

Title (en)

Dispenser with grounding means and method therefor

Title (de)

Spender mit Erdungsvorrichtung und Verfahren dafür

Title (fr)

Distributeur avec mise à la terre et son procédé

Publication

EP 1231823 B2 20100811 (EN)

Application

EP 02250924 A 20020211

Priority

- US 78073301 A 20010209
- US 96627501 A 20010927
- US 96612401 A 20010927

Abstract (en)

[origin: EP1231823A1] A grounding mechanism and method for grounding a dispenser are provided, consisting in having an internal low-impedance path (2016) for electrostatic charges that build up during use of the dispenser. The electrostatic charges are discharged to a local ground to which the low-impedance path is connected.

IPC 8 full level

H05F 3/02 (2006.01); **A47K 10/36** (2006.01)

CPC (source: EP)

A47K 10/36 (2013.01); **A47K 10/3687** (2013.01); **H05F 3/02** (2013.01); **A47K 10/3612** (2013.01); **A47K 10/3625** (2013.01);
A47K 2010/3668 (2013.01); **A47K 2010/3681** (2013.01)

Citation (opposition)

Opponent :

- JP S63295344 A 19881201 - KONISHIROOKU PHOTO IND
- US 4605988 A 19860812 - NIENHUIS JAMES H [US], et al
- DE 20108336 U1 20010802 - COMPUCASE ENTPR CO [TW]
- EP 0994667 B1 20030402 - BLATZ WILHELM [DE]
- WO 9958040 A1 19991118 - BLATZ WILHELM [DE], et al

Cited by

WO2011130765A1; US8511598B2; US6977588B2; US6903654B2; US7946522B2; US8298640B2; US8741410B2; US9878869B2;
US10604374B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DE 60202083 D1 20050105; DE 60202083 T2 20051215; DE 60207453 D1 20051229; DE 60207453 T2 20060803; DE 60213491 D1 20060914;
DE 60213491 T2 20070726; DE 60213491 T3 20110120; DK 1231823 T3 20061204; DK 1231823 T4 20101122; DK 1232715 T3 20060403;
EP 1232715 A2 20020821; EP 1232715 A3 20031022; EP 1232715 B1 20051123; ES 2253491 T3 20060601; ES 2267941 T3 20070316;
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