

Title (en)
ENERGY CONDITIONING CIRCUIT ASSEMBLY

Title (de)
ENERGIEANPASSUNGSSCHALTUNG

Title (fr)
ENSEMBLE CIRCUIT DE CONDITIONNEMENT D'ENERGIE

Publication
EP 1177641 A4 20030423 (EN)

Application
EP 00930194 A 20000428

Priority

- US 0011409 W 20000428
- US 13138699 P 19990428
- US 13554299 P 19990524
- US 13645199 P 19990528
- US 13918299 P 19990615
- US 14698799 P 19990803
- US 16503599 P 19991112
- US 18010100 P 20000203
- US 18532000 P 20000228

Abstract (en)
[origin: WO0065740A1] The present invention is a component carrier (132) consisting of a plate of insulating material having a plurality of apertures (140) for accepting the leads of a thru-hole differential and common mode filter (130). Another embodiment consists of a surface mount component carrier (10) comprising a disk (16) of insulating material having a plurality of apertures (24). The same concept for the above described carrier is also incorporated into several alternate embodiments, either independently, embedded within electronic connectors. The overall configuration and electrical characteristics of the concepts underlying the present inventions are also described as an energy conditioning circuit assembly which encompasses the combination of differential and common mode filters and component carriers optimized for such filters. The various embodiments of components carriers provide increased physical support and protection to differential and common mode filters and substantially improve the electrical characteristics of the filter due to the increased shielding provided by the carriers. Embodiments of the carrier energy conditioning assembly include integrated circuit construction for a differential and common mode filter coupled to the power bus of an integrated circuit.

IPC 1-7
H04B 3/00; **H03H 1/00**

IPC 8 full level
H01L 23/50 (2006.01); **H01L 23/552** (2006.01); **H03H 1/00** (2006.01); **H03H 7/01** (2006.01); **H05K 1/02** (2006.01); **H05K 3/46** (2006.01); **H05K 1/14** (2006.01); **H05K 1/16** (2006.01); **H05K 3/34** (2006.01)

CPC (source: EP KR)
H01L 23/50 (2013.01 - EP); **H01L 23/552** (2013.01 - EP); **H01L 24/49** (2013.01 - EP); **H05K 7/02** (2013.01 - KR); **H01L 24/48** (2013.01 - EP); **H01L 2224/48095** (2013.01 - EP); **H01L 2224/49** (2013.01 - EP); **H01L 2924/00014** (2013.01 - EP); **H01L 2924/01005** (2013.01 - EP); **H01L 2924/01014** (2013.01 - EP); **H01L 2924/01027** (2013.01 - EP); **H01L 2924/01029** (2013.01 - EP); **H01L 2924/01033** (2013.01 - EP); **H01L 2924/01039** (2013.01 - EP); **H01L 2924/01077** (2013.01 - EP); **H01L 2924/01078** (2013.01 - EP); **H01L 2924/01079** (2013.01 - EP); **H01L 2924/01082** (2013.01 - EP); **H01L 2924/014** (2013.01 - EP); **H01L 2924/09701** (2013.01 - EP); **H01L 2924/10253** (2013.01 - EP); **H01L 2924/14** (2013.01 - EP); **H01L 2924/19041** (2013.01 - EP); **H01L 2924/30105** (2013.01 - EP); **H01L 2924/30107** (2013.01 - EP); **H01L 2924/3011** (2013.01 - EP); **H01L 2924/3025** (2013.01 - EP); **H03H 7/427** (2013.01 - EP); **H03H 2001/0078** (2013.01 - EP); **H05K 1/141** (2013.01 - EP); **H05K 1/162** (2013.01 - EP); **H05K 3/3436** (2013.01 - EP)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 0065740A1

Citation (examination)
WO 9952210 A1 19991014 - X2Y ATTENUATORS LLC [US], et al

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0065740 A1 20001102; AU 4805700 A 20001110; CN 1223107 C 20051012; CN 1373938 A 20021009; EP 1177641 A1 20020206; EP 1177641 A4 20030423; HK 1045915 A1 20021213; JP 2002543661 A 20021217; KR 100427111 B1 20040417; KR 20020007391 A 20020126

DOCDB simple family (application)
US 0011409 W 20000428; AU 4805700 A 20000428; CN 00809403 A 20000428; EP 00930194 A 20000428; HK 02105664 A 20020801; JP 2000614574 A 20000428; KR 20017013786 A 20011027