

Title (en)

MULTI-FREQUENCY FUSION PHASE-SHIFTING FEED NETWORK AND BASE STATION ANTENNA

Title (de)

MEHRFREQUENZFUSIONSPHASENVERSCHIEBUNGSSPEISENETZWERK UND BASISSTATIONSANTENNE

Title (fr)

RÉSEAU D'ALIMENTATION À DÉCALAGE DE PHASE DE FUSION MULTIFRÉQUENCE ET ANTENNE DE STATION DE BASE

Publication

EP 4325665 A1 20240221 (EN)

Application

EP 22918146 A 20220701

Priority

- CN 202210002185 A 20220104
- CN 2022103260 W 20220701

Abstract (en)

The present application relates to the technical field of antennas, and provides a multi-frequency fusion phase-shifting feed network and a base station antenna. The multi-frequency fusion phase-shifting feed network comprises a plurality of phase-shifting assemblies, each phase-shifting assembly comprises a phase-shifting circuit board and a slider assembly rotatably connected to the phase-shifting circuit board, and a phase-shifting circuit is provided on each phase-shifting circuit board; the plurality of phase-shifting circuit boards are divided into a first phase-shifting circuit board and a second phase-shifting circuit board, a combination circuit is provided on the first phase-shifting circuit board, and phase-shifting output ports of the phase-shifting circuit on the first phase-shifting circuit board and the phase-shifting circuit on the second phase-shifting circuit board are respectively connected to combined input ports of the combination circuit. By means of the multi-frequency fusion phase-shifting feed network and the base station antenna provided by the present application, multi-frequency independent phase shifting and fusion output can be realized, a combiner does not need to be independently arranged, reduction of occupancy of an antenna space is facilitated, layout is simplified, and cable solder joints are reduced; the phase-shifting feed network has good phase change stability and good consistency, and is convenient to assemble.

IPC 8 full level

H01Q 3/34 (2006.01); **H01P 1/18** (2006.01)

CPC (source: CN EP)

H01P 1/184 (2013.01 - EP); **H01P 1/213** (2013.01 - CN); **H01Q 1/246** (2013.01 - CN); **H01Q 1/50** (2013.01 - CN); **H01Q 3/34** (2013.01 - CN)

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4325665 A1 20240221; CN 114447611 A 20220506; MX 2023015558 A 20240124; WO 2023130690 A1 20230713

DOCDB simple family (application)

EP 22918146 A 20220701; CN 202210002185 A 20220104; CN 2022103260 W 20220701; MX 2023015558 A 20220701