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5750778**FUNGICIDE INTERMEDIATES**

Crowley Patrick Jelf; Lawson Kevin Robert; Smith Douglas John; Moseley Donn Warwick Crowthorne, UNITED KINGDOM assigned to Zeneca Limited

Certain fluoroalkanoic acids and derivatives, including 2-fluoroisobutyric acid and 2-fluoroisobutyryl chloride, useful as intermediates for fungicides, and methods of preparing them.

5750807**PRODUCTION OF HYROFLUOROCARBONS**

Burgess Leslie; Butcher Jane Lesley; Ryan Thomas Anthony; Clayton Peter Paul Runcorn, UNITED KINGDOM assigned to Imperial Chemical Industries PLC

A process for the production of a hydro(halo)fluorocarbon which comprises heating an alpha-fluoroether in the vapor phase at elevated temperature. alpha-fluoroethers are obtained by reacting a non-enolisable aldehyde with hydrogen fluoride to form an intermediate and reacting the intermediate with an alcohol or a halogenating agent. Novel alpha-fluoroethers are also provided.

5753776**LIQUID-PHASE FLUORINATION**

Bierschenk Thomas R; Juhlke Timothy J; Kawa Hajimu; Lagow Richard J Round Rock, TX, UNITED STATES assigned to Exfluor Research Corporation

This invention pertains to a method for liquid phase fluorination for perfluorination of a wide variety of hydrogen-containing compounds.

5756804**HOMOGENEOUS PROCESS FOR CARRYING OUT CROSS-COUPLING REACTIONS**

Haber Steffen; Kleiner Hans-Jerg Germersheim/Rhein, GERMANY assigned to Hoechst Aktiengesellschaft

A process for preparing polycyclic aromatic compounds, which comprises reacting a) an aromatic boron compound with b) an aromatic halogen compound or an aromatic perfluoroalkylsulfonate in the presence of c) a base, d) a nickel or palladium catalyst, e) a phosphorus-containing ligand and f) a polyhydric alcohol, a sulfoxide or sulfone. The process gives high yields, in particular also in the coupling of chloroaromatics.

5756834**PROCESS FOR PREPARING FLUORINATED AROMATICS**

Pasenok Serge; Appel Wolfgang Liederbach, GERMANY assigned to Hoechst Aktiengesellschaft

It is known to prepare fluorinated aromatic compounds of the formula I (*See Patent for Chemical Structure*) in which X, Y and Z can have the meaning specified in the description, by reacting aromatic compounds of the formula II (*See Patent for Chemical Structure*) in which X, Y and Z have the meaning specified for formula I, with fluorine in a reaction medium. According to the invention, the direct fluorination is carried out in a reaction medium containing polyfluoroalkanesulfonic acids of the formula III(*See Patent for Tabular Presentation*) PS in which m, n and Y have the meaning specified in the description. By this means, it is possible, particularly advantageously to provide a process, which improves the known processes not only with

regard to the selectivity and the yield, but also with respect to the quality of the resulting products of the process in a manner not readily predictable. Fluorinated aromatic compounds of the formula I as intermediates for active compound synthesis.

5756841

**PROCESS FOR PREPARING
FLUROXY-OR
CHLOROXY-PERFLUROACYLEFLURO
IDES**

Desmarteau Derryl D; Anderson John David; Navarrini Walter Clemson, SC, UNITED STATES assigned to Ausimont S p A

Process for preparing fluoroxy- or chloroxy-perfluoroacylfluorides $FC(O)-RF-CF_2OX$, wherein RF is a perfluoroalkylenic or perfluoropolyoxyalkylenic chain, X is -F or -Cl, by fluorination or chlorofluorination of the corresponding perfluorodiacylfluoride $FC(O)-RF-C(O)F$ with $X-F$ in the presence of an hydrogenfluoride corresponding to the formula $MeFy.zHF$, wherein: Me is an alkaline or alkaline-earth metal, y is 1 when Me is an alkaline metal, or y is 2 when Me is an alkaline-earth metal; z is comprised between 0.5 and 4.

5756861

**METHOD FOR PRODUCTION FOR
PHENOL AND ITS DERIVATIVES**

Panov Gennady Ivanovich; Kharitonov Alexandr Sergeevich; Sheveleva Galina Antolievan Novosibirsk, assigned to Monsanto Company

PCT No. PCT/RU95/00066 Sec. 371 Date Jan. 7, 1997 Sec. 102(e) Date Jan. 7, 1997 PCT Filed Apr. 12, 1995 PCT Pub. No. WO95/27691 PCT Pub. Date Oct. 19, 1995. A method for partial oxidation of aromatic compounds such as benzene, phenol,

chlorobenzene, fluorobenzene, toluene, ethylbenzene and the like, with a molar deficiency of nitrous oxide over a catalyst such as a ZSM-5 or ZSM-11 zeolite. The method is advantageous for producing phenol from benzene at high production rates, high nitrous oxide conversion and high selectivity toward the production of phenol.

5756868

**PRODUCTION OF
HYDROFLUROCARBONS**

Burgess Lesli; Ryan Thomas Anthon; Powell Richard Llewellyn Runcorn, UNITED KINGDOM assigned to Imperial Chemical Industries PLC

A process for the production of hydrofluorocarbons, in particular hydrofluoroalkanes such as difluoromethane, which comprises contacting an alpha-fluoro-ether, in particular a fluorinated dialkyl ether such as bis(fluoromethyl)ether in the liquid phase with a Lewis acid such as a fluoride of Nb, Sb, B, Ta, Al or Ti.

5756869

**METHOD OF PREPARING
HYDROFLUROCARBON**

Yoshikawa Satoshi; Takada Naoto; Oshio Hideki Kawagoe, JAPAN assigned to Central Glass Company Limited

The invention relates to a method of preparing a saturated hydrofluorocarbon represented by $C_nH_pF_z$, by reducing a chlorofluorocarbon or hydrochlorofluorocarbon represented by $C_nH_xCl_yF_z$ by hydrogen in the presence of a catalyst having palladium and bismuth, wherein n is an integer within a range from 3 to 6, x is an integer within a range from 0 to 2n, each of y and z is an integer within a range from 1 to 2n+1,

$x+y+z=2n+2$ or $2n$, $p=x+y$ when $x+y+z=2n+2$, and $p=x+y+2$ when $x+y+z=2n$. The catalyst has a long lifetime in the reduction. According to the invention, conversion of the chlorofluorocarbon or hydrochlorofluorocarbon is high, and the saturated hydrofluorocarbon is prepared with a high yield and a high selectivity.

5759442

**POLYIMIDE ALIGNMENT FILM FROM
2,2-BIS
(3,4-DICARBOXYPHENYL)-HEXAFLUOROPROPANE
DIANHYDRIDE AND
ORTHO-SUBSTITUTED AROMATIC
DIAMINES FOR ACTIVE MATRIX
LIQUID CRYSTAL DISPLAYS**

Auman Brian Carl; Bohm Edga; Fiebranz Bernd
Newark, DE, UNITED STATES assigned to E I du
Pont de Nemours and Company; Merck Patent Gm

A polyimide alignment film based on 2,2-bis(3,4-dicarboxyphenyl)hexafluoropropane dianhydride and ortho-substituted aromatic diamines, such as 2,3,5,6-tetramethyl-p-phenylene diamine, 2,4,6-trimethyl-m-phenylene diamine and

1,5-diaminonaphthalene, providing high voltage holding ratio and high tilt angle when used in active matrix liquid crystal displays.

5760255

**PROCESS FOR THE CONVERSION OF
HYDROXYL GROUPS INTO THE
CORRESPONDING FLUORINE
COMPOUNDS**

Vorbruml uggen Helmu; Bennua-Skalmowski
Buml arbel Berlin, GERMANY assigned to Bayer
AG

PCT No. PCT/EP95/04192 Sec. 371 Date Jun. 25, 1996 Sec. 102(e) Date Jun. 25, 1996 PCT Filed Oct. 25, 1995 PCT Pub. No. WO96/13474 PCT Pub. Date May 9, 1996. The invention is drawn to a process for the conversion of primary and secondary alcohols into the corresponding fluorine compounds in the presence of an organic solvent, 2-3 equivalents of a strong base and perfluoroalkylsulphonyl fluorides, such as perfluorobutanesulphonyl fluoride or higher homologues.



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