

Title (en)

RADIATION UNIT AND BASE STATION ANTENNA

Title (de)

STRAHLUNGSEINHEIT UND BASISSTATIONSANTENNE

Title (fr)

UNITÉ DE RAYONNEMENT ET ANTENNE DE STATION DE BASE

Publication

**EP 4340124 A1 20240320 (EN)**

Application

**EP 21947869 A 20210906**

Priority

- CN 202110734497 A 20210630
- CN 2021116742 W 20210906

Abstract (en)

The present application provides a radiation unit and a base station, and relates to the technical field of communications. The radiation unit comprises a substrate and two groups of radiation arms. Each group of radiation arms comprises two radiation single arms. Each radiation single arm has at least one decoupling structure. Two radiation single arms of the same group of radiation arms are coupled by means of a radiation surface. One radiation single arm in each group of radiation arms is located on a first surface of the substrate, and the other radiation single arm is located on a second surface of the substrate; or, the two radiation single arms in each group of radiation arms are located on the same surface of the substrate. In the radiation unit and the base station antenna provided in the present application, the two radiation single arms of each group of radiation arms are disposed on two surfaces of the substrate, respectively, thereby increasing the impedance bandwidth. By coupling the two radiation single arms in the same group of radiation arms by means of the radiation surface and adjusting the coupling area, the attenuation of inter-frequency signals is achieved, the decoupling effect is enhanced, and the technical problem in the existing technology that mutual coupling between frequency bands is difficult to reduce in a fused array antenna is resolved.

IPC 8 full level

**H01Q 1/24** (2006.01); **H01Q 1/36** (2006.01); **H01Q 23/00** (2006.01)

CPC (source: CN EP)

**H01Q 1/246** (2013.01 - CN EP); **H01Q 1/36** (2013.01 - CN); **H01Q 1/521** (2013.01 - EP); **H01Q 9/065** (2013.01 - EP); **H01Q 21/26** (2013.01 - EP); **H01Q 23/00** (2013.01 - CN)

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

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DOCDB simple family (publication)

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