

Title (en)
Switched ring phase shifting circuit.

Title (de)
Phasenverschiebungsschaltung mit geschaltetem Ring.

Title (fr)
Circuit déphasageur en anneau commuté.

Publication
EP 0434860 A1 19910703 (EN)

Application
EP 89123992 A 19891227

Priority
US 28796988 A 19881221

Abstract (en)
A phase shifting circuit is disclosed comprising a plurality of bidirectional transmission line segments (31, 35, 37, 39) serially connected to form a ring. Input and output terminals (13, 15) are connected to opposite ends of the first of the transmission line segments (31) to form a first signal path through the ring. A second ring signal path, through the remainder of the serially connected transmission line segments (35, 37, 39), is selectively enabled to provide a predetermined phase shift at the output of the ring. By removing series semiconductor devices, the circuit permits higher power signals to be phase shifted over wide frequency ranges.

IPC 1-7
H01P 1/185

IPC 8 full level
H01P 1/185 (2006.01)

CPC (source: EP)
H01P 1/185 (2013.01)

Citation (search report)
• [X] US 4238745 A 19801209 - SCHWARZMANN ALFRED [US]
• [A] US 4001734 A 19770104 - BURNS RICHARD W
• [X] 1979 IEEE MTT-S INTERNATIONAL MICROWAVE SYMPOSIUM-DIGEST, 30 april-2 may 1979, Orlando, US; IEEE, New York, US, 1979; K. HIRAI et al.: "Practical design of C-band, MIC, PIN phase shifters" pages 229-231
• [A] IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES. vol. 22, no. 6, June 1974, NEW YORK US pages 658 - 674; J.F. WHITE: "Diode phase shifters for array antennas"

Cited by
WO2015009056A1

Designated contracting state (EPC)
DE ES GB IT NL

DOCDB simple family (publication)
EP 0434860 A1 19910703; CA 2004857 A1 19900621

DOCDB simple family (application)
EP 89123992 A 19891227; CA 2004857 A 19891207