 26.209, 26.210, 26.211, 26.212, 26.213, 26.214, 26.215, 26.216, 26.217, 26.218, 26.219, 26.220, 26.221, 26.222, 26.223, 26.224, 26.225, 26.226, 26.227, 26.228, 26.229, 26.230, 26.231, 26.232, 26.233, 26.234, 26.235, 26.236, 26.237, 26.238, 26.239, 26.240, 26.241, 26.242, 26.243, 26.244, 26.245, 26.246, 26.247, 26.248, 26.249, 26.250, 26.251, 26.252, 26.253, 26.254, 26.255, 26.256, 26.257, 26.258, 26.259, 26.260, 26.261, 26.262, 26.263, 26.264, 26.265, 26.266, 26.267, 26.268, 26.269, 26.270, 26.271, 26.272, 26.273, 26.274, 26.275, 26.276, 26.277, 26.278, 26.279, 26.280, 26.281, 26.282, 26.283, 26.284, 26.285, 26.286, 26.287, 26.288, 26.289, 26.290, 26.291, 26.292, 26.293, 26.294, 26.295, 26.296, 26.297, 26.298, 26.299, 26.300, 26.301, 26.302, 26.303, 26.304, 26.305, 26.306, 26.307, 26.308, 26.309, 26.310, 26.311, 26.312, 26.313, 26.314, 26.315, 26.316, 26.317, 26.318, 26.319, 26.320, 26.321, 26.322, 26.323, 26.324, 26.325, 26.326, 26.327, 26.328, 26.329, 26.330, 26.331, 26.332, 26.333, 26.334, 26.335, 26.336, 26.337, 26.338, 26.339, 26.340, 26.341, 26.342, 26.343, 26.344, 26.345, 26.346, 26.347, 26.348, 26.349, 26.350, 26.351, 26.352, 26.353, 26.354, 26.355, 26.356, 26.357, 26.358, 26.359, 26.360, 26.361, 26.362, 26.363, 26.364, 26.365, 26.366, 26.367, 26.368, 26.369, 26.370, 26.371, 26.372, 26.373, 26.374, 26.375, 26.376, 26.377, 26.378, 26.379, 26.380, 26.381, 26.382, 26.383, 26.384, 26.385, 26.386, 26.387, 26.388, 26.389, 26.390, 26.391, 26.392, 26.393, 26.394, 26.395, 26.396, 26.397, 26.398, 26.399, 26.400, 26.401, 26.402, 26.403, 26.404, 26.405, 26.406, 26.407, 26.408, 26.409, 26.410, 26.411, 26.412, 26.413, 26.414, 26.415, 26.416, 26.417, 26.418, 26.419, 26.420, 26.421, 26.422, 26.423, 26.424, 26.425, 26.426, 26.427, 26.428, 26.429, 26.430, 26.431, 26.432, 26.433, 26.434, 26.435, 26.436, 26.437, 26.438, 26.439, 26.440, 26.441, 26.442, 26.443, 26.444, 26.445, 26.446, 26.447, 26.448, 26.449, 26.450, 26.451, 26.452, 26.453, 26.454, 26.455, 26.456, 26.457, 26.458, 26.459, 26.460, 26.461, 26.462, 26.463, 26.464, 26.465, 26.466, 26.467, 26.468, 26.469, 26.470, 26.471, 26.472, 26.473, 26.474, 26.475, 26.476, 26.477, 26.478, 26.479, 26.480, 26.481, 26.482, 26.483, 26.484, 26.485, 26.486, 26.487, 26.488, 26.489, 26.490, 26.491, 26.492, 26.493, 26.494, 26.495, 26.496, 26.497, 26.498, 26.499, 26.500, 26.501, 26.502, 26.503, 26.504, 26.505, 26.506, 26.507, 26.508, 26.509, 26.510, 26.511, 26.512, 26.513, 26.514, 26.515, 26.516, 26.517, 26.518, 26.519, 26.520, 26.521, 26.522, 26.523, 26.524, 26.525, 26.526, 26.527, 26.528, 26.529, 26.530, 26.531, 26.532, 26.533, 26.534, 26.535, 26.536, 26.537, 26.538, 26.539, 26.540, 26.541, 26.542, 26.543, 26.544, 26.545, 26.546, 26.547, 26.548, 26.549, 26.550, 26.551, 26.552, 26.553, 26.554, 26.555, 26.556, 26.557, 26.558, 26.559, 26.560, 26.561, 26.562, 26.563, 26.564, 26.565, 26.566, 26.567, 26.568, 26.569, 26.570, 26.571, 26.572, 26.573, 26.574, 26.575, 26.576, 26.577, 26.578, 26.579, 26.580, 26.581, 26.582, 26.583, 26.584, 26.585, 26.586, 26.587, 26.588, 26.589, 26.590, 26.591, 26.592, 26.593, 26.594, 26.595, 26.596, 26.597, 26.598, 26.599, 26.600, 26.601, 26.602, 26.603, 26.604, 26.605, 26.606, 26.607, 26.608, 26.609, 26.610, 26.611, 26.612, 26.613, 26.614, 26.615, 26.616, 26.617, 26.618, 26.619, 26.620, 26.621, 26.622, 26.623, 26.624, 26.625, 26.626, 26.627, 26.628, 26.629, 26.630, 26.631, 26.632, 26.633, 26.634, 26.635, 26.636,

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit including a hybrid automatic repeat request (HARQ) buffer. <3GPP TS 25.321 v9.9.0> 11.8.1.1.2 HARQ process Each HARQ process is associated with a physical buffer (HARQ buffer). TS 25.321 v9.9.0 at 142. If the UE is sending DTCH or DCCH data, the UE shall release the common E-DCH resource under following conditions: - a L1 synchronization failure occurs; or - the maximum period for collision resolution is reached and no E-AGCH with the UE's E-RNTI (through an E-RNTI specific CRC attachment) has been reached; or - an E-AGCH is received with a common E-DCH resource release command (INACTIVE) (explicit common E-DCH resource release) or; - "E-DCH transmission continuation back off" is not set to "infinity", the empty buffer status (TEBS = 0 byte) has been reported and no MAC-i PDU is left in a HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 156.
[6.d] a processor; wherein the processor	Each of the Accused LGE '809 Products is a user equipment that would have a processor. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a processor that operates in accordance with WCDMA cellular standard.
[6.e] determines if the E-DCH buffer is empty;	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to determine if a E-DCH buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to determine if a E-DCH buffer is empty. <3GPP TS 25.321 v9.9.0> - Total E-DCH Buffer Status (TEBS): The TEBS field identifies the total amount of data available across all logical channels for which reporting has been requested by the RRC and indicates the amount of data in number of bytes that is available for transmission and retransmission in RLC layer. If MAC-i is configured, it also includes the amount of data that is available for transmission in the MAC-i segmentation entity. When MAC is connected to an AM RLC entity, control PDUs to be transmitted and RLC PDUs outside the RLC Tx window shall also be included in the TEBS. RLC PDUs that have been transmitted but not negatively acknowledged by the peer entity shall not be included in the TEBS. TS 25.321 v9.9.0 at 94. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	TS 25.321 v9.9.0 at 153-154.
[6.f] causes the transmitter to transmit to the base station scheduling information (SI), wherein the SI includes a total E-DCH buffer status (TEBS) equal to zero for the E-DCH buffer when the processor has determined that the E-DCH buffer is empty;	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to cause the transmitter to transmit to the base station scheduling information (SI), wherein the SI includes a total E-DCH buffer status (TEBS) equal to zero for the E-DCH buffer when the processor has determined that the E-DCH buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to cause the transmitter to transmit to the base station scheduling information (SI), wherein the SI includes a total E-DCH buffer status (TEBS) equal to zero for the E-DCH buffer when the processor has determined that the E-DCH buffer is empty. <3GPP TS 25.321 v9.9.0> 9.2.5.3 UL Scheduling information This control information is used by UEs to indicate to their serving E-DCH Node-B the amount of resources they require. TS 25.321 v9.9.0 at 94.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	9.2.5.3.2 Scheduling Information The Scheduling Information is located at the end of the MAC-e or MAC-i PDU and is used to provide the serving Node B with a better view of the amount of system resources needed by the UE and the amount of resources it can actually make use of. The transmission of this information will be initiated due to the quantization of the transport block sizes that can be supported or based on the triggers defined in subclause 11.8.1.6. When a Scheduling Information is transmitted, its contents shall always be updated in new transmissions with the buffer status after application of the E-TFC selection procedure described in subclause 11.8.1.4. The logical channels for which a non-scheduled grant is configured shall never be taken into account when putting together this information. In addition, the RRC may restrict applicability for logical channels for which no non-scheduled grant was configured. A Scheduling Information is reported independently on each of the Activated Uplink Frequencies. This information includes the following fields: TS 25.321 v9.9.0 at 94. - Total E-DCH Buffer Status (TEBS): The TEBS field identifies the total amount of data available across all logical channels for which reporting has been requested by the RRC and indicates the amount of data in number of bytes that is available for transmission and retransmission in RLC layer. If MAC-i/is is configured, it also includes the amount of data that is available for transmission in the MAC-i/is segmentation entity. When MAC is connected to an AM RLC entity, control PDUs to be transmitted and RLC PDUs outside the RLC Tx window shall also be included in the TEBS. RLC PDUs that have been transmitted but not negatively acknowledged by the peer entity shall not be included in the TEBS. The length of this field is 5 bits. The values taken by TEBS are shown in Table 9.2.5.3.2.1. TS 25.321 v9.9.0 at 94. 11.8.1.6 Scheduling Information reporting Scheduling information reports will be triggered differently depending on the value of the variable <u>Serving_Grant</u> after the Serving Grant Update function. The triggering of a report shall be indicated to the E-TFC selection function at the first new transmission opportunity. TS 25.321 v9.9.0 at 153.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.
[6.g] determines if the HARQ buffer is empty; and	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to determine if the HARQ buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to determine if the HARQ buffer is empty. <3GPP TS 25.321 v9.9.0>

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	If the UE is sending DTCH or DCCH data, the UE shall release the common E-DCH resource under following conditions: - a L1 synchronization failure occurs; or - the maximum period for collision resolution is reached and no E-AGCH with the UE's E-RNTI (through an E-RNTI specific CRC attachment) has been reached; or - an E-AGCH is received with a common E-DCH resource release command (INACTIVE) (explicit common E-DCH resource release) or; - "E-DCH transmission continuation back off" is not set to "infinity", the empty buffer status (TEBS = 0 byte) has been reported and no MAC-i PDU is left in a HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 156.
[6.h] releases the E-DCH resource when the transmission of the SI with the TEBS equal to zero has been made and the HARQ buffer is empty.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to release the E-DCH resource when the transmission of the SI with the TEBS equal to zero has been made and the HARQ buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to release the E-DCH resource when the transmission of the SI with the TEBS equal to zero has been made and the HARQ buffer is empty. <3GPP TS 25.321 v9.9.0>

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	11.8.1.9 Release of common E-DCH resources (FDD only) If the UE is sending CCCH data in CELL_FACH state or Idle mode, the UE shall release the common E-DCH resource under following conditions: - the empty buffer status (TEBS = 0 byte) has been reported and no MAC-i PDU is left in a HARQ process for (re-)transmission; or - the maximum E-DCH resource allocation for CCCH is reached, or; - a L1 synchronisation failure is reported. TS 25.321 v9.9.0 at 156. If the UE is sending DTCH or DCCH data, the UE shall release the common E-DCH resource under following conditions: - a L1 synchronization failure occurs; or - the maximum period for collision resolution is reached and no E-AGCH with the UE's E-RNTI (through an E-RNTI specific CRC attachment) has been reached; or - an E-AGCH is received with a common E-DCH resource release command (INACTIVE) (explicit common E-DCH resource release) or; - "E-DCH transmission continuation back off" is not set to "infinity", the empty buffer status (TEBS = 0 byte) has been reported and no MAC-i PDU is left in a HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 156.
[7.pre] The WTRU as in claim 6, wherein	See claim 6.
[7.a] the processor completes an E-DCH transmission when a cell reselection or a radio link failure occurs.	Each of the Accused LGE '809 Products is a user equipment that would have a processor to complete an E-DCH transmission when a cell reselection or a radio link failure occurs. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 25.212, 25.213, 25.214, 25.215, 25.216, 25.217, 25.218, 25.219, 25.220, 25.221, 25.222, 25.223, 25.224, 25.225, 25.226, 25.227, 25.228, 25.229, 25.230, 25.231, 25.232, 25.233, 25.234, 25.235, 25.236, 25.237, 25.238, 25.239, 25.240, 25.241, 25.242, 25.243, 25.244, 25.245, 25.246, 25.247, 25.248, 25.249, 25.250, 25.251, 25.252, 25.253, 25.254, 25.255, 25.256, 25.257, 25.258, 25.259, 25.260, 25.261, 25.262, 25.263, 25.264, 25.265, 25.266, 25.267, 25.268, 25.269, 25.270, 25.271, 25.272, 25.273, 25.274, 25.275, 25.276, 25.277, 25.278, 25.279, 25.280, 25.281, 25.282, 25.283, 25.284, 25.285, 25.286, 25.287, 25.288, 25.289, 25.290, 25.291, 25.292, 25.293, 25.294, 25.295, 25.296, 25.297, 25.298, 25.299, 25.300, 25.301, 25.302, 25.303, 25.304, 25.305, 25.306, 25.307, 25.308, 25.309, 25.310, 25.311, 25.312, 25.313, 25.314, 25.315, 25.316, 25.317, 25.318, 25.319, 25.320, 25.321, 25.322, 25.323, 25.324, 25.325, 25.326, 25.327, 25.328, 25.329, 25.330, 25.331, 25.332, 25.333, 25.334, 25.335, 25.336, 25.337, 25.338, 25.339, 25.340, 25.341, 25.342, 25.343, 25.344, 25.345, 25.346, 25.347, 25.348, 25.349, 25.350, 25.351, 25.352, 25.353, 25.354, 25.355, 25.356, 25.357, 25.358, 25.359, 25.360, 25.361, 25.362, 25.363, 25.364, 25.365, 25.366, 25.367, 25.368, 25.369, 25.370, 25.371, 25.372, 25.373, 25.374, 25.375, 25.376, 25.377, 25.378, 25.379, 25.380, 25.381, 25.382, 25.383, 25.384, 25.385, 25.386, 25.387, 25.388, 25.389, 25.390, 25.391, 25.392, 25.393, 25.394, 25.395, 25.396, 25.397, 25.398, 25.399, 25.400, 25.401, 25.402, 25.403, 25.404, 25.405, 25.406, 25.407, 25.408, 25.409, 25.410, 25.411, 25.412, 25.413, 25.414, 25.415, 25.416, 25.417, 25.418, 25.419, 25.420, 25.421, 25.422, 25.423, 25.424, 25.425, 25.426, 25.427, 25.428, 25.429, 25.430, 25.431, 25.432, 25.433, 25.434, 25.435, 25.436, 25.437, 25.438, 25.439, 25.440, 25.441, 25.442, 25.443, 25.444, 25.445, 25.446, 25.447, 25.448, 25.449, 25.450, 25.451, 25.452, 25.453, 25.454, 25.455, 25.456, 25.457, 25.458, 25.459, 25.460, 25.461, 25.462, 25.463, 25.464, 25.465, 25.466, 25.467, 25.468, 25.469, 25.470, 25.471, 25.472, 25.473, 25.474, 25.475, 25.476, 25.477, 25.478, 25.479, 25.480, 25.481, 25.482, 25.483, 25.484, 25.485, 25.486, 25.487, 25.488, 25.489, 25.490, 25.491, 25.492, 25.493, 25.494, 25.495, 25.496, 25.497, 25.498, 25.499, 25.500, 25.501, 25.502, 25.503, 25.504, 25.505, 25.506, 25.507, 25.508, 25.509, 25.510, 25.511, 25.512, 25.513, 25.514, 25.515, 25.516, 25.517, 25.518, 25.519, 25.520, 25.521, 25.522, 25.523, 25.524, 25.525, 25.526, 25.527, 25.528, 25.529, 25.530, 25.531, 25.532, 25.533, 25.534, 25.535, 25.536, 25.537, 25.538, 25.539, 25.540, 25.541, 25.542, 25.543, 25.544, 25.545, 25.546, 25.547, 25.548, 25.549, 25.550, 25.551, 25.552, 25.553, 25.554, 25.555, 25.556, 25.557, 25.558, 25.559, 25.560, 25.561, 25.562, 25.563, 25.564, 25.565, 25.566, 25.567, 25.568, 25.569, 25.570, 25.571, 25.572, 25.573, 25.574, 25.575, 25.576, 25.577, 25.578, 25.579, 25.580, 25.581, 25.582, 25.583, 25.584, 25.585, 25.586, 25.587, 25.588, 25.589, 25.590, 25.591, 25.592, 25.593, 25.594, 25.595, 25.596, 25.597, 25.598, 25.599, 25.600, 25.601, 25.602, 25.603, 25.604, 25.605, 25.606, 25.607, 25.608, 25.609, 25.610, 25.611, 25.612, 25.613, 25.614, 25.615, 25.616, 25.617, 25.618, 25.619, 25.620, 25.621, 25.622, 25.623, 25.624, 25.625, 25.626, 25.627, 25.628, 25.629, 25.630, 25.631, 25.632, 25.633, 25.634, 25.635, 25.636, 25.637, 25.638, 25.639, 25.640, 25.641, 25.642, 25.643, 25.644, 25.645, 25.646, 25.647, 25.648, 25.649, 25.650, 25.651, 25.652, 25.653, 25.654, 25.655, 25.656, 25.657, 25.658, 25.659, 25.660, 25.661, 25.662, 25.663, 25.664, 25.665, 25.666, 25.667, 25.668, 25.669, 25.670, 25.671, 25.672, 25.673, 25.674, 25.675, 25.676, 25.677, 25.678, 25.679, 25.680, 25.681, 25.682, 25.683, 25.684, 25.685, 25.686, 25.687, 25.688, 25.689, 25.690, 25.691, 25.692, 25.693, 25.694, 25.695, 25.696, 25.697, 25.698, 25.699, 25.700, 25.701, 25.702, 25.703, 25.704, 25.705, 25.706, 25.707, 25.708, 25.709, 25.710, 25.711, 25.712, 25.713, 25.714, 25.715, 25.716, 25.717, 25.718, 25.719, 25.720, 25.721, 25.722, 25.723, 25.724, 25.725, 25.726, 25.727, 25.728, 25.729, 25.730, 25.731, 25.732, 25.733, 25.734, 25.735, 25.736, 25.737, 25.738, 25.739, 25.740, 25.741, 25.742, 25.743, 25.744, 25.745, 25.746, 25.747, 25.748, 25.749, 25.750, 25.751, 25.752, 25.753, 25.754, 25.755, 25.756, 25.757, 25.758, 25.759, 25.760, 25.761, 25.762, 25.763, 25.764, 25.765, 25.766, 25.767, 25.768, 25.769, 25.770, 25.771, 25.772, 25.773, 25.774, 25.775, 25.776, 25.777, 25.778, 25.779, 25.780, 25.781, 25.782, 25.783, 25.784, 25.785, 25.786, 25.787, 25.788, 25.789, 25.790, 25.791, 25.792, 25.793, 25.794, 25.795, 25.796, 25.797, 25.798, 25.799, 25.800, 25.801, 25.802, 25.803, 25.804, 25.805, 25.806, 25.807, 25.808, 25.809, 25.810, 25.811, 25.812, 25.813, 25.814, 25.815, 25.816, 25.817, 25.818, 25.819, 25.820, 25.821, 25.822, 25.823, 25.824, 25.825, 25.826, 25.827, 25.828, 25.829, 25.830, 25.831, 25.832, 25.833, 25.834, 25.835, 25.836, 25.837, 25.838, 25.839, 25.840, 25.841, 25.842, 25.843, 25.844, 25.845, 25.846, 25.847, 25.848, 25.849, 25.850, 25.851, 25.852, 25.853, 25.854, 25.855, 25.856, 25.857, 25.858, 25.859, 25.860, 25.861, 25.862, 25.863, 25.864, 25.865, 25.866, 25.867, 25.868, 25.869, 25.870, 25.871, 25.872, 25.873, 25.874, 25.875, 25.876, 25.877, 25.878, 25.879, 25.880, 25.881, 25.882, 25.883, 25.884, 25.885, 25.886, 25.887, 25.888, 25.889, 25.890, 25.891, 25.892, 25.893, 25.894, 25.895, 25.896, 25.897, 25.898, 25.899, 25.900, 25.901, 25.902, 25.903, 25.904, 25.905, 25.906, 25.907, 25.908, 25.909, 25.910, 25.911, 25.912, 25.913, 25.914, 25.915, 25.916, 25.917, 25.918, 25.919, 25.920, 25.921, 25.922, 25.923, 25.924, 25.925, 25.926, 25.927, 25.928, 25.929, 25.930, 25.931, 25.932, 25.933, 25.934, 25.935, 25.936, 25.937, 25.938, 25.939, 25.940, 25.941, 25.942, 25.943, 25.944, 25.945, 25.946, 25.947, 25.948, 25.949, 25.950, 25.951, 25.952, 25.953, 25.954, 25.955, 25.956, 25.957, 25.958, 25.959, 25.960, 25.961, 25.962, 25.963, 25.964, 25.965, 25.966, 25.967, 25.968, 25.969, 25.970, 25.971, 25.972, 25.973, 25.974, 25.975, 25.976, 25.977, 25.978, 25.979, 25.980, 25.981, 25.982, 25.983, 25.984, 25.985, 25.986, 25.987, 25.988, 25.989, 25.990, 25.991, 25.992, 25.993, 25.994, 25.995, 25.996, 25.997, 25.998, 25.999, 26.000, 26.001, 26.002, 26.003, 26.004, 26.005, 26.006, 26.007, 26.008, 26.009, 26.010, 26.011, 26.012, 26.013, 26.014, 26.015, 26.016, 26.017, 26.018, 26.019, 26.020, 26.021, 26.022, 26.023, 26.024, 26.025, 26.026, 26.027, 26.028, 26.029, 26.030, 26.031, 26.032, 26.033, 26.034, 26.035, 26.036, 26.037, 26.038, 26.039, 26.040, 26.041, 26.042, 26.043, 26.044, 26.045, 26.046, 26.047, 26.048, 26.049, 26.050, 26.051, 26.052, 26.053, 26.054, 26.055, 26.056, 26.057, 26.058, 26.059, 26.060, 26.061, 26.062, 26.063, 26.064, 26.065, 26.066, 26.067, 26.068, 26.069, 26.070, 26.071, 26.072, 26.073, 26.074, 26.075, 26.076, 26.077, 26.078, 26.079, 26.080, 26.081, 26.082, 26.083, 26.084, 26.085, 26.086, 26.087, 26.088, 26.089, 26.090, 26.091, 26.092, 26.093, 26.094, 26.095, 26.096, 26.097, 26.098, 26.099, 26.100, 26.101, 26.102, 26.103, 26.104, 26.105, 26.106, 26.107, 26.108, 26.109, 26.110, 26.111, 26.112, 26.113, 26.114, 26.115, 26.116, 26.117, 26.118, 26.119, 26.120, 26.121, 26.122, 26.123, 26.124, 26.125, 26.126, 26.127, 26.128, 26.129, 26.130, 26.131, 26.132, 26.133, 26.134, 26.135, 26.136, 26.137, 26.138, 26.139, 26.140, 26.141, 26.142, 26.143, 26.144, 26.145, 26.146, 26.147, 26.148, 26.149, 26.150, 26.151, 26.152, 26.153, 26.154, 26.155, 26.156, 26.157, 26.158, 26.159, 26.160, 26.161, 26.162, 26.163, 26.164, 26.165, 26.166, 26.167, 26.168, 26.169, 26.170, 26.171, 26.172, 26.173, 26.174, 26.175, 26.176, 26.177, 26.178, 26.179, 26.180, 26.181, 26.182, 26.183, 26.184, 26.185, 26.186, 26.187, 26.188, 26.189, 26.190, 26.191, 26.192, 26.193, 26.194, 26.195, 26.196, 26.197, 26.198, 26.199, 26.200, 26.201, 26.202, 26.203, 26.204, 26.205, 26.206, 26.207, 26.208, 26.209, 26.210, 26.211, 26.212, 26.213, 26.214, 26.215, 26.216, 26.217, 26.218, 26.219, 26.220, 26.221, 26.222, 26.223, 26.224, 26.225, 26.226, 26.227, 26.228, 26.229, 26.230, 26.231, 26.232, 26.233, 26.234, 26.235, 26.236, 26.237, 26.238, 26.239, 26.240, 26.241, 26.242, 26.243, 26.244, 26.245, 26.246, 26.247, 26.248, 26.249, 26.250, 26.251, 26.252, 26.253, 26.254, 26.255, 26.256, 26.257, 26.258, 26.259, 26.260, 26.261, 26.262, 26.263, 26.264, 26.265, 26.266, 26.267, 26.268, 26.269, 26.270, 26.271, 26.272, 26.273, 26.274, 26.275, 26.276, 26.277, 26.278, 26.279, 26.280, 26.281, 26.282, 26.283, 26.284, 26.285, 26.286, 26.287, 26.288, 26.289, 26.290, 26.291, 26.292, 26.293, 26.294, 26.295, 26.296, 26.297, 26.298, 26.299, 26.300, 26.301, 26.302, 26.303, 26.304, 26.305, 26.306, 26.307, 26.308, 26.309, 26.310, 26.311, 26.312, 26.313, 26.314, 26.315, 26.316, 26.317, 26.318, 26.319, 26.320, 26.321, 26.322, 26.323, 26.324, 26.325, 26.326, 26.327, 26.328, 26.329, 26.330, 26.331, 26.332, 26.333, 26.334, 26.335, 26.336, 26.337, 26.338, 26.339, 26.340, 26.341, 26.342, 26.343, 26.344, 26.345, 26.346, 26.347, 26.348, 26.349, 26.350, 26.351, 26.352, 26.353, 26.354, 26.355, 26.356, 26.357, 26.358, 26.359, 26.360, 26.361, 26.362, 26.363, 26.364, 26.365, 26.366, 26.367, 26.368, 26.369, 26.370, 26.371, 26.372, 26.373, 26.374, 26.375, 26.376, 26.377, 26.378, 26.379, 26.380, 26.381, 26.382, 26.383, 26.384, 26.385, 26.386, 26.387, 26.388, 26.389, 26.390, 26.391, 26.392, 26.393, 26.394, 26.395, 26.396, 26.397, 26.398, 26.399, 26.400, 26.401, 26.402, 26.403, 26.404, 26.405, 26.406, 26.407, 26.408, 26.409, 26.410, 26.411, 26.412, 26.413, 26.414, 26.415, 26.416, 26.417, 26.418, 26.419, 26.420, 26.421, 26.422, 26.423, 26.424, 26.425, 26.426, 26.427, 26.428, 26.429, 26.430, 26.431, 26.432, 26.433, 26.434, 26.435, 26.436, 26.437, 26.438, 26.439, 26.440, 26.441, 26.442, 26.443, 26.444, 26.445, 26.446, 26.447, 26.448, 26.449, 26.450, 26.451, 26.452, 26.453, 26.454, 26.455, 26.456, 26.457, 26.458, 26.459, 26.460, 26.461, 26.462, 26.463, 26.464, 26.465, 26.466, 26.467, 26.468, 26.469, 26.470, 26.471, 26.472, 26.473, 26.474, 26.475, 26.476, 26.477, 26.478, 26.479, 26.480, 26.481, 26.482, 26.483, 26.484, 26.485, 26.486, 26.487, 26.488, 26.489, 26.490, 26.491, 26.492, 26.493, 26.494, 26.495, 26.496, 26.497, 26.498, 26.499, 26.500, 26.501, 26.502, 26.503, 26.504, 26.505, 26.506, 26.507, 26.508, 26.509, 26.510, 26.511, 26.512, 26.513, 26.514, 26.515, 26.516, 26.517, 26.518, 26.519, 26.520, 26.521, 26.522, 26.523, 26.524, 26.525, 26.526, 26.527, 26.528, 26.529, 26.530, 26.531, 26.532, 26.533, 26.534, 26.535, 26.536, 26.537, 26.538, 26.539, 26.540, 26.541, 26.542, 26.543, 26.544, 26.545, 26.546, 26.547, 26.548, 26.549, 26.550, 26.551, 26.552, 26.553, 26.554, 26.555, 26.556, 26.557, 26.558, 26.559, 26.560, 26.561, 26.562, 26.563, 26.564, 26.565, 26.566, 26.567, 26.568, 26.569, 26.570, 26.571, 26.572, 26.573, 26.574, 26.575, 26.576, 26.577, 26.578, 26.579, 26.580, 26.581, 26.582, 26.583, 26.584, 26.585, 26.586, 26.587, 26.588, 26.589, 26.590, 26.591, 26.592, 26.593, 26.594, 26.595, 26.596, 26.597, 26.598, 26.599, 26.600, 26.601, 26.602, 26.603, 26.604, 26.605, 26.606, 26.607, 26.608, 26.609, 26.610, 26.611, 26.612, 26.613, 26.614, 26.615, 26.616, 26.617, 26.618, 26.619, 26.620, 26.621, 26.622, 26.623, 26.624, 26.625, 26.626, 26.627, 26.628, 26.629, 26.630, 26.631, 26.632, 26.633, 26.634, 26.635, 26.636, 26.637, 26.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	3GPP TS 25.214, and 3GPP TS 25.321, and has a processor to complete an E-DCH transmission when a cell reselection or a radio link failure occurs. <3GPP TS 25.321 v9.9.0> The E-DCH enhanced physical random access transmission procedure is completed with release of the allocated common E-DCH resource, if one of the following conditions is fulfilled: - If the UE according to subclause 8.5.4A in [7] failed to establish the physical channels, or if the criteria for radio link failure are met as specified in subclause 8.5.6 in [7], then the timer T_2 is started. After the expiry of T_2 a backoff timer T_{BOI} is started. Backoff timer T_{BOI} is set to an integer number N_{BOI} of 10 ms time intervals, randomly drawn within an interval $0 \leq N_{BOImin} \leq N_{BOI} \leq N_{BOImax}$ (with uniform distribution). N_{BOImin} and N_{BOImax} may be set equal when a fixed delay is desired, and even to zero when no delay other than the one due to persistency is desired. The procedure ends if timer T_{BOI} expires or the UE performs cell reselection while timer T_{BOI} is running, whatever occurs first. In case of a cell reselection, the timer T_{BOI} is stopped. TS 25.321 v9.9.0 at 109.
[8.pre] The WTRU as in claim 6, wherein	See claim 6.
[8.a] the processor starts an inactivity timer when the E-DCH buffer is empty.	Each of the Accused LGE '809 Products is a user equipment that would have a processor to start an inactivity timer when the E-DCH buffer is empty. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a processor to start an inactivity timer when the E-DCH buffer is empty. <3GPP TS 25.321 v9.9.0>

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	11.2.2A Control of Enhanced Uplink in CELL_FACH state and Idle mode for FDD mode The transmissions in Enhanced Uplink in CELL_FACH state and Idle mode are controlled by the UE MAC sublayer as outlined in figures 11.2.2A-1, 11.2.2A-2 and 11.2.2A-3. TS 25.321 v9.9.0 at 108. - Implicit release with E-DCH transmission continuation backoff Implicit resource release is enabled only if "E-DCH transmission continuation back off" is not set to "infinity". If implicit resource release is enabled, then in case of DTCH/DCCH transmission, the timer Tb is set to "E-DCH transmission continuation back off" value, when TEBS is 0 byte and the last generated MAC-i PDU with higher layer data is provided with the PHY-data-REQ primitive to the physical layer for transmission. If TEBS > 0 byte is detected while timer Tb is running, then the timer is stopped and uplink data transmission on the common E-DCH resource continues. If a MAC-ehs PDU is received while timer Tb is running, then the timer is re-started. If the "E-DCH transmission continuation back off" value is set to "0" or if timer Tb expires the MAC-STATUS-Ind primitive indicates to RLC for each logical channel that no PDUs shall be transferred to MAC. TEBS = 0 byte is reported to the Node B MAC as SI in a MAC-i PDU. If the "E-DCH transmission continuation back off" value is set to "0", then the SI shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination is triggered when the empty buffer status has been reported and no MAC-i PDU is left in any HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 109-110.

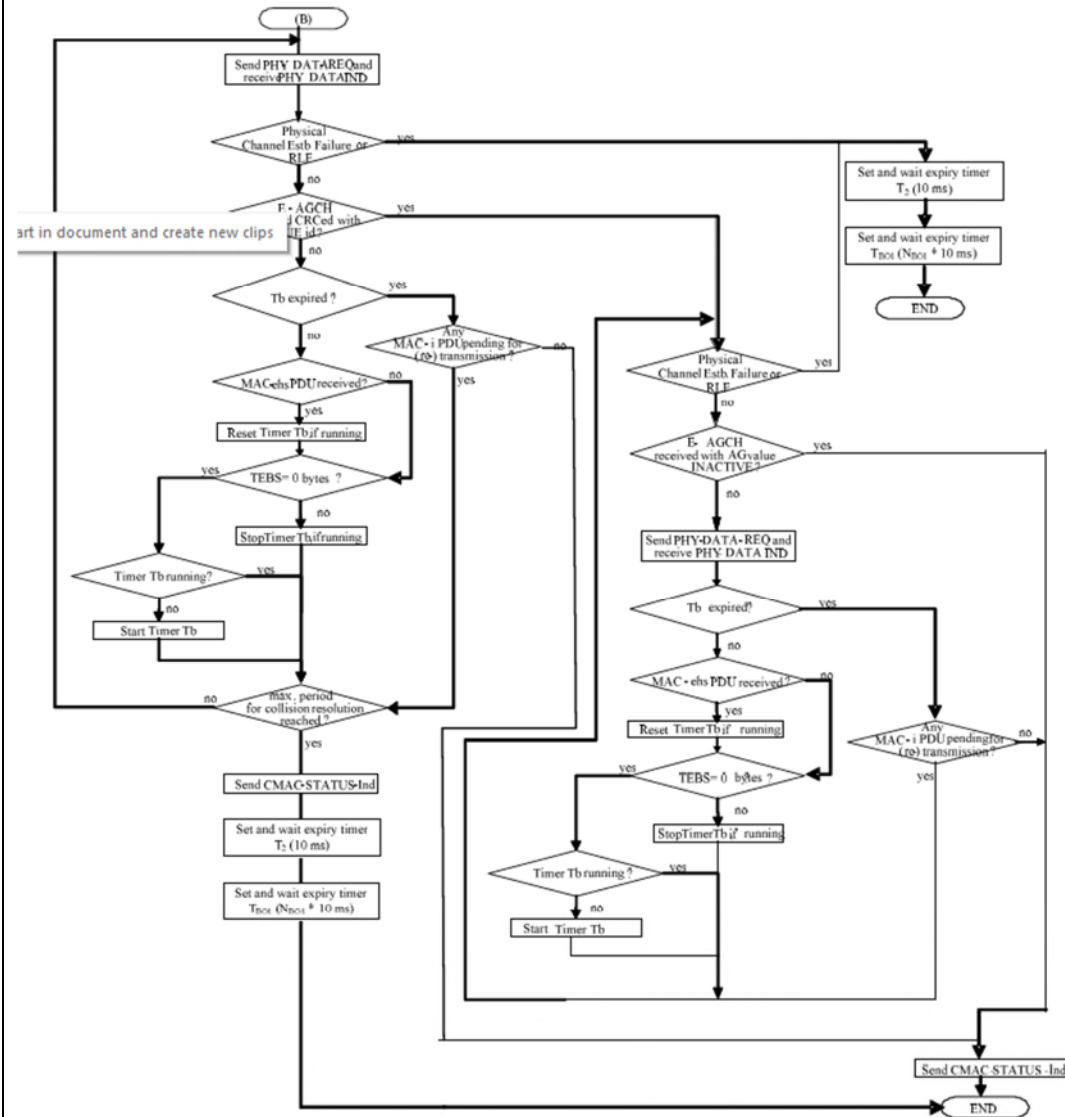


Figure 11.2.2A-3: Enhanced Uplink in CELL_FACH state and Idle mode transmission control procedure (UE side, informative), Part II for DTCH/DCCH transmission

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	TS 25.321 v.9.9.0 at 113. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.
[9.pre] The WTRU as in claim 8, wherein	See claim 8.
[9.a] the transmitter transmits the SI when the inactivity timer expires.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to transmit the SI when the inactivity timer expires. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to transmit the SI when the inactivity timer expires.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	<3GPP TS 25.321 v9.9.0>

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

	The E-DCH enhanced physical random access transmission procedure is completed with release of the allocated common E-DCH resource, if one of the following conditions is fulfilled: - If the UE according to subclause 8.5.4A in [7] failed to establish the physical channels, or if the criteria for radio link failure are met as specified in subclause 8.5.6 in [7], then the timer T_2 is started. After the expiry of T_2 a backoff timer T_{BO1} is started. Backoff timer T_{BO1} is set to an integer number N_{BO1} of 10 ms time intervals, randomly drawn within an interval $0 \leq N_{BO1min} \leq N_{BO1} \leq N_{BO1max}$ (with uniform distribution). N_{BO1min} and N_{BO1max} may be set equal when a fixed delay is desired, and even to zero when no delay other than the one due to persistency is desired. The procedure ends if timer T_{BO1} expires or the UE performs cell reselection while timer T_{BO1} is running, whatever occurs first. In case of a cell reselection, the timer T_{BO1} is stopped. - In case of CCCH transmission, if the maximum E-DCH resource allocation for CCCH has been reached, then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. - In case of CCCH transmission, when the MAC-i PDU containing the last MAC-c PDU is being transmitted, TEBS = 0 byte is reported to the Node B MAC as SI in a MAC-i PDU and the MAC-STATUS-Ind primitive indicates to RLC for each logical channel that no PDU shall be transferred to MAC. When the empty buffer status has been reported and no MAC-i PDUs are left for (re-)transmission in MAC, then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. - In case of DTCH/DCCH transmission, if no E-AGCH with UE's E-RNTI has been received (through an E-RNTI-specific CRC attachment) within the maximum period for collision resolution phase, then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. Then the timer T_2 is started. After the expiry of T_2 a backoff timer T_{BO1} is started. Backoff timer T_{BO1} is set to an integer number N_{BO1} of 10 ms time intervals, randomly drawn within an interval $0 \leq N_{BO1min} \leq N_{BO1} \leq N_{BO1max}$ (with uniform distribution). N_{BO1min} and N_{BO1max} may be set equal when a fixed delay is desired, and even to zero when no delay other than the one due to persistency is desired. The procedure ends when T_{BO1} expires. - Explicit common E-DCH resource release: In case of DTCH/DCCH transmission, if an E-AGCH with UE's E-RNTI has been received (through an E-RNTI-specific CRC attachment) with absolute grant value set to 'INACTIVE', then this triggers a CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination. - Implicit release with E-DCH transmission continuation backoff Implicit resource release is enabled only if "E-DCH transmission continuation back off" is not set to "infinity".
--	---

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	If implicit resource release is enabled, then in case of DTCH/DCCH transmission, the timer Tb is set to "E-DCH transmission continuation back off" value, when TEBS is 0 byte and the last generated MAC-i PDU with higher layer data is provided with the PHY-data-REQ primitive to the physical layer for transmission. If TEBS $\leq$ 0 byte is detected while timer Tb is running, then the timer is stopped and uplink data transmission on the common E-DCH resource continues. If a MAC-ebs PDU is received while timer Tb is running, then the timer is re-started. If the "E-DCH transmission continuation back off" value is set to "0" or if timer Tb expires the MAC-STATUS-Ind primitive indicates to RLC for each logical channel that no PDUs shall be transferred to MAC. TEBS = 0 byte is reported to the Node B MAC as SI in a MAC-i PDU. If the "E-DCH transmission continuation back off" value is set to "0", then the SI shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. CMAC-STATUS-Ind which informs the RRC about the Enhanced Uplink in CELL_FACH state and Idle mode process termination is triggered when the empty buffer status has been reported and no MAC-i PDU is left in any HARQ process for (re-)transmission. TS 25.321 v9.9.0 at 109-110. For FDD and for CCCH transmission in CELL_FACH state and Idle mode, the transmission of Scheduling Information shall only be triggered when TEBS becomes zero and the MAC-i PDU containing the last data is being transmitted. The SI is transmitted with the MAC-i PDU carrying the last data, given the serving grant is sufficient to carry the SI with the last remaining data. Otherwise, the empty buffer status report is transmitted separately with the next MAC-i PDU. For FDD and for DTCH/DCCH transmission in CELL_FACH state, the transmission of Scheduling Information shall be triggered once, if the TEBS remains zero and no higher layer data remains in MAC to be transmitted for a period given by the E-DCH transmission continuation back off period unequal "infinity". For FDD and for DTCH/DCCH transmission in CELL_FACH state with E-DCH transmission continuation back off period set to "infinity" or "zero", the transmission of Scheduling Information shall be triggered each time when the TEBS becomes zero and no higher layer data remains in MAC to be transmitted after the transmission of the MAC-i PDU containing the scheduling information with the empty buffer status report. When "E-DCH transmission continuation back off" is set to "infinity", the Scheduling Information with empty buffer status report shall be transmitted with the MAC-i PDU carrying the last DCCH/DTCH data, given the serving grant is sufficient to carry the SI in the same MAC-i PDU together with the remaining DCCH/DTCH data. Otherwise, the Scheduling Information with empty buffer status report is transmitted separately with the next MAC-i PDU. TS 25.321 v9.9.0 at 153-154.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
[10.pre] The WTRU as in claim 6, wherein	See claim 6.
[10.a] the transmitter transmits using the E-DCH resource when a response is received on an E-DCH acquisition indication channel (E-AICH) to a preamble transmitted by the WTRU.	Each of the Accused LGE '809 Products is a user equipment that would have a wireless transmit/receive unit to transmit using the E-DCH resource when a response is received on an E-DCH acquisition indication channel (E-AICH) to a preamble transmitted by the WTRU. As shown in Appendix 1, each of the Accused LGE '809 Products incorporates a chipset, antenna or antennas, memory, and transceiver or combination of transmitter and receiver that operate in accordance with WCDMA cellular standard. Each of the Accused LGE '809 Products complies with one or more of WCDMA Release 9 or later cellular communication protocols including at least 3GPP TS 25.211, 3GPP TS 25.214, and 3GPP TS 25.321, and has a wireless transmit/receive unit to transmit using the E-DCH resource when a response is received on an E-DCH acquisition indication channel (E-AICH) to a preamble transmitted by the WTRU. <3GPP TS 25.214 v9.8.0> 6.1A Physical random access procedure for Enhanced Uplink in CELL_FACH state and IDLE mode The physical random access procedure described in this subclause is initiated upon request from the MAC sublayer (cf. [9]). TS 25.214 v9.8.0 at 41. 8 If a positive acquisition indicator on AICH corresponding to the selected signature is detected in the downlink access slot corresponding to the selected uplink access slot, pass L1 status ('Ack on AICH received') with the default E-DCH resource index corresponding to the selected signature as defined in [1] to higher layers (MAC), 9 Start transmitting DPCCH (timing as specified in [1] and synchronisation according to synchronisation procedure AA). The initial transmission power of DPCCH prior to starting the E-DCH transmission should be P_{p-e} [dB] higher than the power of the last transmitted preamble. 10 Proceed to transmitting E-DPCCH and E-DPDCH as instructed by MAC layer after the defined number of TTIs of DPCCH only transmission has passed.

APPENDIX 6: PRELIMINARY INFRINGEMENT CONTENTIONS OF U.S. PATENT NO. 9,313,809

U.S. Patent No. 9,313,809	Exemplary Evidence of Infringement
	TS 25.214 v9.8.0 at 42. <3GPP TS 25.211 v9.2.0> 5.3.3.7 Acquisition Indicator Channel (AICH) The Acquisition Indicator channel (AICH) is a fixed rate (SF=256) physical channel used to carry Acquisition Indicators (AI) and Extended Acquisition Indicators (EAI). Acquisition Indicator AI_s corresponds to signature s on the PRACH. Extended Acquisition Indicators represent a set of values corresponding to a set of E-DCH resource configurations. TS 25.211 v9.2.0 at 38.