

Title (en)  
Pneumatic expander

Title (de)  
Pneumatischer Expander

Title (fr)  
Extenseur pneumatique

Publication  
**EP 1522331 A1 20050413 (DE)**

Application  
**EP 03022755 A 20031010**

Priority  
EP 03022755 A 20031010

Abstract (en)  
Pneumatic expander (1) comprises a main housing (2), two actuating units (4a, 4b) that can be manually adjusted relative to the housing to compress air in at least one air chamber (15) in at least one operating mode of the expander, and a control valve unit (17) that can be brought into different stable switching states without addition of energy. Preferred Features: The pneumatic expander is a mobile device.

Abstract (de)  
Es wird ein pneumatischer Expander (1) vorgeschlagen, der über ein Hauptgehäuse (2) sowie zwei manuell relativ zu dem Hauptgehäuse (2) verstellbare Betätigungseinheiten (4a, 4b) verfügt. Eine Steuerventileinrichtung (17) ermöglicht die Vorgabe unterschiedlicher Betriebsmodi des Expanders und ist zu diesem Zweck in verschiedene, jeweils ohne Energiezufuhr stabil beibehaltene Schaltzustände verbringbar. <IMAGE>

IPC 1-7  
**A63B 21/008**; **A63B 23/12**; **A63B 24/00**

IPC 8 full level  
**A63B 21/008** (2006.01); **A63B 23/12** (2006.01); **A63B 24/00** (2006.01)

CPC (source: EP)  
**A63B 21/0004** (2013.01); **A63B 21/00069** (2013.01); **A63B 21/00072** (2013.01); **A63B 21/0087** (2013.01); **A63B 21/4035** (2015.10); **A63B 21/4045** (2015.10); **A63B 23/12** (2013.01); **A63B 24/00** (2013.01)

Citation (search report)  
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• [Y] FR 2686259 A1 19930723 - THEROND LEON [FR]  
• [A] EP 0710774 A2 19960508 - FESTO KG [DE]  
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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

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