(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 3 649 738 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 73

(48) Corrigendum issued on:
13.11.2024 Bulletin 2024/46

(45) Date of publication and mention of the grant of the patent:
11.09.2024 Bulletin 2024/37

(21) Application number: **18734761.2**

(22) Date of filing: **04.07.2018**

(51) International Patent Classification (IPC):
H03M 13/13 *(2006.01)* ***H03M 13/00*** *(2006.01)*

(52) Cooperative Patent Classification (CPC):
H03M 13/13; H03M 13/00; H03M 13/618; H03M 13/6356; H03M 13/6362; H03M 13/6508

(86) International application number:
PCT/EP2018/065554

(87) International publication number:
WO 2019/011555 (17.01.2019 Gazette 2019/03)

(54) BLOCKWISE PARALLEL FROZEN BIT GENERATION FOR POLAR CODES

BLOCKWEISE PARALLELE GEFRORENE BITERZEUGUNG FÜR POLARE CODES

GÉNÉRATION DE BITS FIGÉS PARALLÈLES DANS LE SENS DU BLOC POUR DES CODES POLAIRES

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **10.07.2017 GB 201711055**
11.09.2017 GB 201714559

(43) Date of publication of application:
13.05.2020 Bulletin 2020/20

(73) Proprietor: **AccelerComm Ltd**
Southampton SO16 7QJ (GB)

(72) Inventors:
- **MAUNDER, Robert**
  Southampton
  Hampshire SO18 4JU (GB)
- **BREJZA, Matthew**
  Southampton
  Hampshire SO16 3LN (GB)
- **ZHONG, Shida**
  Nanshan, Shenzen
  Guangdong, 518060 (CN)
- **PEREZ-ANDRADE, Isaac**
  Zapopan
  Jalisco 45180 (MX)
- **CHEN, Taihai**
  Southampton
  SO18 4JU (GB)

(74) Representative: **Optimus Patents Limited**
Peak Hill House
Steventon
Basingstoke, Hampshire RG25 3AZ (GB)

(56) References cited:
- **ACCELERCOMM: "On the storage of polar code sequences", vol. RAN WG1, no. Qingdao, China; 20170627 - 20170630, 26 June 2017 (2017-06-26), XP051300047, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/RAN1/Docs/> [retrieved on 20170626]**

Processed by Luminess, 75001 PARIS (FR)

(Cont. next page)

- LIN JUN ET AL: "Efficient Soft Cancelation Decoder Architectures for Polar Codes", IEEE TRANSACTIONS ON VERY LARGE SCALE INTEGRATION (VLSI) SYSTEMS, IEEE SERVICE CENTER, PISCATAWAY, NJ, USA, vol. 25, no. 1, January 2017 (2017-01-01), pages 87 - 99, XP011637698, ISSN: 1063-8210, [retrieved on 20161226], DOI: 10.1109/TVLSI.2016.2577883
- GABI SARKIS ET AL: "Flexible and Low-Complexity Encoding and Decoding of Systematic Polar Codes", IEEE TRANSACTIONS ON COMMUNICATIONS, January 2016 (2016-01-01), New York, pages 2732 - 2745, XP055336370, Retrieved from the Internet <URL:https://arxiv.org/pdf/1507.03614v3.pdf> DOI: 10.1109/TCOMM.2016.2574996
- HUAWEI ET AL: "Design Aspects of Polar and LDPC codes for NR", vol. RAN WG1, no. Reno, USA; 20161114 - 20161118, 19 November 2016 (2016-11-19), XP051191169, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_87/Docs/> [retrieved on 20161119]