

Title (en)  
Builder composition

Title (de)  
Builder-Zusammensetzung

Title (fr)  
Composition d'adjuvant

Publication  
**EP 1253189 A3 20030618 (DE)**

Application  
**EP 02008621 A 20020417**

Priority  
DE 10121051 A 20010428

Abstract (en)  
[origin: EP1253189A2] Production of a builder composition comprises mixing a crystalline layered sodium silicate (I) with water or an aqueous solution or dispersion of at least one detergent ingredient in a specified (I):water molar ratio. Production of a builder composition comprises mixing a crystalline layered sodium silicate of formula  $\text{NaMSixO}_{2x-1} \cdot y\text{H}_2\text{O}$  (I) with water or an aqueous solution or dispersion of at least one detergent ingredient in a (I):water molar ratio of 0.5-20:1, and heat-treating the mixture at 30-400 degrees C for 0.5-1000 minutes. M = Na or H; x = 1.9-4; y = 0-20.

IPC 1-7  
**C11D 3/12**

IPC 8 full level  
**C11D 3/08** (2006.01); **C11D 3/12** (2006.01)

CPC (source: EP US)  
**C11D 3/1273** (2013.01 - EP US)

Citation (search report)

- [E] EP 1205537 A2 20020515 - CLARIANT GMBH [DE]
- [PX] EP 1113068 A2 20010704 - CLARIANT GMBH [DE]
- [X] EP 0849355 A2 19980624 - CLARIANT GMBH [DE], et al
- [X] US 5456895 A 19951010 - TAPPER ALEXANDER [DE], et al
- [A] EP 0970918 A1 20000112 - CLARIANT GMBH [DE]
- [A] EP 0928827 A1 19990714 - CLARIANT GMBH [DE]

Cited by  
WO2011106158A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1253189 A2 20021030; EP 1253189 A3 20030618; EP 1253189 B1 20061115**; DE 10121051 A1 20021031; DE 50208676 D1 20061228; ES 2273939 T3 20070516; JP 2002363594 A 20021218; US 2003073605 A1 20030417; US 6908896 B2 20050621

DOCDB simple family (application)  
**EP 02008621 A 20020417**; DE 10121051 A 20010428; DE 50208676 T 20020417; ES 02008621 T 20020417; JP 2002127063 A 20020426; US 12379602 A 20020416