

Title (en)

FIRE-RESISTANT GAS GENERATING BATTERY ELECTROLYTES

Title (de)

ELEKTROLYT FÜR EINE BATTERIE, DIE NICHTBRENNBARES GAS PRODUZIERT

Title (fr)

ELECTROLYTES DE BATTERIE PRODUISANT UN GAZ IGNIFUGEANT

Publication

**EP 1042838 A4 20010404 (EN)**

Application

**EP 98960601 A 19981201**

Priority

- US 9825466 W 19981201
- US 6722697 P 19971202

Abstract (en)

[origin: WO9928987A1] A compound that generates a fire-retardant gas upon decomposition has general structure (I) wherein, X is N, C, S, NO, N2, CO, SO; A is substantially any organic moiety including alkyl, aryl, alkoxy, cyclic, fused cyclic, heteroatoms, ketals, acetals or alcohols. B<1> and B<2> are substantially any organic moiety including alkyl, aryl, alkoxy, cyclic, fused cyclic, heteroatoms, ketals, acetals or alcohols, also including oxygen, hydrogen and null; and n is an integer from 0-100. Preferred gases generated thereby include CO, SO2, SO3, NO, N2O, NO2 and N2. It is also preferred that the generated gas assists in formation of a solid electrolyte interface (SEI) between the electrolyte and at least one of the electrodes. It is most preferred that the cell have a conductivity greater than 10<-3> S/cm.

IPC 1-7

**H01M 10/40; H01M 6/16**

IPC 8 full level

**H01M 10/05** (2010.01); **H01M 4/13** (2010.01); **H01M 6/16** (2006.01); **H01M 10/052** (2010.01); **H01M 10/0565** (2010.01); **H01M 10/0567** (2010.01)

CPC (source: EP)

**H01M 6/162** (2013.01)

Citation (search report)

- [X] EP 0631339 A2 19941228 - CANON KK [JP]
- [X] US 5202203 A 19930413 - DELNICK FRANK M [US]
- [AD] WO 9744842 A1 19971127 - STANFORD RES INST INT [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 038 (E - 878) 24 January 1990 (1990-01-24)
- See references of WO 9928987A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

**WO 9928987 A1 19990610**; AU 1616199 A 19990616; CA 2313027 A1 19990610; EP 1042838 A1 20001011; EP 1042838 A4 20010404; JP 2001525597 A 20011211

DOCDB simple family (application)

**US 9825466 W 19981201**; AU 1616199 A 19981201; CA 2313027 A 19981201; EP 98960601 A 19981201; JP 2000523720 A 19981201