

Publication

**EP 0762800 A3 19970423 (EN)**

Application

**EP 96306415 A 19960904**

Priority

- JP 22995495 A 19950907
- JP 25409095 A 19950929

Abstract (en)

[origin: EP0762800A2] A lead frame (1) for an electroacoustic transducer, forming leads of the electroacoustic transducer, comprising a metal sheet (2) made of a metal having elongation 20% or higher, a nickel undercoat deposit (3) of a thickness in the range from 0.01 to 2.0  $\mu\text{m}$  formed on the metal sheet (2) by plating in a nickel plating bath containing no brightening agent, and a solder deposit (4) of a thickness in the range from 1.0 to 10  $\mu\text{m}$  formed on the surface of the nickel undercoat deposit (3) by plating in a tin-lead plating bath containing no brightening agent. With the lead frame (1) formed by plating the metal sheet (2) as stated above, micro-cracking occurring in the bent corners of the metal sheet (2) and the solder deposit (4), when the outer leads of the lead frame (1) are bent at an angle of 90 DEG, can be prevented. <IMAGE>

IPC 1-7

**H04R 1/06**

IPC 8 full level

**C23C 28/02** (2006.01); **G10K 9/13** (2006.01); **H01L 23/48** (2006.01); **H01R 4/02** (2006.01); **H01R 13/03** (2006.01); **H04R 1/06** (2006.01); **H04R 9/02** (2006.01)

CPC (source: EP)

**C23C 28/021** (2013.01); **C23C 28/023** (2013.01); **H01R 4/024** (2013.01); **H01R 13/03** (2013.01); **H04R 1/06** (2013.01)

Citation (search report)

- [A] EP 0650308 A1 19950426 - STAR MFG CO [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 398 (C - 538) 21 October 1988 (1988-10-21)
- [A] PATENT ABSTRACTS OF JAPAN vol. 013, no. 350 (E - 800) 7 August 1989 (1989-08-07)
- [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 019 (E - 292) 25 January 1985 (1985-01-25)
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 095 (E - 242) 2 May 1984 (1984-05-02)
- [A] R.SCHETTY: "Outer Lead Plating Process Protects Solderability", ELECTRONIC PACKAGING AND PACKAGING, vol. 34, no. 2, February 1994 (1994-02-01), NEWTON, MASS., US, pages 114 - 116, XP000430271

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Designated contracting state (EPC)

DE GB SE

DOCDB simple family (publication)

**EP 0762800 A2 19970312**; **EP 0762800 A3 19970423**; **EP 0762800 B1 19981125**; DE 69601021 D1 19990107; DE 69601021 T2 19990610; HK 1012487 A1 19990730; JP 3142754 B2 20010307; JP H09135492 A 19970520

DOCDB simple family (application)

**EP 96306415 A 19960904**; DE 69601021 T 19960904; HK 98113341 A 19981214; JP 25409095 A 19950929