

Title (en)  
TERMINAL AND COMMUNICATION METHOD

Title (de)  
ENDGERÄT UND KOMMUNIKATIONSVERFAHREN

Title (fr)  
TERMINAL ET PROCÉDÉ DE COMMUNICATION

Publication  
**EP 4131653 A4 20240327 (EN)**

Application  
**EP 21775949 A 20210210**

Priority  
• JP 2020058849 A 20200327  
• JP 2021005055 W 20210210

Abstract (en)  
[origin: EP4131653A1] A terminal (200) comprises: a control unit (203) which determines a direction of transmitting a radio wave on the basis of a direction of arrival of a desired wave or a direction of arrival of an interference wave; and a transmission direction restriction unit (205) which is provided near an antenna (204) and restricts the direction of transmitting the radio wave in accordance with the determination of the control unit (203). The transmission direction restriction unit (205) includes a plurality of metasurface units each including a metasurface substrate, and a dielectric substrate arranged to be opposed to the metasurface substrate. The control unit (203) adjusts the distance between the metasurface substrate and the dielectric substrate of each metasurface unit.

IPC 8 full level  
**H01Q 3/26** (2006.01); **H01Q 1/24** (2006.01); **H01Q 3/14** (2006.01); **H01Q 3/44** (2006.01); **H01Q 15/00** (2006.01); **H01Q 19/06** (2006.01)

CPC (source: EP)  
**H01Q 1/241** (2013.01); **H01Q 3/14** (2013.01); **H01Q 3/2611** (2013.01); **H01Q 3/44** (2013.01); **H01Q 15/0066** (2013.01); **H01Q 15/0086** (2013.01); **H01Q 19/06** (2013.01)

Citation (search report)  
• [XA] US 2018205152 A1 20180719 - TEGREENE CLARENCE T [US], et al  
• [X] US 10573963 B1 20200225 - WALL WALTER S [US], et al  
• [A] US 2012170114 A1 20120705 - DOMASH LAWRENCE H [US], et al  
• [A] US 6323826 B1 20011127 - SIEVENPIPER DANIEL [US], et al  
• [A] US 2014097996 A1 20140410 - VITAZ JACQUELYN A [US], et al  
• See also references of WO 2021192694A1

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

DOCDB simple family (publication)  
**EP 4131653 A1 20230208; EP 4131653 A4 20240327**; JP 2021158600 A 20211007; JP 7284731 B2 20230531; WO 2021192694 A1 20210930

DOCDB simple family (application)  
**EP 21775949 A 20210210**; JP 2020058849 A 20200327; JP 2021005055 W 20210210