

Title (en)
DRIVE DEVICE

Title (de)
ANTRIEBSVORRICHTUNG

Title (fr)
DISPOSITIF D'ENTRAINEMENT

Publication
EP 1086499 A1 20010328 (DE)

Application
EP 00903616 A 20000122

Priority

- DE 19903484 A 19990129
- DE 19905191 A 19990206
- DE 19937209 A 19990806
- EP 0000495 W 20000122

Abstract (en)
[origin: WO0045444A1] The invention relates to a drive device. Piezo actuators (4) are driven by an oscillating circuit and move the mechanical drive components. Said piezo actuators (4) and said drive components form a first spring-mass system which is caused to oscillate by the piezo actuators (4) at a first natural frequency. The drive components drive a second spring-mass system (1, 2) that is provided with a second natural frequency which is smaller than the first natural frequency. The second natural frequency determines an envelope curve of the same frequency during which the piezo actuators (4) are driven by the first natural frequency. The piezo actuators (4) are switched on when the mass (1) of the second spring-mass system (1, 2) interacts mechanically with the drive components of the second spring-mass system.

IPC 1-7
H01L 41/04; **H01L 41/09**

IPC 8 full level
B06B 1/06 (2006.01); **H01L 41/04** (2006.01); **H01L 41/09** (2006.01); **H02N 2/04** (2006.01)

CPC (source: EP)
H02N 2/002 (2013.01); **H02N 2/067** (2013.01)

Citation (search report)
See references of WO 0045444A1

Cited by
DE102015009833B3

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
WO 0045444 A1 20000803; **WO 0045444 A8 20010405**; AU 2543400 A 20000818; CN 1300447 A 20010620; DE 19937209 A1 20000810; EP 1086499 A1 20010328; JP 2002536146 A 20021029

DOCDB simple family (application)
EP 0000495 W 20000122; AU 2543400 A 20000122; CN 00800095 A 20000122; DE 19937209 A 19990806; EP 00903616 A 20000122; JP 2000596607 A 20000122