

Title (en)  
Pyrotechnic composition with improved mechanical strength

Title (de)  
Pyrotechnische Zusammensetzung mit verbesserter Festigkeit

Title (fr)  
Composition pyrotechnique ayant une tenue mécanique améliorée

Publication  
**EP 1604963 A3 20121121 (FR)**

Application  
**EP 05291154 A 20050530**

Priority  
FR 0406390 A 20040610

Abstract (en)  
[origin: EP1604963A2] The pyrotechnic composition, which includes at least one oxidant and at least one reducing material, incorporates between 1 and 40 per cent, and preferably 1 - 10 per cent of myristic acid, which occurs naturally in animal fats and plant vegetable oils such as copra and palm oil. The reducing material is an organic acid selected from the following group: glutamic acid, acetylsalicylic acid, fumaric acid, stearic acid, ascorbic acid or mixtures of these. The oxidant material is selected from the group comprising potassium perchlorate, ammonium perchlorate, potassium nitrate, ammonium nitrate or mixtures of these, and a typical version of the composition contains 30 - 70 per cent of oxidant material, 20 - 40 per cent of a reducing mixture containing myristic acid and at least one organic acid, 0 - 10 per cent of a bonding agent, and 0 - 10 per cent of a catalyst such as ferric oxide (Fe2O3).

IPC 8 full level  
**C06D 5/06** (2006.01); **C06B 23/00** (2006.01)

CPC (source: EP)  
**C06B 23/009** (2013.01); **C06D 5/06** (2013.01)

Citation (search report)  
• [I] GB 630981 A 19491025 - PERCY ALFRED HARRY GOLDSMITH, et al  
• [I] GB 1601392 A 19811028 - PYRODEX CORP  
• [Y] WO 9961395 A1 19991202 - ORICA AUSTRALIA PTY LTD [AU], et al  
• [A] EP 1069096 A1 20010117 - TRW AIRBAG SYS GMBH & CO KG [DE]  
• [A] EP 0543026 A1 19930526 - DAICEL CHEM [JP]  
• [A] EP 0659711 A2 19950628 - MORTON INT INC [US]  
• [Y] CHEMICAL ABSTRACTS, vol. 114, no. 3, 21 January 1991, Columbus, Ohio, US; abstract no. 23028b, SAXENA, RAMESH CHANDRA: "Coating fertilizers for caking prevention" page 624; XP000191370 & IN 165464 A  
• [A] PERRY R H ET AL: "PERRY'S CHEMICAL ENGINEERS' HANDBOOK, PASSAGE TEXT", 1 January 1984, PERRY'S CHEMICAL ENGINEERS HANDBOOK, NEW YORK, McGRAW-HILL, US, PAGE(S) 8.62/8.63 - 8, XP002040425

Cited by  
EP4378917A1

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Designated extension state (EPC)  
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