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**(54) Title (EN):** MULTIPLEXING OF DIFFERENT TRAFFIC TYPES IN A TELECOMMUNICATIONS NETWORK

**(54) Title (FR):** MULTIPLEXAGE DE DIFFÉRENTS TYPES DE TRAFIC DANS UN RÉSEAU DE TÉLÉCOMMUNICATIONS

**(57) Abstract:**

**(EN):** Methods and systems for multiplexing of different traffic types in a telecommunications network are provided. According to one aspect, a method of operation of a network node comprises: determining that data is available for a Downlink (DL) transmission of a first traffic type to a User Equipment (UE); identifying a DL transmission of a second traffic type to be punctured; transmitting the DL transmission of the first traffic type by puncturing the identified DL transmission of the second traffic type; receiving a Hybrid Automatic Repeat Request (HARQ) Negative Acknowledgement (NACK) associated with the punctured DL transmission of the second traffic type; and excluding the HARQ NACK associated with the punctured DL transmission of the second traffic type from a DL Contention Window Size (CWS) adjustment operation of the network node.

**(FR):** L'invention concerne des procédés et des systèmes de multiplexage de différents types de trafic dans un réseau de télécommunications. Selon un aspect, un procédé de fonctionnement d'un nœud de réseau consiste : à déterminer que des données sont disponibles pour une transmission de liaison descendante (DL) d'un premier type de trafic à un équipement utilisateur (UE) ; à identifier une transmission DL d'un second type de trafic à perforer ; à transmettre la transmission DL du premier type de trafic par perforation de la transmission DL identifiée du second type de trafic ; à recevoir un accusé de réception négatif (NACK) de demande de répétition automatique hybride (HARQ) associé à la transmission DL perforée du second type de trafic ; et à exclure le NACK HARQ, associé à la transmission DL perforée du second type de trafic, d'un fonctionnement de réglage de taille de fenêtre de contention (CWS) DL du nœud de réseau.

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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

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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

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America