

Title (en)

STRUCTURE FOR A PRISM-SHAPED BATTERY CELL WITH A STRESS-GENERATED SEAL

Title (de)

ANORDNUNG FÜR EINE PRISMATISCHE METALL-LUFT-BATTERIE ZELLE MIT EINER SPANNUNGSGENERIERTEN DICHTUNG

Title (fr)

STRUCTURE POUR PILE EN FORME DE PRISME COMPORTANT UN JOINT PAR CONTRAINTE

Publication

EP 1142056 A1 20011010 (EN)

Application

EP 99969268 A 19991202

Priority

- US 9928558 W 19991202
- US 11229298 P 19981215
- US 29345899 A 19990415

Abstract (en)

[origin: WO003668A1] A leak proof, metal-air battery cell having features for the prevention of electrolyte leakage through gaps between the casing elements of the battery cell and through openings formed on the battery cell. By forming the casing elements and/or the grommet positioned between the casing elements with at least one protrusion, the casing elements and grommet create a concentrated stress circumscribing the opening, which prevents the leakage of electrolyte. Also, through the addition of a liquid with a high viscosity, which is either coated on the grommet or in replacement of the grommet, the leakage of electrolyte is substantially prevented. Also a seal formed of at least one layer of generally uncompressed Teflon having flattened portions pressed against at least one casing element. The interactive forces between the flatten portions of the uncompressed Teflon layer and the casing elements provide the sealing function.

IPC 1-7

H01M 12/06; **H01M 2/02**

IPC 8 full level

H01M 4/06 (2006.01); **H01M 4/62** (2006.01); **H01M 4/86** (2006.01); **H01M 4/88** (2006.01); **H01M 4/96** (2006.01); **H01M 8/02** (2006.01); **H01M 12/06** (2006.01); **H01M 50/103** (2021.01); **H01M 50/186** (2021.01); **H01M 4/02** (2006.01); **H01M 4/74** (2006.01); **H01M 4/90** (2006.01); **H01M 6/42** (2006.01); **H01M 6/50** (2006.01); **H01M 8/04** (2006.01); **H01M 10/44** (2006.01); **H01M 16/00** (2006.01)

CPC (source: EP US)

H01M 4/06 (2013.01 - EP); **H01M 4/62** (2013.01 - EP); **H01M 4/628** (2013.01 - EP); **H01M 4/745** (2013.01 - EP); **H01M 4/8605** (2013.01 - EP); **H01M 4/96** (2013.01 - EP); **H01M 6/5033** (2013.01 - EP); **H01M 8/0228** (2013.01 - EP); **H01M 12/06** (2013.01 - EP); **H01M 50/103** (2021.01 - EP US); **H01M 50/109** (2021.01 - EP); **H01M 50/1385** (2021.01 - EP); **H01M 50/186** (2021.01 - EP US); **H01M 4/02** (2013.01 - EP); **H01M 4/621** (2013.01 - EP); **H01M 4/9016** (2013.01 - EP); **H01M 6/42** (2013.01 - EP); **H01M 8/0206** (2013.01 - EP); **H01M 8/0213** (2013.01 - EP); **H01M 8/04089** (2013.01 - EP); **H01M 10/44** (2013.01 - EP); **H01M 16/00** (2013.01 - EP); **H01M 2004/021** (2013.01 - EP); **H01M 2004/8689** (2013.01 - EP); **Y02E 60/10** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

See references of WO 0036693A1

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 0036668 A1 20000622; AU 2843500 A 20000703; AU 2843700 A 20000703; AU 3206400 A 20000703; EP 1142056 A1 20011010; JP 2002532858 A 20021002; WO 0036689 A1 20000622; WO 0036693 A1 20000622

DOCDB simple family (application)

US 9928421 W 19991201; AU 2843500 A 19991130; AU 2843700 A 19991202; AU 3206400 A 19991201; EP 99969268 A 19991202; JP 2000588847 A 19991202; US 9928253 W 19991130; US 9928558 W 19991202