

Title (en)  
METHOD FOR THE PRODUCTION OF A DICARBOXYLIC ACID FROM ACRYLIC ACID

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINER DICARBONS URE AUSGEHEND VON ACRYLS URE

Title (fr)  
PROCEDE DE PRODUCTION D'UN ACIDE DICARBOXYLIQUE A PARTIR D'ACIDE ACRYLIQUE

Publication  
**EP 1521734 A1 20050413 (DE)**

Application  
**EP 03735697 A 20030704**

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• EP 0307151 W 20030704

Abstract (en)  
[origin: WO2004007415A1] Disclosed is a method for producing a dicarboxylic acid of formula (I) H-OOC-(n-C<sub>4</sub>H<sub>x</sub>)-COO-H, in which x represents 6 or 8, from acrylic acid. Said method is characterized by the fact that a) a dicarboxylic acid diester of formula (II) R<1>-OOC-(n-C<sub>4</sub>H<sub>x</sub>)-COO-R<2>, in which x represents 6 or 8 and R<1>, R<2> independently represent C<sub>1</sub>-, C<sub>2</sub>-, C<sub>3</sub>-, C<sub>4</sub>-alkyl, aryl, heteroaryl and can be identical or different, is reacted with acrylic acid so as to obtain a dicarboxylic acid of formula (I) and a mixture of acrylic acid ester of formula C<sub>2</sub>H<sub>3</sub>-COOR<1> and C<sub>2</sub>H<sub>3</sub>-COOR<2>, in which R<1> and R<2> have the meanings mentioned above; b) the dicarboxylic acid of formula (I) obtained in step (a) is separated from the reaction mixture obtained in step (a); c) the C<sub>2</sub>H<sub>3</sub>-COOR<1>, C<sub>2</sub>H<sub>3</sub>-COOR<2>, or the mixtures thereof obtained in step (a) are dimerized so as to obtain n-butene dicarboxylic acid diester; and d) the dicarboxylic acid diester obtained in step (c) is split into the corresponding dicarboxylic acid of formula (I).

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