

Title (en)  
METAL FOIL WITH OPENINGS

Title (de)  
METALLFOLIE MIT DURCHBRECHUNGEN

Title (fr)  
FEUILLE METALLIQUE COMPORTANT DES TROUS

Publication  
**EP 1038096 B1 20040317 (DE)**

Application  
**EP 98965782 A 19981208**

Priority  
• DE 19755354 A 19971212  
• EP 9807954 W 19981208

Abstract (en)  
[origin: DE19755354A1] The object of the invention is a flat entity inter alia, having at least two partially overlapping structures (10, 11, 14) which are located at a distance from a reference surface. An opening (16) is formed in an area (5) where the structures (10, 11, 14) overlap.

IPC 1-7  
**F01N 3/28**; **B01J 35/04**

IPC 8 full level  
**B01J 35/04** (2006.01); **F01N 3/28** (2006.01)

CPC (source: EP KR US)  
**B01J 35/56** (2024.01 - EP US); **F01N 3/28** (2013.01 - KR); **F01N 3/2821** (2013.01 - EP US); **F01N 2330/321** (2013.01 - EP US);  
**F01N 2330/38** (2013.01 - EP US); **Y10T 428/1234** (2015.01 - EP US); **Y10T 428/12361** (2015.01 - EP US); **Y10T 428/1241** (2015.01 - EP US)

Designated contracting state (EPC)  
DE FR IT

DOCDB simple family (publication)  
**DE 19755354 A1 19990617**; AU 2159299 A 19990705; CN 1107789 C 20030507; CN 1281529 A 20010124; DE 59811018 D1 20040422;  
EP 1038096 A1 20000927; EP 1038096 B1 20040317; JP 2002508469 A 20020319; KR 100528356 B1 20051115; KR 20010033060 A 20010425;  
PL 193856 B1 20070330; PL 341477 A1 20010423; RU 2213231 C2 20030927; US 6316121 B1 20011113; WO 9931362 A1 19990624

DOCDB simple family (application)  
**DE 19755354 A 19971212**; AU 2159299 A 19981208; CN 98812128 A 19981208; DE 59811018 T 19981208; EP 9807954 W 19981208;  
EP 98965782 A 19981208; JP 2000539245 A 19981208; KR 20007006421 A 20000612; PL 34147798 A 19981208; RU 2000118793 A 19981208;  
US 59229900 A 20000612