

Search history

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Title: PROCESS FOR THE HYDRODECHLORINATION OF A LIQUID FEED COMPRISING DICHLOROACETIC ACID

Abstract: The process of the present invention pertains to a process wherein a liquid feed comprising monochloroacetic acid, dichloroacetic acid, and optionally acetic acid and/or trichloroacetic acid is subjected to a **catalytic hydrodechlorination** step by contacting it with a source of hydrogen in the presence of a solid heterogeneous hydrogenation catalyst situated in a fixed catalyst bed, wherein the liquid feed is fed to the top of a vertical tubular reactor at a superficial mass velocity of between 10 and 10 kg/s per square meter of the horizontal cross-section of the vertical tubular reactor and a rate of between 250 and 3,000 kg/hr per m of said catalyst bed, wherein the source of hydrogen is fed to the top or bottom of the vertical tubular reactor at a rate of between 0.025 to 0.25 Nm/s per square meter of the horizontal cross-section of the vertical tubular reactor, so as to obtain an average axial pressure gradient of at least 2 kPa per meter of said catalyst bed, and wherein the temperature in the top of the vertical tubular reactor is between 100 and 200 degrees centigrade, and wherein the pressure in the top of the vertical tubular reactor is between 0.2 and 1.0 MPa.

Classifications:

International (IPC 8-9): C07C C07C51/347 C07C51/377 C07C51/487 C07C53/16 (Advanced/Invention);

C07C51/377 (Core/Invention);

C07C (Subclass/Invention)

CPC: C07C51/347 C07C51/377 C07C51/487 C07C53/16

US: 562/604

JP F-Term: 4H006 4H006/AA02 4H006/AC80 4H006/BA25 4H006/BA26 4H006/BA55 4H006/BA61 4H006/BA85 4H006/BC10 4H006/BC11 4H006/BC18 4H006/BC31 4H006/BC32 4H006/BD10 4H006/BD81 4H006/BE20 4H006/BM10 4H006/BS10 4H039 4H039/CA11 4H039/CD20 4H039/CE40

JP F-Index: C07B61/00/300 C07C51/377 C07C51/487 C07C53/16

Family:

Publication number	Publication date	Application number	Application date
AR088477 AA	20140611	AR2012P103937	20121022
AU2012324958 AA	20130425	AU20120324958	20121017
AU2012324958 BB	20160317	AU20120324958	20121017
BR112014008599 A2	20170425	BR20141108599	20121017
CN103649039 A	20140319	CN201280035254	20121017
CN103649039 B	20160120	CN201280035254	20121017
CN105646190 A	20160608	CN201610031231	20121017
CO6950504 A2	20140520	CO20140102279	20140513
DE602012031655 D1	20170608	DE201260031655T	20121017
DK2748139 T3	20170807	DK20120778693T	20121017
EP2748139 A1	20140702	EP20120778693	20121017
EP2748139 B1	20170426	EP20120778693	20121017
ES2625050 T3	20170718	ES20120778693T	20121017
ID201601966 A	20160325	ID2014P0002869	20121017
IN03586CN2014 A	20151009	IN2014CN03586	20140513
JP2014530834 T2	20141120	JP20140536211T	20121017
JP5870199 B2	20160224	JP20140536211T	20121017
MX2014004616 A1	20140512	MX20140004616	20121017
MX349701 B	20170808	MX20140004616	20121017
PL2748139 T3	20170831	PL20120778693T	20121017
RU2014118948 A	20151127	RU20140118948	20121017
RU2608630 C2	20170123	RU20140118948	20121017
TH150556 A	20160314	TH20141001979	20121017
TR201707184 T4	20170621	TR20170007184T	20121017
US2014357892 AA	20141204	US20120351331	20121017
US9505693 BB	20161129	US20120351331	20121017
WO13057126 A1	20130425	WO2012EP70524	20121017
ZA201402210 A	20150429	ZA20140002210	20140325

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EP20110185953 20111020 CN201280035254 20121017 WO2012EP70524 20121017
EP20120778693 20121017

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: PROCESS FOR THE PURIFICATION OF A LIQUID FEED COMPRISING MCA AND DCA

Abstract: The present invention pertains to a process for the purification of a substantially water-free liquid feed comprising **monochloroacetic acid**, dichloroacetic acid, optionally acid chlorides, optionally anhydrides, and optionally acetic acid, which comprises the steps of (a) adding water to the liquid feed so that a liquid feed is obtained comprising between 0.01 and 5 percent by weight of water, based on the total weight of the liquid feed, and (b) subsequently subjecting the liquid feed obtained in step (a) to a **catalytic hydrodechlorination** step by contacting it with a source of hydrogen to convert the dichloroacetic acid into **monochloroacetic acid** in the presence of a solid heterogeneous hydrogenation catalyst comprising one or more metals of Group VIII of the Periodic Table of the Elements deposited on a carrier.

Classifications:

International (IPC 8-9): C07C C07C51/377 C07C51/487 C07C53/16 (Advanced/Invention);

C07C51/377 (Core/Invention);

C07C (Subclass/Invention)

CPC: C07C51/377 C07C51/487 C07C53/16

US: 562/604

JP F-Term: 4H006 4H006/AA02 4H006/AC13 4H006/AD11 4H006/BA25 4H006/BA61 4H006/BB31 4H006/BC10 4H006/BC11 4H006/BC35 4H006/BC37 4H006/BE20 4H006/BM10 4H006/BM72 4H006/BS10 4H039 4H039/CA19 4H039/CD20 4H039/CE40

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Publication number	Publication date	Application number	Application date
AR088478 AA	20140611	AR2012P103938	20121022
AU2012324957 AA	20130425	AU20120324957	20121017
AU2012324957 BB	20150820	AU20120324957	20121017
BR112014008207 A2	20170411	BR20141108207	20121017
CN103687840 A	20140326	CN201280035267	20121017
CN103687840 B	20161123	CN201280035267	20121017
CO6950503 A2	20140520	CO20140102276	20140513
DE602012031651 D1	20170608	DE201260031651T	20121017
DK2748138 T3	20170821	DK20120775481T	20121017
EP2748138 A1	20140702	EP20120775481	20121017
EP2748138 B1	20170426	EP20120775481	20121017
ES2624144 T3	20170713	ES20120775481T	20121017
IN00409MN2014 A	20141205	IN2014MN00409	20140307
JP2014530833 T2	20141120	JP20140536210T	20121017
JP5829340 B2	20151209	JP20140536210T	20121017
MX2014004617 A1	20140512	MX20140004617	20121017
MX347055 B	20170410	MX20140004617	20121017
PL2748138 T3	20170929	PL20120775481T	20121017
RU2014118949 A	20151127	RU20140118949	20121017
RU2609408 C2	20170201	RU20140118949	20121017
TH149861 A	20160510	TH20141001978	20121017
TR201706206 T4	20170621	TR20170006206T	20121017
US2014275625 AA	20140918	US20120351313	20121017
US9505694 BB	20161129	US20120351313	20121017
WO13057125 A1	20130425	WO2012EP70523	20121017
ZA201402208 A	20150429	ZA20140002208	20140325

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Inventor(s): WILLEM KOELEWIJN

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