

Title (en)
RADIATING STRUCTURE AND ARRAY ANTENNA

Title (de)
STRAHLENDE STRUKTUR UND GRUPPENANTENNE

Title (fr)
STRUCTURE RAYONNANTE ET ANTENNE DE RÉSEAU

Publication
EP 3968458 A4 20220720 (EN)

Application
EP 19928598 A 20191111

Priority
• CN 201910407059 A 20190516
• CN 2019117111 W 20191111

Abstract (en)
[origin: EP3968458A1] The present application provides a radiating structure and an array antenna, wherein the radiating structure comprises a radiating sheet which is provided with a radiating slot in the middle portion thereof, and the radiating slot comprises a lateral slot and a longitudinal slot that are communicated with each other and are cross-orthogonal to each other, and both the lengths of the lateral slot and the longitudinal slot are less than that of the radiating sheet in an extending direction along the corresponding radiating slot. Radiating slots are additionally arranged in the radiating sheet such that the radiating structure may generate two kinds of radiation simultaneously when working in an antenna system, thereby achieving a superposition and enhancement effect of polarization vectors. Therefore, only one layer of radiating sheet is used to achieve the same radiation efficiency and radiation gain as that of the traditional antenna having a multiple-layer patch structure, thereby reducing the use of components; and the structure is simple, and the antenna profile can be reduced, which is beneficial to the implementation of antenna miniaturization.

IPC 8 full level
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CPC (source: CN EP)
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Citation (search report)
• [X] CN 103618149 A 20140305 - JIANGSU JST RF SYS CO LTD, et al
• [X] EP 3454414 A1 20190313 - PCTEL INC [US]
• [X] CN 106329083 A 20170111 - ZHANGJIAGANG MAOAN TRADE CO LTD

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CN116666974A

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

DOCDB simple family (publication)
EP 3968458 A1 20220316; **EP 3968458 A4 20220720**; **EP 3968458 B1 20230830**; **EP 3968458 C0 20230830**; CN 110098477 A 20190806; CN 110098477 B 20220826; WO 2020228275 A1 20201119

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