

Title (en)
ELECTRO-MECHANICAL COMPONENT AND METHOD FOR PRODUCING THE SAME

Title (de)
ELEKTROMECHANISCHES BAUELEMENT UND VERFAHREN ZUR HERSTELLUNG DESSELBEN

Title (fr)
COMPOSANT ELECTROMECHANIQUE ET SON PROCEDE DE PRODUCTION

Publication
EP 1222142 A1 20020717 (DE)

Application
EP 00971334 A 20001006

Priority
• DE 19948613 A 19991008
• EP 0009813 W 20001006

Abstract (en)
[origin: WO0127026A1] The invention relates to an electromechanical component (10) comprising a polymeric body (12) consisting of a mechanically active component (14a, 14b, 14c), a frame (18) and a metal layer (30). Said metal layer at least partially covers a mechanically active part in order to mechanically stabilize the same, whereby a region of the polymer body (12) carrying said metal layer (30), comprises a first polymer material which can be metallicized in a wet chemical process. Another region which does not have a metal layer comprises a second polymer material which can not be metallized in a wet chemical process. Said electromechanical component can be an acceleration sensor, a rotation speed sensor, a microvalve, a micropump, a pressure sensor or a power sensor. Production of said electromechanical component incurs substantially lower costs compared to electromechanical components produced using silicon-based technology because said production process involves simple injection-molding and/or stamping instead of complicated silicon-based technology.

IPC 1-7
B81B 3/00; **G01P 15/08**; **G01P 15/125**

IPC 8 full level
B81B 3/00 (2006.01); **B81B 7/00** (2006.01); **B81C 3/00** (2006.01); **F04B 43/04** (2006.01); **F15C 5/00** (2006.01); **F16K 99/00** (2006.01); **G01P 1/02** (2006.01); **G01P 15/08** (2006.01); **G01P 15/125** (2006.01); **H03H 9/24** (2006.01)

CPC (source: EP US)
B81B 7/0077 (2013.01 - EP US); **F15C 5/00** (2013.01 - EP US); **F16K 99/0001** (2013.01 - EP US); **F16K 99/0015** (2013.01 - EP US); **F16K 99/0042** (2013.01 - EP US); **G01P 1/023** (2013.01 - EP US); **G01P 15/0802** (2013.01 - EP US); **G01P 15/125** (2013.01 - EP US); **F04B 43/043** (2013.01 - EP US); **F16K 2099/0076** (2013.01 - EP US); **F16K 2099/0078** (2013.01 - EP US); **G01P 2015/0814** (2013.01 - EP US); **H01L 2224/48091** (2013.01 - EP US); **H01L 2224/48227** (2013.01 - EP US); **H01L 2224/49171** (2013.01 - EP US); **H01L 2224/72** (2013.01 - EP US)

Citation (search report)
See references of WO 0127025A1

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 0127026 A1 20010419; DE 19964218 A1 20010531; DE 19964218 C2 20030410; EP 1222142 A1 20020717; EP 1226089 A1 20020731; JP 2003511256 A 20030325; JP 2003511257 A 20030325; US 6644117 B1 20031111; WO 0127025 A1 20010419

DOCDB simple family (application)
EP 0009814 W 20001006; DE 19964218 A 19991008; EP 0009813 W 20001006; EP 00971334 A 20001006; EP 00979486 A 20001006; JP 2001530050 A 20001006; JP 2001530051 A 20001006; US 8994902 A 20020808