

Title (en)

Pyrotechnic composition containing an inorganic binder, which generates a non-toxic gas and its method of manufacture.

Title (de)

Pyrotechnische, einen anorganischen Binder enthaltende und ein nichttoxisches Gas erzeugende Zusammensetzung und Verfahren zu ihrer Herstellung.

Title (fr)

Composition pyrotechnique génératrice de gaz non toxiques comportant un liant minéral et son procédé de fabrication.

Publication

**EP 0467731 B1 19941214 (FR)**

Application

**EP 91401701 A 19910625**

Priority

FR 9008096 A 19900627

Abstract (en)

[origin: EP0467731A1] Pyrotechnic compositions generating nontoxic gases intended to inflate, in the event of accident, protective cushions for the occupants of a motor vehicle. <??>The compositions according to the invention contain an azide, an inorganic oxidising agent and, characteristically, between 5% and 40% by weight of an inorganic binder which is the product of an inorganic polycondensation reaction of mixtures based on alkali metal silicoaluminates. The binder is preferably the product of polymerisation of a silicoaluminate of formula (Si<sub>2</sub>O<sub>5</sub>.Al<sub>2</sub>O<sub>2</sub>) and of silica SiO<sub>2</sub> in the presence of aqueous sodium hydroxide and/or potassium hydroxide. <??>After mixing and shaping the various constituents of the composition, the polymerisation of the said binder is ensured in a first stage by heating in a closed leakproof enclosure and, in a second stage, drying of the composition is ensured. <??>The compositions with an inorganic binder according to the invention exhibit mechanical strength and moisture resistance which are higher than those exhibited by equivalent compositions without a binder.

IPC 1-7

**C06D 5/06**; **C06B 35/00**

IPC 8 full level

**B60R 21/26** (2006.01); **C06B 35/00** (2006.01); **C06D 5/06** (2006.01)

CPC (source: EP US)

**C06B 35/00** (2013.01 - EP US); **C06D 5/06** (2013.01 - EP US)

Cited by

FR2997695A1; US5527405A; US5585048A; US5589662A; FR2689884A1; US5470406A; US5563367A; GB2285976A; GB2285976B; US8574358B2; WO2014072633A1; EP0712767A1; EP0713808A1

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

**EP 0467731 A1 19920122**; **EP 0467731 B1 19941214**; DE 69105846 D1 19950126; FR 2663924 A1 19920103; FR 2663924 B1 19940506; JP H04240179 A 19920827; JP H0725634 B2 19950322; US 5236526 A 19930817

DOCDB simple family (application)

**EP 91401701 A 19910625**; DE 69105846 T 19910625; FR 9008096 A 19900627; JP 14514891 A 19910618; US 72062891 A 19910625