

Title (en)

APPARATUS FOR DISTRIBUTING/COMBINING A MULTI-BEAM IN A MOBILE COMMUNICATION SYSTEM

Title (de)

VORRICHTUNG ZUR VERTEILUNG/ZUSAMMENFÜHRUNG EINES MEHRFACHSTRAHLS IN EINEM MOBILENKOMMUNIKATIONSSYSTEM

Title (fr)

APPAREIL DE DISTRIBUTION/COMBINAISON D'UN FAISCEAU MULTIPLE DANS UN SYSTEME DE COMMUNICATION MOBILE

Publication

**EP 1336260 A4 20090121 (EN)**

Application

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- KR 20000070207 A 20001124
- KR 20000070208 A 20001124
- KR 20000070688 A 20001125

Abstract (en)

[origin: WO0243278A1] The present invention relates to an apparatus of dividing a multi-beam from a base station for several n sectors and combining vice versa in a mobile communication system. The present apparatus includes a multi-beam forming module consisting of n multi-beam forming means forming a received multi-beam from m antennas in a mobile communication system to m beams, which have different direction each other; a 180 DEG coupling module combining the (mXn) beams from the multi-beam forming module to (mXn)/2 beams; a switching module choosing each beam path of the beams from the 180 DEG coupling module; a 180 DEG phase shifting module shifting signal phase to strengthen a part of the beams outputted from the switching module; and a mixing module adapting characteristics of amplitude and phase of the beams while mixing them. According to the present invention, data traffic of a base station can be distributed equally among its n sectors.

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**H04B 7/155**

IPC 8 full level

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Citation (search report)

- [X] WO 9522210 A2 19950817 - QUALCOMM INC [US]
- [X] US 5889494 A 19990330 - REUDINK MARK [US], et al
- [X] EP 0416872 A2 19910313 - MOTOROLA INC [US]
- See references of WO 0243278A1

Designated contracting state (EPC)

FI FR GB SE

DOCDB simple family (publication)

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**KR 0102031 W 20011124**; AU 2315202 A 20011124; CN 01804044 A 20011124; EP 01997908 A 20011124; JP 2002544884 A 20011124