

Title (en)  
CUSHION AND SELF-ADJUSTING VALVE

Title (de)  
POLSTER SOWIE SELBSTMACHSTELLENDES VENTIL DAFÜR

Title (fr)  
COUSSIN ET VALVE AUTO-RÉGLABLE

Publication  
**EP 2635160 A4 20140326 (EN)**

Application  
**EP 11838620 A 20111031**

Priority  
• US 40877410 P 20101101  
• US 2011058582 W 20111031

Abstract (en)  
[origin: WO2012061292A2] A cushion with a support pad comprising a plurality of compressible suspension elements with a cover top and bottom joined together to form an impervious barrier, and a valve in fluid communication with the plurality of compressible suspension elements that allows the controlled expulsion of air until a user positioned on the cushion is optimally immersed in the cushion. When the user is removed from the cushion, the valve allows ingress of air into the cushion. In one aspect, the valve comprises an expansion valve controls air flow out of and into the cushion. In one aspect, the valve comprises a labyrinth seal that dampens air flow and pressure spikes. The valve comprises a pressure responsive compression spring that controls the expulsion of air from the cushion and, consequently, adjusting the immersion depth of the seated user.

IPC 8 full level  
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**F16K 17/0413** (2013.01 - EP US); **F16K 17/048** (2013.01 - EP US); **Y10T 137/7771** (2015.04 - EP US)

Citation (search report)  
• [A] GB 2325495 A 19981125 - HUNLEIGH TECHNOLOGY PLC [GB]  
• [A] US 2005218367 A1 20051006 - SHINNER NEIL [GB]  
• [A] EP 1014017 A2 20000628 - MERLONI ELETTRODOMESTICI SPA [IT]  
• [A] DE 4315701 A1 19941117 - SCHUETZ WERKE GMBH CO KG [DE]  
• See references of WO 2012061292A2

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