

Title (en)

METHODS AND APPARATUS FOR DOWNLINK MACRO-DIVERSITY IN CELLULAR NETWORKS

Title (de)

VERFAHREN UND VORRICHTUNG FÜR MAKRODIVERSITÄT IN ABWÄRTSRICHTUNG IN ZELLULAREN NETZEN

Title (fr)

PROCEDES ET APPAREIL PERMETTANT D'ETABLIR UNE MACRO-DIVERSITE LIAISON DESCENDANTE DANS LES RESEAUX CELLULAIRES

Publication

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Application

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Abstract (en)

[origin: WO2004068739A1] The invention described herein enables a form of downlink macro-diversity in packet-switched cellular networks. It allows packets (650, 650', 652, 652', 654, 654', 656, 656', 658, 658', 660, 660', 662) to be selectively delivered from a network/internetnetwork to an end node (200), e.g., wireless communication device or terminal, over a set of available link-layer connections (402, 502) to/from the end node (200), through one or more access nodes (300, 300'), e.g., base stations. Downlink macro-diversity is particularly important when the link layer connections (402, 502) between the end node (200) and the corresponding access node (300, 300'), e.g., the access links, are subject to independent or partially correlated time variations in signal strength and interference. In accordance with the invention, the end node (200) dynamically selects a downlink (402, 502) to be used out of a set of available access links on a per packet basis subject to prevailing channel conditions, availability of airlink resources and other constraints. The invention improves the robustness and efficiency of communication, overall utilization of air-link resources, and quality of service experienced by the end node (200).

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IPC 8 full level

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Citation (search report)

- [E] EP 1502122 A2 20050202 - FLARION TECHNOLOGIES INC [US]
- [X] WO 9913652 A2 19990318 - NOKIA TELECOMMUNICATIONS OY [FI], et al
- See references of WO 2004068739A1

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