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**(54) Title (EN):** ITERATIVE MULTI-LEVEL EQUALIZATION AND DECODING

**(54) Title (FR):** ÉGALISATION ET DÉCODAGE ITÉRATIFS MULTINIVEAUX

**(57) Abstract:**

**(EN):** A wireless communication method for transmitting wireless signals from a transmitter includes receiving information bits for transmission, segmenting the information bits into a stream of segments, applying a corresponding forward error correction (FEC) code and an interleaver to each of the stream of segments and combining outputs of the interleaving to generate a stream of symbols, processing the stream of symbols to generate a waveform, and transmitting the waveform over a communication medium.

**(FR):** Un procédé de communication sans fil utilisé pour transmettre des signaux sans fil à partir d'un émetteur consiste à recevoir des bits d'informations pour une transmission, à segmenter les bits d'informations en un flux de segments, à appliquer un code de correction d'erreur sans voie de retour (FEC) correspondant et un entrelaceur pour chacun des flux de segments et combiner des sorties de l'entrelaceur pour générer un flux de symboles, à traiter le flux de symboles pour générer une forme d'onde, et à transmettre la forme d'onde sur un support de communication.

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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

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**Declarations:**

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate