

Title (en)  
SULPHAMIC ACID DERIVATIVES AND PRODUCTION METHODS THEREOF

Title (de)  
SULFAMINSÄUREDERIVATE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
DÉRIVÉS D'ACIDE SULFAMIQUE ET PROCÉDÉS POUR LEUR PRÉPARATION

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Application  
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Abstract (en)  
[origin: WO2018072024A1] The invention relates to methods for the production of sulphamic acid derivatives, for example, halogenated derivatives and the salts thereof, metallic or organic, are described. The present application also relates to the resulting sulphamic acid derivatives and to the uses thereof, for example, in electrolytic compositions for electrochemical uses.

IPC 8 full level  
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Citation (search report)  
• [X] WO 0240567 A1 20020523 - RHODIA CHIMIE SA [FR], et al  
• [X] WO 03035611 A1 20030501 - 3M INNOVATIVE PROPERTIES CO [US]  
• [X] WO 2016093399 A1 20160616 - CHUN BO LTD [KR]  
• [X] WO 2012160280 A2 20121129 - ARKEMA FRANCE [FR], et al  
• [X] ALEXANDER HILLEBRECHT ET AL: "Integrated Approach Using Protein and Ligand Information to Analyze Selectivity- and Affinity-Determining Features of Carbonic Anhydrase Isozymes", CHEMMEDCHEM, vol. 1, no. 8, 11 August 2006 (2006-08-11), DE, pages 839 - 853, XP055688852, ISSN: 1860-7179, DOI: 10.1002/cmdc.200600083  
• [X] ILMAR A. KOPPEL ET AL: "Generalized Principle of Designing Neutral Superstrong Brønsted Acids", JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol. 124, no. 19, 19 April 2002 (2002-04-19), US, pages 5594 - 5600, XP055573166, ISSN: 0002-7863, DOI: 10.1021/ja0255958  
• [X] ANDREA SCOZZAFAVA ET AL: "Carbonic Anhydrase Inhibitors: Inhibition of Isozymes I, II and IV by Sulfamide and Sulfamic Acid Derivatives", JOURNAL OF ENZYME INHIBITION, vol. 15, no. 5, 1 January 2000 (2000-01-01), USA, pages 443 - 453, XP055688872, ISSN: 8755-5093, DOI: 10.3109/14756360009040700  
• [X] BURK P ET AL: "Superacidity of neutral Brønsted acids in gas phase", JOURNAL OF COMPUTATIONAL CHEMISTRY, JOHN WILEY AND SONS, CHICHESTER, GB, vol. 17, no. 1, 1 January 1996 (1996-01-01), pages 30 - 41, XP002086724, ISSN: 0192-8651, DOI: 10.1002/(SICI)1096-987X(19960115)17:1<30::AID-JCC3>3.0.CO;2-1  
• [X] KEIGO KUBOTA ET AL: "Investigation of an Intermediate Temperature Molten Lithium Salt Based on Fluorosulfonyl(trifluoromethylsulfonyl)amide as a Solvent-Free Lithium Battery Electrolyte", JOURNAL OF PHYSICAL CHEMISTRY C, vol. 117, no. 37, 19 September 2013 (2013-09-19), US, pages 18829 - 18836, XP055688889, ISSN: 1932-7447, DOI: 10.1021/jp405068q  
• See references of WO 2018072024A1

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