

Title (en)
Electric PCB track

Title (de)
Elektrische Leiterbahn

Title (fr)
Piste conductrice électrique

Publication
EP 2509156 A1 20121010 (DE)

Application
EP 12161739 A 20120328

Priority
DE 102011007058 A 20110408

Abstract (en)
The electrical strip conductor (100) comprises an arc-shaped modification portion that is formed in a secondary fractal iteration portion. The length of the secondary fractal iteration portion is greater than the length of two-fold portion of a primary fractal iteration portion. The radius of curvature of the arc-shaped modification portion is greater than a pre-determined minimum turning radius (Rmin).

Abstract (de)
Eine elektrische Leiterbahn weist eine bogenförmige Abwandlung einer Form zumindest eines Teils eines Fraktals zumindest zweiter Iteration auf. Dabei ist der Teil des Fraktals größer als ein Zweifaches einer ersten Iteration des Fraktals. Die bogenförmig abgewandelte Form für Richtungsänderungen weist einen Kurvenradius auf, der größer ist als ein vordefinierter minimaler Kurvenradius R min .

IPC 8 full level
H01Q 1/36 (2006.01)

CPC (source: EP US)
H01Q 1/36 (2013.01 - EP US)

Citation (applicant)
• US 6476766 B1 20021105 - COHEN NATHAN [US]
• US 2010177001 A1 20100715 - ALEXOPOULOS NICOLAOS G [US], et al
• GHALI, H.; MOSELHY, T. A.: "Miniaturized Fractal Rat-Race, Branch-Line and Coupled-Line Hybrids", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol. 52, no. 11, November 2004 (2004-11-01), pages 2513 - 2520, XP011121731, DOI: doi:10.1109/TMTT.2004.837154
• POPUGAEV, A. E.; WANSCH, R.: "3rd European Conference on Antennas and Propagation (EuCAP 2009), Proceedings, CD-ROM", 23 March 2009, VDE-VERLAG, article "A Novel Miniaturization Technique in Microstrip Feed Network Design", pages: 2309 - 2313

Citation (search report)
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EP3671951A1; WO2020128096A1

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 2509156 A1 20121010; EP 2509156 B1 20160427; DE 102011007058 A1 20121011; JP 2012222826 A 20121112; JP 5698176 B2 20150408; US 2012306701 A1 20121206; US 8878729 B2 20141104

DOCDB simple family (application)
EP 12161739 A 20120328; DE 102011007058 A 20110408; JP 2012087775 A 20120406; US 201213441433 A 20120406