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(54) **METHOD AND DEVICE FOR ENCODING POLAR CODE**

POLARCODE-CODIERUNGSVERFAHREN UND -VORRICHTUNG

DISPOSITIF ET PROCÉDÉ DE CODAGE DE CODE POLAIRE

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- (56) References cited:
- CN-A- 105 099 622 CN-A- 105 743 621
CN-A- 107 592 181 US-A1- 2014 331 083
- QUALCOMM INCORPORATED: "Design of Polar codes for control channel", 3GPP DRAFT; R1-1700832 DESIGN OF POLAR CODES FOR CONTROL CHANNEL, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE , vol. RAN WG1, no. Spokane, USA; 20170116 - 20170120 16 January 2017 (2017-01-16), XP051208351, Retrieved from the Internet:
URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/RAN1/Docs/ [retrieved on 2017-01-16]
 - SAMSUNG: "Design of a Nested Sequence for Polar Codes", 3GPP DRAFT; R1-1705425 DESIGN OF A NESTED SEQUENCE FOR POLAR CODES_FINAL, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX , vol. RAN WG1, no. Spokane, Washington, USA; 20170403 - 20170407 2 April 2017 (2017-04-02), XP051243555, Retrieved from the Internet:
URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/RAN1/Docs/ [retrieved on 2017-04-02]
 - HUAWEI ET AL: "Channel coding chain for control channel", 3GPP DRAFT; R1-1710003 CHANNEL CODING CHAIN FOR CONTROL CHANNEL, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE , vol. RAN WG1, no. Qingdao, China; 20170627 - 20170630 26 June 2017 (2017-06-26), XP051299228, Retrieved from the Internet:
URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/RAN1/Docs/ [retrieved on 2017-06-26]
 - NTT DOCOMO: "Sequence design of Polar codes", 3GPP DRAFT; R1-1708489, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE , vol. RAN WG1, no. Hangzhou, China; 20170515 - 20170519 14 May 2017 (2017-05-14), XP051273681, Retrieved from the Internet:
URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/RAN1/Docs/ [retrieved on 2017-05-14]