

Diego Gonzalez

1) Family number: 63734314 (US2016302104A)

Title: PROCESSING TIME EXTENSION FOR HIGH BANDWIDTH WIRELESS COMMUNICATIONS

Abstract: A wireless device may selectively add padding to an end of a data transmission in order to provide adequate time for a receiving device to process the transmitted data and transmit feedback related to the transmitted data. A wireless device may identify a total amount of data capable of being transmitted in a transmission, and determine a number of data bits to be transmitted in the transmission. An amount of padding may be selected based on a proportion of the total amount of data capable of being transmitted and the number of data bits. In some examples, a preamble for a feedback transmission may be transmitted concurrently with processing of the received transmission.

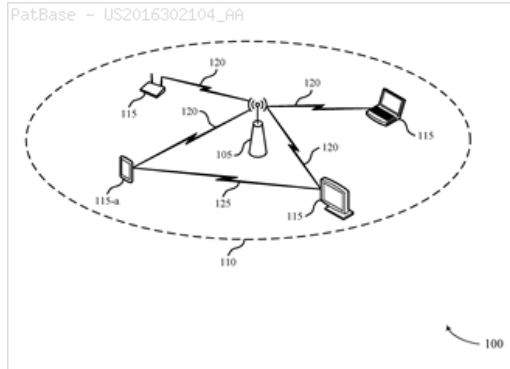
Classifications:

International (IPC 8-9): H04B7/0452 H04B7/06 H04L H04L1/00 H04L1/16 H04L12/78 H04L29/02 H04L29/08 H04L5/00 H04W H04W24/00 H04W42/20 H04W42/06 H04W28/06 H04W72/04 H04W74/04 H04W80/02 H04W84/12 H04W88/08 (Advanced/Invention); H04B7/0452 (Advanced/Non-invention); H04W (Subclass/Invention)

CPC: H04W28/06 H04W72/0446 H04L5/0044 H04L1/0005

H04L1/0008 H04L1/0011 H04W84/12 H04L5/0048 H04L5/0053
H04L5/0046 H04L1/0025 H04B7/0452 H04L1/0042 H04L1/1685

US: 370/230 370/336



Family:

Publication number	Publication date	Application number	Application date
AU2016246714 AA	20170914	AU20160246714	20160407
BR112017021435 A2	20180703	BR20171121435	20160407
BR112017021548 A2	20180703	BR20171121548	20160402
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CA2978200 AA	20170829	CA20162978200	20160407
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EP3281320 A2	20180214	EP20160718090	20160407
EP3281323 A1	20180214	EP20160718767	20160402
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EP3435572 A1	20190130	EP20180193782	20160402
EP3447948 A1	20190227	EP20180193785	20160402
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JP2018518082 T2	20180705	JP20170552426T	20160407
KR20170134439 A	20171206	KR20177027890	20160402
KR20170134456 A	20171206	KR20177028177	20160407
MX2017012630 A1	20180124	MX20170012630	20160407
PH2017501564 A	20180205	PH20170501564	20170831
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RU2017135280 A3	20190516	RU20170135280	20160407
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US2016302199 AA	20161013	US20160088113	20160401
US10136358 BB	20181120	US20160092467	20160406
US10194436 BB	20190129	US20160088113	20160401
WO16164279 A1	20161013	WO2016US25782	20160402
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Priority:

US20150144216P	20150407	US20150151399P	20150422	US20150152008P	20150423
US20160088113	20160401	EP20160718767	20160402	WO2016US25782	20160402
US20160092467	20160406	RU20170135280	20160407	WO2016US26332	20160407

Probable Assignee: QUALCOMM INC

Assignee(s): (std): QUALCOMM INC

Assignee(s): TIAN BIN ; VERMANI SAMEER ; BHARADWAJ ARJUN ; KIM YOUHAN ; KVELKOMM INKORPOREJTED ; PATI VISHVABHUSAN

Inventor(s): (std): KIM YOU HAN ; BIN TIAN ; SAMEER VERMANI ; ARJUN BHARADWAJ ; YOUHAN KIM ; VISHVABHUSAN PATI ; VERMANI SAMEER ; TIAN BIN ; PATI VISHVABHUSAN ; BHARADWAJ ARJUN ; KIM YOUHAN

Inventor(s): BKHARADVADZH ARDZHUN ; KIM JOUKHAN ; PATI VISHVABKHUSAN ; VERMANI SAMIR

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; MADDERNS PTY LTD; SMART AND BIGGAR; ESTUDIO CLARKE MODET AND CO CHILE LIMITADA; JOSE ANDRES RINCON USCATEGUI; HOHGARDT MARTIN; WEGNER HANS; NTD PATENT AND TRADE MARK AGENCY LTD; LUDIYANTO SH MH MM; YURIDICHESKAYA GORODISSKIY I PARTNERY OOO FA; HOLLAND AND HART LLP QUALCOMM; PATTERSON AND SHERIDAN LLP; READ RANDOL W ET AL; SCHRAMM PAUL M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

2) Family number: 28300467 (US2002170013A)
PatBase

Title: METHOD AND SYSTEM FOR IMPLICIT USER EQUIPMENT IDENTIFICATION

Abstract: A method for data related downlink signaling including selectively tailoring the UE ID to create a UE ID value, which is then added to a data field to create a data mask. This data mask is then further processed as the CRC field and transmitted with the data burst to provide CRC-related functions. An alternative embodiment discloses initializing a CRC generator with UE identification prior to CRC generation. This implicitly includes the UE ID within the CRC without requiring additional overhead signaling.

Classifications:

International (IPC 8-9): G06F G06F11/00 G06F11/10 H03M H03M13/00 H03M13/09 H03M13/11 H03M13/37 H04B H04B1/707 H04B7/26 H04H H04H1/00 H04H20/00 H04J H04J13/00 H04J3/24 H04L H04L1/00 H04L1/22 H04L5/00 H04L9/32 H04Q H04Q7/22 H04Q7/32 H04Q7/34 H04Q7/38 H04W H04W12/00 H04W12/10 H04W24/00 H04W28/02 H04W28/04 H04W28/06 H04W4/00 H04W72/04 H04W8/22 H04W88/02 H04W88/08 (Advanced/Invention); H03M13/00 H03M13/09 H04B7/155 H04B7/26 H04L1/00 H04W28/02 H04W48/12 (Advanced/Non-invention); G06F11/00 H03M13/00 H04B1/707 H04B7/26 H04H1/00 H04J3/24 H04L1/00 H04L1/22 H04Q7/22 H04Q7/32 H04Q7/34 H04Q7/38 H04W12/00 H04W24/00 H04W28/02 H04W8/22 H04W88/00 (Core/Invention); H04J13/00 H04W12/10 (Core/Non-invention); H03M H04L H04W (Subclass/Invention); G06F H04H H04J (Subclass/Non-invention)

International (IPC 1-7): G06F G06F11/00 G06F11/18 H03M H03M13/00 H03M13/09 H04B1/707 H04B7/005 H04B7/216 H04B7/26 H04H1/00 H04J13/00 H04J3/24 H04L1/00 H04L1/24 H04L12/56 H04L9/32 H04Q11/04 H04Q7/04 H04Q7/30 H04Q7/32 H04Q7/34

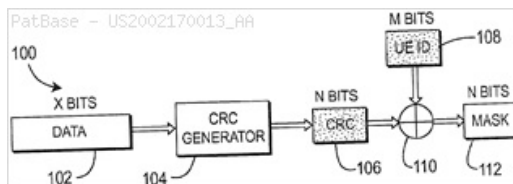
CPC: H04L5/0092 H03M13/09 H03M13/37 H04L1/0061 H04B7/2612 H04W72/042

European: H03M13/09 H03M13/37 H04L1/00B7E

US: 370/320 370/328 370/328P 370/329 714/708 714/745 714/748 714/755 714/756 714/758 714/762 714/808 714/808P 714/E11.032 714/E11.032S

Family:

Publication number	Publication date	Application number	Application date
AR033734 AA	20040107	AR2002P101747	20020514
AR062277 AB	20081029	AR2007P103492	20070808
AR071379 AB	20100616	AR2009P101379	20090420
AU2002257253 AA	20021125	AU20020257253	20020508
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Priority:

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Probable Assignee: INTEL CORP

Assignee(s): (std): BOLOURCHI NADER ; DICK STEPHEN G ; INTEL CORP ; INTERDIGITAL TECHNOLOGY CORP ; INTERDIGITAL TECHNOLOGY CORP ; ISINTERDIGITAL TECHNOLOGY CORP ; INTERDIGITAL TECH CORP ; WITHIN A DIGITAL TECHNOLOGY CO ; TERRY STEPHEN E

Assignee(s): INTERDIGITAL TECHNOLOGY SUITE 527 300 DELAWARE CORP ; INTERDIGITAL TECHNOL CORP ; INTERDIGITAL TECHNOLOGY CORPORATIONUS ; INTERDIGITAL TECHNOLOGY CORP WILMINGTON ; INTEL SANTA CLARA CORP

Inventor(s): (std): BOLOUCHI NADER ; STEPHEN E ; TERRY ; BOLOCH NADER ; TERRY STEFAN E ; DICK STEFAN G ; NADER BOLOURCHI ; TERRY STEPHEN ; STEPHEN G DICK G ; STEPHEN E TERRY E ; DICK STEPHEN G ; TERRY STEPHEN E ; BOLOURCHI NADER ; DICK STEPHEN C ; TERRY E ; DICK G ; BOLOURCHI NADER TERRY STEPHEN ; STEPHEN E TERRY ; NADER BOLOCH ; STEFAN E TERRY ; STEPHEN G DICK ; STEFAN G DICK ; DICK NADER BOLOUCHI STEPHEN E

Inventor(s): NADER BOLOUCHI STEPHEN E TERRY STEPHEN G DICK ; TERRY STEPHENE ; DICK STEPHENG ; BOLOURCHI NADER LARCHMONT ; TERRY STEPHEN E NORTH PORT ; DICK STEPHEN G NESCONSET ; STEPHEN G DICK C ; NADER BOLOUCHI ; BOLOURCHI NADER TERRY STEPHEN E ; BOLOOURCHI NADER ; BOLOURCHI NADIR ; TERRY STEPHEN ELLIOT ; DICK STEPHEN GEORGE ; DICK STEPHEN

Agent(s): FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; WATERMARK PATENT AND TRADE MARKS ATTORNEYS; RIDOUT AND MAYBEE LLP; RICHES MCKENZIE AND HERBERT LLP; MEISSNER BOLTE AND PARTNER; HGF LTD; HUTCHINSON GLENN STANLEY; LEHMANN MARIA ISABEL; LLOYD WISE AND CO 4005 TOWER TWO LIPPO CENTRE 89 QUEENSWAY CENTRAL; LLOYD WISE AND CO; MARKS AND CLERK; CHINA PATENT AGENT HK LTD; HASTINGS AND CO; SHICHRUR AND CO; REINHOLD COHN AND PARTNERS; OHNUKI SHINSUKE; ITOH TADAHIKO; ITOH TADASHIGE; SONG SEUNG PIL; KIM TAE HONG; ELLA CHEONG SPRUSON AND FERGUSON SINGAPORE PTE LTD; VOLPE AND KOENIG PC DEPT ICC; VOLPE AND KOENIG PC; BLAKELY SOKOLOFF TAYLOR AND ZAFMAN LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

3) Family number: 73175205 (US2019053254A)

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Title: CBG INDICATION WITH MULTI-TTI GRANT

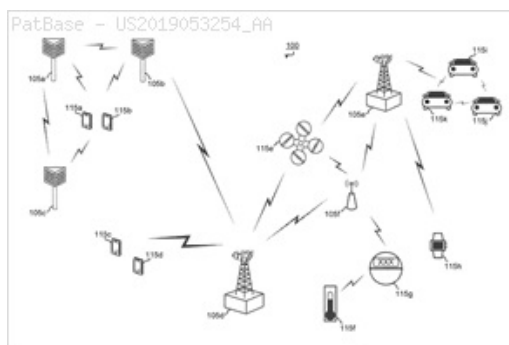
Abstract: Code block group (CBG) transmission indications for communications configured with multiple transmission time interval (TTI) grants is disclosed. Where multiple TTIs are configured for CBG transmission, the base station may select to signal CBG transmission indications and/or transport block (TB)-level new data indicator (NDI) for each of the configured TTIs along with an index of the TTIs that CBG transmission indicators are sent for. The base station may select to add one or more CBG transmission indications based on the predetermined payload size of the transmission indication signal of the physical downlink control channel (PDCCH).

Classifications:

International (IPC 8-9): H04L1/18 H04W72/12

H04W72/14 (Advanced/Invention)

CPC: H04W72/12 H04W72/14 H04L1/1864 H04L1/1896



Family:

Publication number	Publication date	Application number	Application date
US2019053254 AA	20190214	US20180046297	20180726
WO19032310 A1	20190214	WO2018US44062	20180727

Priority:

Probable Assignee: QUALCOMM INC**Assignee(s):** (std): QUALCOMM INC**Inventor(s):** (std): ZHANG XIAOXIA ; LUO TAO ; SUN JING**Agent(s):** MEANEY THOMAS J

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

4) Family number: 43761579 (US2001019310A)

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Title: INFORMATION ADDITIVE CODE GENERATOR AND DECODER FOR COMMUNICATION SYSTEMS

Abstract: An encoder uses an input file of data and a key to produce an output symbol. An output symbol with key I is generated by determining a weight, $W(I)$, for the output symbol to be generated, selecting $W(I)$ of the input symbols associated with the output symbol according to a function of I, and generating the output symbol's value $B(I)$ from a predetermined value function $F(I)$ of the selected $W(I)$ input symbols. An encoder can be called repeatedly to generate multiple output symbols. The output symbols are generally independent of each other, and an unbounded number (subject to the resolution of I) can be generated, if needed. A decoder receives some or all of the output symbols generated. The number of output symbols needed to decode an input file is equal to, or slightly greater than, the number of input symbols comprising the file, assuming that input symbols and output symbols represent the same number of bits of data.

Classifications:

International (ipc 8-9): G06F11/10 G11B20/18 H03M H03M11/00 H03M13/00 H03M13/05 H03M13/09 H03M13/11 H03M13/15 H03M13/19 H03M13/29 H03M13/37 H03M13/45 H03M13/47 H03M5/00 H03M7/00 H03M7/02 H03M7/34 H04B14/04 H04K1/02 H04L H04L1/00 H04L1/16 H04L1/18 H04L1/22 H04L12/18 H04L12/28 H04L12/56 H04L25/49 H04L27/00 H04L27/04 H04L27/06 H04L9/14 H04N5/222 H04N5/76 H04N7/00 H04N7/24 (Advanced/Invention); G06F11/10 H03M13/00 H03M13/11 H03M13/19 H03M13/29 H03M13/47 H03M7/00 H04B14/04 H04L1/00 H04L1/02 H04L12/56 H04L27/04 (Advanced/Non-invention); H03M13/00 H03M13/37 H03M7/00 H04K1/02 H04L1/00 H04L25/49 H04L27/00 H04L27/02 H04N5/222 H04N5/76 H04N7/00 (Core/Invention); G06F11/10 H03M13/00 H03M13/05 H04L1/02 (Core/Non-invention); H03M H04L (Subclass/Invention)

International (ipc 1-7): G06F11/10 G06F15/16 H03M11/00 H03M13/00 H03M13/09 H03M13/11 H03M13/15 H03M13/19 H03M13/29 H03M13/37 H03M13/47 H03M7/00 H04B14/04 H04L1/00 H04L1/16 H04L1/18 H04L12/28 H04L12/56 H04L25/49 H04L27/04 H04N5/222 H04N5/76 H04N7/00

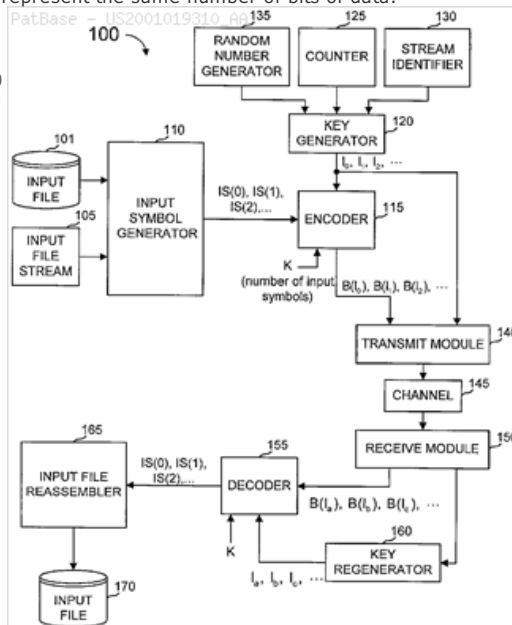
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European: G11B20/18 H03M13/11 H03M13/11L7 H03M13/15 H03M13/37E H03M13/37K H03M13/37M H03M13/47 H04H20/95 H04L1/00B H04L1/00B3 H04L1/00B5 H04L1/00B7B H04L1/00B7K1 H04L1/00B7K3 H04L1/00F2 H04L12/18E H04L19/18 H04N21/2343L H04N21/236W1 H04N21/2383 H04N21/2385 H04N21/2389 H04N21/2662 H04N21/434W1 H04N21/4385 H04N21/438M H04N21/63M H04N21/647P1 H04N21/845T T03M13/11L T03M13/19 T04L1/00T1 T04L1/00T7 T04L12/18E

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Family:

Publication number	Publication date	Application number	Application date
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Assignee(s): DIGITAL FOUNTAIN INC FREMONT ; DIGITAL FOUNTAIN INC OAKLAND ; QUALCOMM INCORPORATED ; QUALCOMM INC SAN DIEGO ; KVEHLKOMM INKORPOREJTED ; DIGITAL FOUNTAIN INC SAN DIEGO ; DIGITAL FOUNTAIN OAKLAND

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

5) Family number: 74176583 (US2019132724A)

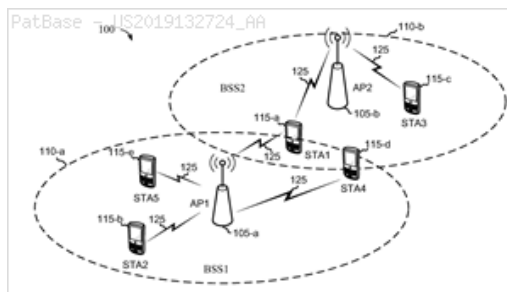
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Title: SYSTEMS FOR SIGNALING COMMUNICATION CHARACTERISTICS

Abstract: This disclosure generally relates to systems, devices, apparatuses, products, and methods for signaling communication characteristics between wireless devices. In one implementation, a first wireless communication device may determine that a trigger frame will allocate one or more resource units for communications by one or more stations unassociated with the first wireless communication device. The first wireless communication device adds an indication of a reference channel associated with the first wireless communication device or a basic service set (BSS) color indication to the trigger frame. The trigger frame is output for transmission to one or more other wireless communication devices. A receiving device may then identify the reference channel or the BSS color indication from the trigger frame and use this information for communication with the first wireless communication device.

Classifications:

International (IPC 8-9): H04L29/08 H04W72/04

**Family:**

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US2019132724 AA	20190502	US20180171164	20181025

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Title: FRAMING FOR AN IMPROVED RADIO LINK PROTOCOL INCLUDING FEC

Abstract: Framing techniques for an improved radio link protocol used in a wireless communication system, such as EV-DO. In one embodiment scheduling of the generation of repair symbols encoded to be transmitted along with source data is described. In another embodiment acknowledgment messages from a receiver are used to control the trailing edge of the protection window offered by the repair symbols. In another embodiment, non-acknowledgment messages from a receiver are used to control the generation of extra repair symbols. In another embodiment, a length field is used to avoid transmission of padding bytes over the air. In yet another embodiment, a symbol auxiliary field is appended to source symbols to indicate the padding bytes needed for symbol aligning thus avoiding the transmission of padding bytes over the air.

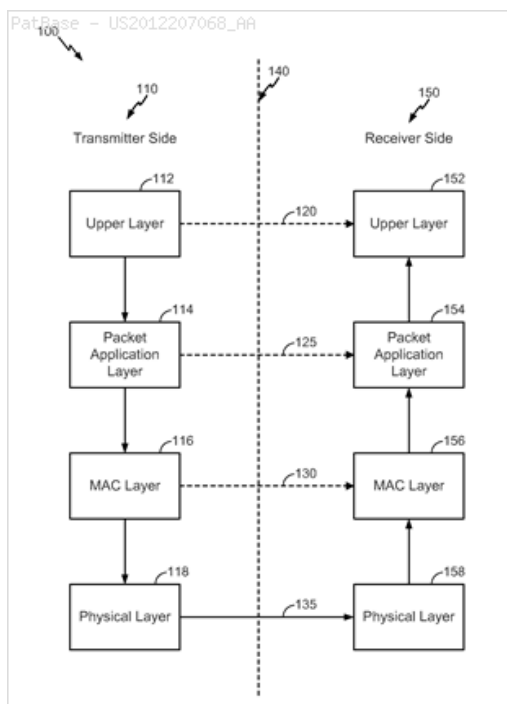
Classifications:

International (IPC 8-9): H04J3/00 H04J3/24 H04L1/00 H04W28/04
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CN103370895 A	20131023	CN201280008373	20120210
CN103370895 B	20170315	CN201280008373	20120210
EP2673907 A1	20131218	EP20120705747	20120210
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US8958375 BB	20150217	US20110025925	20110211
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IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT
MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM
SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW