

Title (en)  
Water barrier for footwear

Title (de)  
Wassersperre für Schuhe

Title (fr)  
Barrière imperméable pour chaussures

Publication  
**EP 2294936 A1 20110316 (EN)**

Application  
**EP 10176462 A 20100913**

Priority  
US 55807209 A 20090911

Abstract (en)  
A footwear construction including a barrier element that restricts the transfer of water into the footwear. The footwear can include an upper joined with a sole, with at least one of the upper and sole defining a channel that allows air to circulate to the upper. The barrier element can be located in the channel, and can include a phase change material that swells to close the channel when subjected to water. The barrier element can act as a valve to restrict the flow of water into the upper through the channel when subjected to water. The barrier element can be water absorbing polymer included in a non-woven sheet. When dry, the barrier element can allow air to pass through the channel and circulate to an interior of the upper. The barrier element can be wetted and dried repeatedly, yet still function to restrict water flow into the footwear.

IPC 8 full level  
**A43B 7/08** (2006.01); **A43B 7/12** (2006.01); **A43B 13/12** (2006.01)

CPC (source: EP US)  
**A43B 7/08** (2013.01 - EP US); **A43B 7/12** (2013.01 - EP US); **A43B 13/125** (2013.01 - EP US); **A43B 17/107** (2013.01 - EP US)

Citation (applicant)  
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• US 5071681 A 19911210 - MANNING JAMES H [US], et al  
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Citation (search report)  
[X] WO 2008028659 A1 20080313 - DEHN MICHAEL CHRISTIAN [DE]

Citation (examination)  
• US 2009203275 A1 20090813 - DEHN MICHAEL CHRISTIAN [DE]  
• ES 2367449 T3 20111103 - IQTEX PATENTVERWALTUNG UG HAFTUNGSBESCHRANKT [DE], et al  
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Designated contracting state (EPC)  
AL 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

Designated extension state (EPC)  
BA ME RS

DOCDB simple family (publication)  
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DOCDB simple family (application)  
**EP 10176462 A 20100913**; CN 201010282790 A 20100910; US 55807209 A 20090911