

Title (en)
Primary horn

Title (de)
Hornstrahler

Title (fr)
Source primaire du type cornet

Publication
EP 1465282 A1 20041006 (EN)

Application
EP 04006861 A 20040322

Priority
JP 2003088280 A 20030327

Abstract (en)
A primary horn is adapted to attach two probes to a common circuit board to easily ensure a good receiving performance and reduce a manufacturing cost. The primary horn 11 includes a first probe 13 disposed at an open end 12a side of a waveguide 12 for detecting a first linearly polarized wave and a second probe 15 disposed at a termination short-circuit surface 12b side of the waveguide 12 for detecting a second linearly polarized wave orthogonal to the first linearly polarized wave. Both probes protrude parallel to each other. A reflector 14 for reflecting the first linearly polarized wave is interposed in the middle between both probes 13 and 15. A phase converter 17 forming a phase-adjusting aperture 16 is disposed in a plane comprising the second probe 15. Therefore, the second linearly polarized wave passes through the phase-adjusting aperture 16, so that the plane of polarization of the second linearly polarized wave is changed to be oriented in the same direction as the plane of polarization of the first linearly polarized wave. <IMAGE>

IPC 1-7
H01P 1/161

IPC 8 full level
H01P 1/161 (2006.01); **H01Q 13/02** (2006.01); **H01Q 13/06** (2006.01)

CPC (source: EP)
H01P 1/161 (2013.01)

Citation (search report)
• [A] US 5619173 A 19970408 - KING GERARD [GB], et al
• [A] PATENT ABSTRACTS OF JAPAN vol. 0031, no. 36 (E - 151) 13 November 1979 (1979-11-13)

Cited by
CN110085981A; US2018340774A1; US10948293B2; US2022026199A1; US11624612B2; US2023228568A1; US11841227B2; US9075105B2; WO2010009682A1; US9318785B2; US8670638B2; EP1998402B1

Designated contracting state (EPC)
DE FR GB

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