

Title (en)  
PREPARATION OF ALKANESULFONYL HALIDES AND ALKANESULFONIC ACIDS

Publication  
**EP 0331864 B1 19930331 (EN)**

Application  
**EP 89100154 A 19890105**

Priority  
US 16459988 A 19880307

Abstract (en)  
[origin: EP0331864A1] A continuous method is provided for preparing alkanesulfonyl halides, particularly chlorides and alkanesulfonic acids in high yields without the formation of undesirable side-products, and without the net production of hydrogen chloride as a by-product. The method involves the continuous electrolysis of an alkanethiol (RSH) or dialkyl disulfide (RSSR min ) in an aqueous hydrochloric acid-containing solution, continuously removing the electrolyzed product mixture from the electrolysis zone, and recovering the alkanesulfonyl chloride (RSO<sub>2</sub>Cl) or alkanesulfonic acid (RSO<sub>3</sub>H) product from the mixture. The alkyl groups in the dialkyl disulfide (R and R min ) may be straight or branched chain, substituted or unsubstituted, have 1 to 20 carbon atoms, preferably 1 to 12 carbon atoms, and may be different, but are preferably the same. The aqueous hydrochloric acid-containing medium and any unreacted sulphur compounds may be recycled through the electrolysis chamber.

IPC 1-7  
**C07C 303/02; C25B 3/02**

IPC 8 full level  
**C25B 3/23** (2021.01)

CPC (source: EP)  
**C25B 3/23** (2021.01)

Cited by  
US6084122A; US6084128A; CN102343197A; WO2023152695A1

Designated contracting state (EPC)  
BE DE ES FR GB IT NL SE

DOCDB simple family (publication)  
**EP 0331864 A1 19890913; EP 0331864 B1 19930331**; BR 8900993 A 19891024; DE 68905638 D1 19930506; DE 68905638 T2 19930826; DK 106089 A 19890908; DK 106089 D0 19890306; ES 2039702 T3 19931001; IN 170927 B 19920613; JP H01272786 A 19891031; MX 169944 B 19930802

DOCDB simple family (application)  
**EP 89100154 A 19890105**; BR 8900993 A 19890303; DE 68905638 T 19890105; DK 106089 A 19890306; ES 89100154 T 19890105; IN 1074CA1988 A 19881229; JP 5218889 A 19890306; MX 1455589 A 19890116