Title (en)

MATCHING AND ISOLATUNG ARRANGEMENT WITH FERRITE CIRCULATOR

Publication

EP 0100274 B1 19890322 (FR)

Application

EP 83401483 A 19830719

Priority

FR 8213105 A 19820727

Abstract (en)

[origin: EP0100274A1] 1. A matching and isolating device for coupling a circuit to be matched (1) to a connection point (A), the device comprising a ferrite circulator having three branches (41, 42, 43) made of a metal plate comprising a resonator disk, the three branches being disposed there around at a mutual angular distance of 120 degrees, the first branch being connected to this connection point (A), the second branch to a biassing resistor (R), the third branch to the circuit to be matched, characterized in that said metal plate is disposed inside a structure constituted by two ground planes situated on either side of the plate, that the lengths of the first and of the second branches (41, 42) are substantially equal to a quarter wavelength in the circulator at a mean frequency, and that this length is substantially greater than that of the third branch (43) which is shown only by way of indication for purposes of connection to the circuit to be matched, and that the circulator is selected in such a way that the real part of the impedance of its third branch is equal to the real part of the impedance of the circuit to be matched and that the Q factors of said impedances are the same.

IPC 1-7

H01P 1/387

IPC 8 full level

H01P 1/387 (2006.01); H01P 5/08 (2006.01); H03D 9/06 (2006.01); H03F 3/60 (2006.01)

CPC (source: EP)

H01P 1/387 (2013.01)

Cited by

CN116259944A

Designated contracting state (EPC)

BE DE GB IT NL

DOCDB simple family (publication)

EP 0100274 A1 19840208; **EP 0100274 B1 19890322**; CA 1212731 A 19861014; DE 3379494 D1 19890427; FR 2531272 A1 19840203; FR 2531272 B1 19850913; JP S5941901 A 19840308

DOCDB simple family (application)

EP 83401483 A 19830719; CA 433144 A 19830725; DE 3379494 T 19830719; FR 8213105 A 19820727; JP 13602283 A 19830727