

Title (en)  
PRODUCTION OF FLUORINE COMPOUNDS

Title (de)  
HERSTELLUNG VON FLUORVERBINDUNGEN

Title (fr)  
PREPARATION DE COMPOSES DE FLUOR

Publication  
**EP 1370506 A1 20031217 (DE)**

Application  
**EP 02708176 A 20020126**

Priority  
• DE 0200276 W 20020126  
• DE 10104663 A 20010202

Abstract (en)  
[origin: DE10104663A1] Inorganic and organic compounds containing fluorine can, for example, be produced from corresponding compounds containing chlorine by exchanging chlorine and fluorine using fluorinating agents. It was found that monocyclic or bicyclic compounds having at least two nitrogen atoms, at least one of said nitrogen atoms being incorporated into the ring system, can be used as a catalyst or fluorinating agent for chlorine-fluorine exchange reactions. As a result sulphurylchlorofluoride, sulphurylfluoride or carboxylic acid fluoride can be produced. It is also possible to achieve HF addition to C-C multiple bonds and chlorine-fluorine exchange with respect to carbon atoms. Mono or dichloromalonic acid esters can, for instance, be converted into difluoromalonic acid esters. Preparation is simplified by using suitable solvents in order to force the reaction mixtures into a 2-phase zone.

IPC 1-7  
**C07B 39/00**; **C07C 67/307**; **C07C 69/63**; **C01B 17/45**

IPC 8 full level  
**C01B 17/45** (2006.01); **C07B 39/00** (2006.01); **C07B 61/00** (2006.01); **C07C 17/20** (2006.01); **C07C 67/307** (2006.01); **C07C 69/63** (2006.01); **C07D 487/04** (2006.01)

CPC (source: EP US)  
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See references of WO 02060838A1

Cited by  
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