

Title (en)
BATTERY POWERED CORDLESS CLEANING SYSTEM

Title (de)
BATTERIEGETRIEBENES KABELLOSES REINIGUNGSSYSTEM

Title (fr)
SYSTÈME DE NETTOYAGE SANS FIL ALIMENTÉ PAR BATTERIE

Publication
EP 3132730 B1 20191016 (EN)

Application
EP 16181499 A 20091016

Priority

- US 32636808 F 20081016
- US 32636408 F 20081016
- US 32636208 F 20081016
- US 10589608 P 20081016
- US 10589108 P 20081016
- US 10589908 P 20081016
- US 40503309 A 20090316
- EP 09821342 A 20091016
- US 2009061054 W 20091016

Abstract (en)
[origin: WO2010045588A1] A cordless, battery-powered system of cleaning products. The system of cleaning products includes devices such as upright vacuums (e.g., a stick vacuum, a lightweight upright vacuum, etc.), a hand-held vacuum, a carpet-cleaner, a canister vacuum, and the like. Each of the devices is powered by a battery pack which is interchangeable among the devices. The battery pack includes a combination of hardware and software for connecting to, identifying, and communicating with the cleaning products to ensure that each of the products receives the power necessary to ensure optimal performance.

IPC 8 full level
A47L 9/00 (2006.01)

CPC (source: EP)
A47L 9/00 (2013.01); **A47L 9/0063** (2013.01); **A47L 9/2857** (2013.01); **A47L 9/2873** (2013.01); **A47L 9/2884** (2013.01); **A47L 9/2889** (2013.01); **A47L 9/2894** (2013.01)

Citation (opposition)

Opponent : Elkington and Fife LLP

- EP 1075906 A2 20010214 - BLACK & DECKER INC [US]
- US 2003201754 A1 20031030 - CONRAD WAYNE ERNEST [CA]
- US 2005155177 A1 20050721 - BAER MARK E [US], et al
- US 2005007068 A1 20050113 - JOHNSON TODD W [US], et al
- GB 2420031 A 20060510 - MILWAUKEE ELECTRIC TOOL CORP [US]
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- US 2006164032 A1 20060727 - JOHNSON TODD W [US], et al
- JP 2007068749 A 20070322 - TOSHIBA TEC KK
- US 5504412 A 19960402 - CHAN KA-MING [HK], et al
- JP 2004113595 A 20040415 - MATSUSHITA ELECTRIC IND CO LTD

Opponent : Kärcher SE & Ko KG

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WO2021138159A1

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
WO 2010045588 A1 20100422; CN 102256522 A 20111123; CN 109528080 A 20190329; CN 109528080 B 20210730; EP 2337485 A1 20110629; EP 2337485 A4 20130904; EP 2337485 B1 20160921; EP 3132730 A1 20170222; EP 3132730 B1 20191016

DOCDB simple family (application)
US 2009061054 W 20091016; CN 200980150929 A 20091016; CN 201811197063 A 20091016; EP 09821342 A 20091016; EP 16181499 A 20091016