

Yenny Campos

Search history

Search 1: TAC=(nitric acid and ozone and N2O5) (Results 19)

Title: Manufacture of nitric anhydrid

Abstract: Source: GB131334A 131,334. Gros et Bouchardy, F., (Assignees of Guye, P. A.). May 16, 1917, [Convention date]. Nitric anhydride is obtained by causing a lower oxide of nitrogen other than nitrous oxide to react with **ozone**, both agents being in the gaseous condition and in quantities exactly regulated so as to give no excess of either gas. The nitric anhydride is recovered by cooling to below -20° C., for instance to -80° C. A solvent may be employed in conjunction with the cooling, **nitric acid**, sulphuric acid, fuming sulphuric acid, and carbon tetrachloride being mentioned. The solution in sulphuric acid or fuming sulphuric acid may be used for nitrations. The gas from which the anhydride has been separated may be passed through a heat-exchanger in order to cool fresh gas.

Classifications:
International (IPC 8-9): C01B21/20 (Advanced/Invention)
International (IPC 1-7): C01B21/20 C01B21/30
CPC: C01B21/206
European: C01B21/20B
US: 423/400

Family:

Publication number	Publication date	Application number	Application date
FR496593 A	19191111		00000000
GB131334 A	00000000		00000000
US1348874 A	19200810	US19180233568	19180509

Probable Assignee: FERDINAND GROS AND BOUCHARDY

Assignee(s): (std): FERDINAND GROS AND BOUCHARDY ; FERDINAND GROS ET BOUCHARDY SO

Assignee(s): SOCIETE FERDINAND GROS ET BOUCHARDY

Inventor(s): (std): AUGUSTE GUYE LIPPE

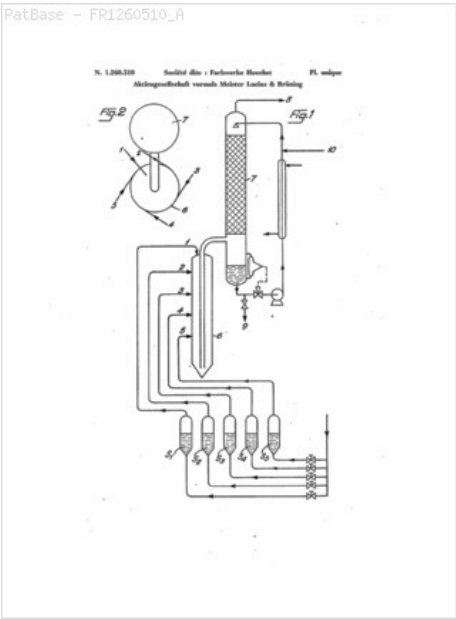
Inventor(s): GUYE LIPPE AUGUSTE

Title: Procédé de préparation de formaldéhyde à partir de méthane

Abstract: Source: FR1260510A (Claim 1) 1. -

Machine translation: (Claim 1) 1. -

Classifications:
International (IPC 8-9): C07C45/33 (Advanced/Invention)
International (IPC 1-7): C07C47/048
CPC: C07C45/33
European: C07C45/33



Family:

Publication number	Publication date	Application number	Application date
FR1260510 A	19610505	FR19600830943	19600623

Priority:

FR19600830943 19600623

Probable Assignee: HOECHST AG

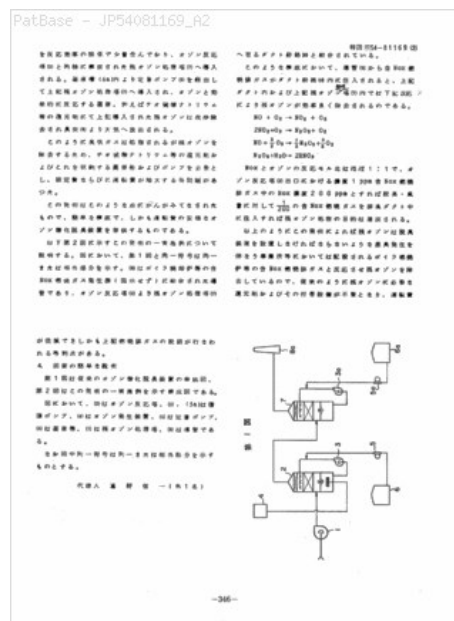
Assignee(s): (std): HOECHST AG

Assignee(s): FARBWERKE HOECHST AKTIENGESELLSCHAFT VORMALS MEIST ; FARBWERKE HOECHST AKTIENGESELLSCHAFT VORMALS MEISTER LUCIUS AND BRUENING

Abstract: Source: JP54081169A PURPOSE:An **ozone**-oxidation deodorizer capable of cutting down operation cost and also of performing the denitrification of combustion exhaust gas, having a mechanism in which a conduit pipe for combustion exhaust gas containing NOx is provided at the outlet of ozonization reactor at which unreacted **ozone** is decomposed by NOx. CONSTITUTION:In an **ozone**-oxidation deodorizer, the pipe 9 for NOx-containing exhaust gas coming out of boiler, incinerator, etc., is connected to the duct 10 leading to the residual **ozone** treatment tower 7 from the ozonization reactor 2. The residual **ozone** is decomposed by NOx in the residual **ozone** treatment tower 7 to oxidize NOx to **N2O5** which is in turn recovered as **nitric acid** by the injection of atomized water. Then, the exhaust gas deprived of NOx is discharged from the chimney 8 to the air.

International (IPC 8-9): B01D53/34 B01D53/38 B01D53/74 (Advanced/Invention);
B01D53/34 B01D53/38 B01D53/74 (Core/Invention)
International (IPC 1-7): B01D53/34

International (IPC 1-7): B01D53/34



Publication number	Publication date	Application number	Application date
JP54081169 A2	19790628	JP19770149591	19771213

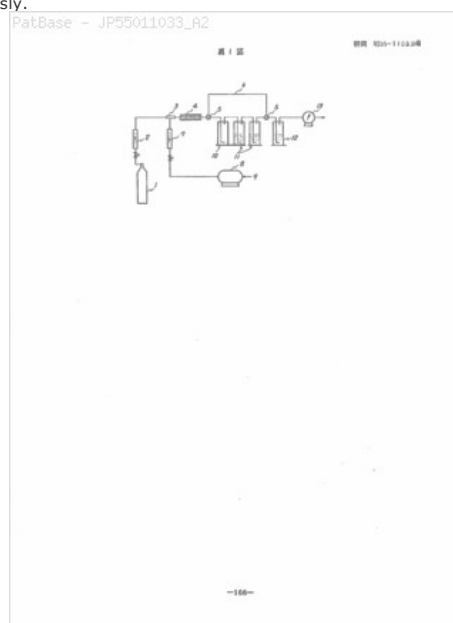
JP19770149591 19771213

Assignee(s): (std): MITSUBISHI ELECTRIC CORP

Inventor(s): (std): HAYASHI EIKICHI ; MATSUNAGA MASAYUKI

Abstract: Source: JP55011033A PURPOSE:To sample nitrogen oxides and sulfur oxides simultaneously in an easy and correct manner, by charging specified amount of **ozone** into waste gas sampling system, and then absorbing and capturing this mixture gas in the hydrogen peroxide absorption liquid. CONSTITUTION:**Ozone** containing gas is charged into the waste gas sampling system at the **ozone** ratio, O₃/(NO_x+SO_x), of more than 4, and NO_x and SO_x are sufficiently oxidized in the oxidation unit provided right after the sampling system to turn into **N₂O₅** and SO₃. Then, this mixture gas is introduced into the absorption liquid containing hydrogen peroxide by more than 0.05 percent to obtain **nitric acid** and sulfuric acid respectively, which are absorbed and sampled simultaneously.

International (IPC 1-7): B01D53/34



Publication number	Publication date	Application number	Application date
1P55011033 A2	19800125	1P19780083694	19780710

1P19780083694 19780710

Assignee(s): (std): MITSUBISHI HEAVY IND LTD

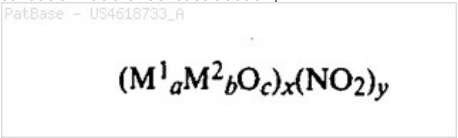
Inventor(s): (std) HAYASHI YUKIO : FURUSAWA TAKETOSHI

Title: VAPOR PHASE NITRATION OF AROMATIC COMPOUNDS

Abstract: Source: US4618733A Aromatic compounds are nitrated in the vapor phase via a process comprising contacting the aromatic compounds with a nitrating agent in the presence of a nitration promoting catalyst comprising the adduct of a Group 4b-Group 3b metal oxide composition represented by the empirical formula: (M₁aM₂bOc)_x(NO₂)_y wherein M₁ is at least one element selected from Group 4b of the Periodic Table of the Elements, M₂ is at least one element selected from Group 3b of the Periodic Table of the Elements, a is 1, b is 0 to 20, c is a number taken to satisfy the average valences of M₁ and M₂ in the oxidation states in which they exist in the composition, x is 1, and y is 0 to c, and a catalytically effective amount of sulfur trioxide. Such catalysts are particularly effective to catalyze the vapor phase nitration of chlorobenzene and are characterized in such reaction by providing a para/ortho isomer distribution ratio of at least about 2/1.

Classifications:

International (IPC 8-9): B01J27/02 B01J27/04 B01J27/24 C07B31/00 C07B43/02 C07B61/00 C07C201/00 C07C201/08 C07C205/06 C07C205/12 C07C205/37 C07C67/00 (Advanced/Invention); B01J27/02 B01J27/04 B01J27/24 C07B31/00 C07B43/00 C07B61/00 C07C201/00 C07C205/00 C07C67/00 (Core/Invention)
International (IPC 1-7): B01J23/00 B01J27/02 B01J27/24 C07B43/02 C07B61/00 C07C201/06 C07C201/08 C07C205/06 C07C205/12 C07C76/02 C07C79/10 C07C79/12
CPC: C07B43/02 B01J27/24 C07C201/08
European: B01J27/24 C07B43/02 C07C201/08 C07C205/06 C07C205/12 C07C205/37
US: 260/688 502/200 502/216 502/302 502/303 502/308 502/349 502/351 568/927 568/937 568/939



Family:

Publication number	Publication date	Application number	Application date
CA1258666 A1	19890822	CA19850495257	19851113
DE3583284 D1	19910725	DE19853583284	19851113
EP0184569 A1	19860611	EP19850870157	19851113
EP0184569 B1	19910619	EP19850870157	19851113
JP1821858 C3	19940210	JP19850254619	19851113
JP5033097 B4	19930518	JP19850254619	19851113
JP61120643 A2	19860607	JP19850254619	19851113
US4618733 A	19861021	US19840671253	19841114
US4746642 A	19880524	US19840671359	19841114
US4757043 A	19880712	US19840671358	19841114

Priority:

US19840671253 19841114 US19840671358 19841114 US19840671359 19841114
CA19850495257 19851113

Probable Assignee: SOLUTIA INC

Assignee(s): (std): MONSANTO CO

Assignee(s): SOLUTIA INC ; MONSANTO COMPANY ; MONSANTO CO ST LOUIS MO US ; SOLUTIA SYSTEMS INC ; SCHUMACHER IGNATIUS ; ABLECO FINANCE LLC ; ABLECO FINANCE LLC AS COLLATERAL AGENT ; ABLECO FINANCE LLC COLLATERAL AGENT AS ; CPFILMS INC ; MONCHEM INC ; MONCHEM INT ; MONCHEM INT INC

Inventor(s): (std): IGUNATEIUSU SHIYAUMATSUHERU ; SCHUMACHER IGNATIUS

Inventor(s): SCHUMACHER IGNATIUS BALLWIN MISSOURI 63011 US ; IGUNATEIUSU SHAUMATSUHERU

Agent(s): MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP

Designated states: DE FR GB IT

Abstract: Source: US5266292A PC. No. PCT/GB91/01249 Sec. 371 Date Apr. 16, 1992 Sec. 102(e) Date Apr. 16, 1992 PCT Filed Jul. 15, 1991 PCT Pub. No. WO92/02451 PCT Pub. Date Feb. 20, 1992. Method of extracting dinitrogen pentoxide (**N2O5**) from its mixture in **nitric acid**, which consists of providing a solution of the mixture in an inert organic solvent, stripping out the **N2O5** from solution in a carrier gas stream containing **ozone**, and subsequently condensing the **N2O5** out of the gas stream by contact with further inert organic solvent. The presence of **ozone** suppresses the dissociation of the **N2O5** transferred to the gas stream into dinitrogen tetroxide (N2O4). In a preferred embodiment the stripping and absorbing steps take place continuously in adjacent stripping and absorbing columns respectively having organic solvent recirculating through each.

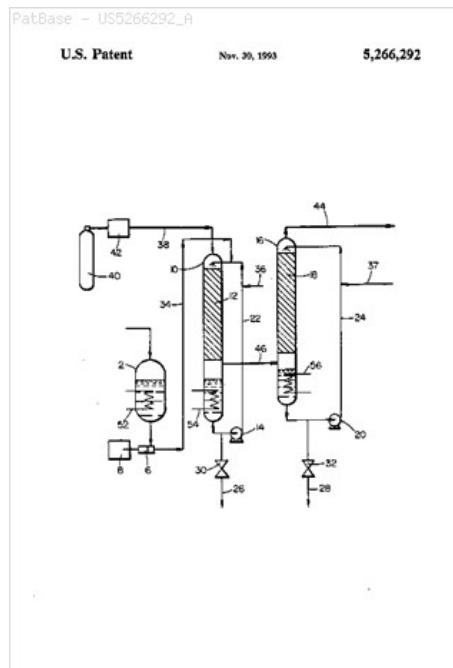
International (IPC 8-9): C01B21/00 C01B21/20 C01B21/46 (Advanced/Invention);
C01B21/00 (Advanced/Non-invention);
C01B21/00 (Core/Invention)

Internal (IPC 1-7): C01B21/00 C01B21/20 C01B21/22 C01B21/24 C01B21/38 C01B21/46

CPC: C01B21/206 C01B21/46

European: C01B21/20B C01B21/46

US: 423/235 423/390.1 423/400



Publication number	Publication date	Application number	Application date
AT120156 E	19950415	AT19910914014T	19910725
AU199183057 A1	19920302	AU19910083057	19910725
AU643317 B2	19931111	AU19910083057	19910725
BRPI9105855 A	19920825	BR1991PI05855	19910725
CA2066030 AA	19920327	CA19912066030	19910725
DE69108376 D1	19950427	DE19916008376	19910725
DE69108376 T2	19950907	DE19916008376T	19910725
DK0496853 T3	19950606	DK19910914014T	19910725
EP0496853 A1	19920805	EP19910914014	19910725
EP0496853 B1	19950322	EP19910914014	19910725
ES2070504 T3	19950601	ES19910914014T	19910725
FI921479 A	19920403	FI19920001479	19920403
FI921479 A0	19920403	FI19920001479	19920403
GB2252552 A1	19920812	GB19920005930	19920316
GB2252552 B2	19940525	GB19920005930	19920316
GB9017135 A0	19900919	GB19900017135	19900804
GB9205930 A0	19920527	GB19920005930	19920316
GR1001426 B	19931130	GR19910100333	19910730
GR91100333 A	19920831	GR19910100333	19910730
IE68246 B	19960612	IE19910002732	19910801
IE912732 A1	19920212	IE19910002732	19910801
IL99016 A0	19920715	IL19910099016	19910730
IL99016 A1	19960119	IL19910099016	19910730
IN184822 A	20000930	IN1991DE00701	19910731
JP5501704 T2	19930402	JP19910513433T	19910725
MX9100510 A1	19920401	MX19910000510	19910802
NO921283 A	19920402	NO19920001283	19920402
NO921283 A0	19920402	NO19920001283	19920402
US5266292 A	19931130	US19920847989	19920416
WO202451 A1	19920220	WO1991GB01249	19910725

GB19900017135 19900804 WO1991GB01249 19910725

Assignee(s): (std): SECR DEFENCE BRIT : SEC DEP FOR DEFENCE IN THE UNI : SECR DEFENCE

Assignee(s): SEC DEP FOR DEFENCE IN UNI ; ARBER ANTHONY WILLIAM ; BAGG GREVILLE EUAN GORDON ; SEC DEP DEFENCE IN HM S GOVERNMENT OF UK OF GB AND N IREL ; SEC DEP FOR DEFENCE ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GOV ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GO ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GOV ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ; SEC DEP FOR DEFENCE IN HER BRITANNI ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVE ; THE SECRETARY OF STATE FOR DEFENCE ; SECRETARY OF STATE FOR DEFENCE THE ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S G ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT ; SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND THE ; SECRETARY OF STATE FOR DEFENCE IN HER BRIT MAJESTY S GOVERNMENT OF UNITED KINGDOM GB AND N IRELAND ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND : THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC

MAJESTY S GOVE ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM OF GR ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM OF GB ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND WHITEHALL LONDON GB ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTYS GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ; THE SECRETARY OF STATE FOR DEFENCE OF THE UNITED KINGDOM

Inventor(s): (std): ARBER ANTHONY WILLIAM HURST DR ; ARBER WILLIAM ANTHONY ; BAGG GORDEN EUN GREVILLE ; BAGG GREVILLE ; BAGG GREVILLE E G ; BAGG GREVILLE EUAN ; BAGG GREVILLE EUAN GORDEN ; BAGG GREVILLE EUAN GORDON ; ARBER ANTHONY ; ARBER ANTHONY W ; ARBER ANTHONY WILLIAM ; BAGG GREVILLE EUAN GORDON MONK

Inventor(s): GREVILLE EUAN GORDEN BAGG ; GREVILLE EUAN GORDON BAGG ; BAGG GREVILLE EUAN GORDON 77 MONKSWOOD AVENUE ESSEX ; ARBER ANTHONY WILLIAM 83 HURST DRIVE HERTFORDSHIRE ; ARBER ANTHONY WILLIAM 83 HURST DRIVE ; ARBER ANTHONY WILLIAM 83 HURST DRIVE HERTFORDSHIRE EN8 8DH GB ; BAGG GREVILLE EUAN GORDON 77 MONKSW ; BAGG GREVILLE EUAN GORDON 77 MONKSWOOD AVENUE ; BAGG GREVILLE EUAN GORDON 77 MONKSWOOD AVENUE ESSEX EN9 1LD GB ; ANTHONY WILLIAM ARBER

Agent(s): DAVIES COLLISON CAVE; FETHERSTONHAUGH AND CO; EITAN PEARL LATZER AND COHEN ZEDEK

Designated states: AT AU BB BE BG BR CA CH DE DK ES FI FR GB GR HU IT JP KP KR LI LK LU MC MG MW NL NO PL RO SD SE SU US

Title: How to extract nitrogen renal site of Phe ?? quantity of material with a mixture of nitric acid. (Machine translation)

Abstract: Source: TH10843A

Machine translation: . How to extract the nitrogen oxides Mai Pae (N2O5) from a mixture of nitric acid, which is composed of. Providing a solution of the mixture in the inert organic solvent to remove it from the solution of N2O5 in the gas branch. Carrier gas containing the ozone. Next, condensation, and N2O5 from the gas stream with an inert organic solvent. To stop the breakdown of ozone transferred to N2O5. Stream of nitrogen gas into the Ettra oxide (N2O4) in the form that the process of elimination and absorption takes place continuously. Column to remove and absorb a contiguous sequence that has to do. A soluble organic flow through each column..

Classifications:
International (IPC 1-7): C01B21/20

Family:

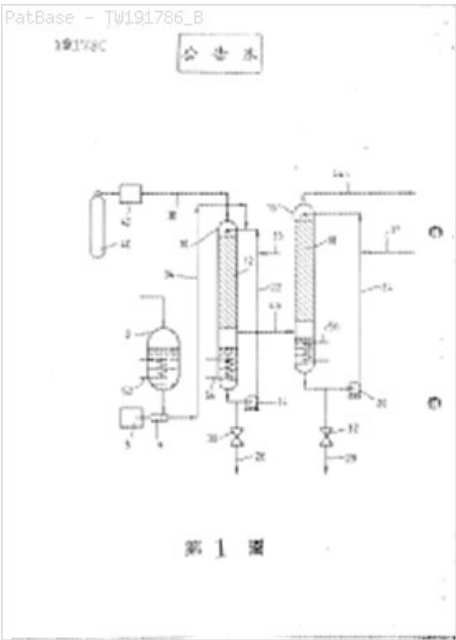
Publication number	Publication date	Application number	Application date
TH10843 A	19920401	TH19911001132	19910802

Title: With the **nitric acid** the nitric anhydride the method which the extract leaves from its mix (Machine translation)

Abstract: Source: TW191786B

Machine translation: **(N2O5)** comes out the method from the nitric anhydride mixture of with in the **nitric acid** the **N2O5** extract including to prepare first dissolves in the inert organic solvent the mixture solution, as soon as then in contains the **ozone** to carry delivers the gas to flow the stripping comes out **N2O5** from the solution, but finally further again flows with the inert organic solvent contact **N2O5** from the gas the condensation to come out. The **ozone** existence may suppress shifts flows to the gas **N2O5** to dissociate the nitrogen tetroxide (N2O4). In a good implementation example, the stripping and the absorption step are in neighboring and have the organic solvent separately in the stripping and the absorption tower which circulates in during carry on continuously.

Classifications:
International (IPC 8-9): C01B21/46 (Advanced/Invention);
C01B21/46 (Core/Non-invention)
International (IPC 1-7): C01B21/46



Family:

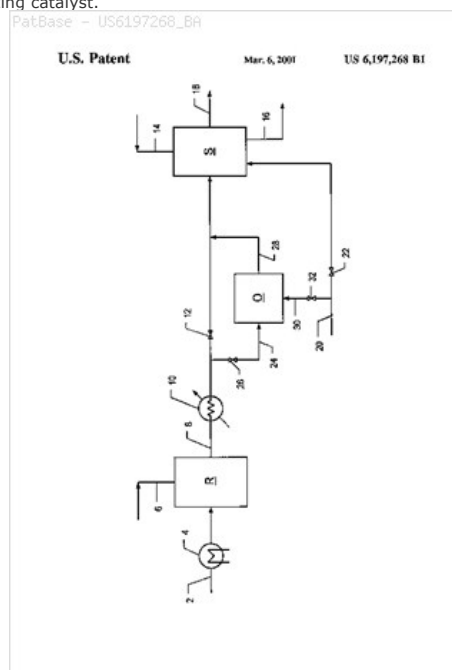
Publication number	Publication date	Application number	Application date
TW191786 B	19921001	TW19920101247	19920220

Probable Assignee: ROBERT WILLIAM BECKHAM

Assignee(s): ROBERT WILLIAM BECKHAM

Abstract: Source: US6197268B Nitrogen oxides are removed from a waste gas stream by contacting the waste gas stream with ammonia, thereby reducing the nitrogen oxides to nitrogen. Residual nitrogen oxides and unreacted ammonia in the waste gas stream leaving the nitrogen oxides reducing step are oxidized to nitrogen pentoxide or nitric acid by contacting this gas stream with ozone. Contact of the ozone and waste gas is preferably carried out in the presence of an aqueous solution at a pH above about 9 and at a temperature above about 75 Degrees Centigrade, and this step is preferably carried out in the presence of an ammonia-oxidizing catalyst.

European: B01D53/56 B01D53/75 B01D53/86F2



Publication number	Publication date	Application number	Application date
AT277680 E	20041015	AT20000305608T	20000703
AU200043790 A5	20010104	AU20000043790D	20000630
AU764628 B2	20030828	AU20000043790	20000630
AU764628 C	20040506	AU20000043790	20000630
CA2312652 AA	20010102	CA20002312652	20000628
CA2312652 C	20080916	CA20002312652	20000628
DE60014248 D1	20041104	DE20006014248	20000703
EP1064981 A1	20010103	EP20000305608	20000703
EP1064981 B1	20040929	EP20000305608	20000703
JP2001025646 A2	20010130	JP20000193793	20000628
JP4512238 B2	20100728	JP20000193793	20000628
NZ505573 A	20011130	NZ20000505573	20000630
US6197268 BA	20010306	US19990347316	19990702
ZA200003249 A	20010117	ZA20000003249	20000628

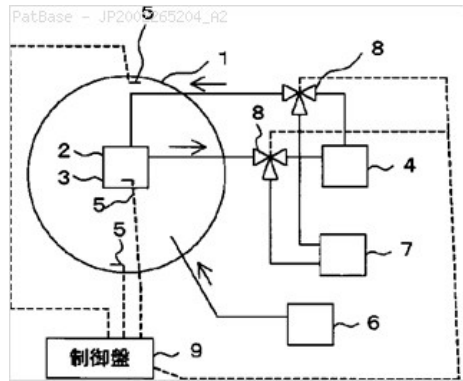
US19990347316 19990702 CA20002312652 20000628

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: OZONE GENERATING APPARATUS AND ITS HANDLING METHOD

Abstract: Source: JP2002265204A PROBLEM TO BE SOLVED: To provide an ozone generating apparatus in whose tank the generation of a toxic substance such as nitric acid and whose corrosion are prevented by mixing gaseous nitrogen in a gaseous starting material.SOLUTION: The ozone generating apparatus is provided with the tank 1 into which the gaseous starting material is introduced, an electric discharge part 2 disposed in the tank 1 for generating ozone by discharging electricity inside the gaseous starting material, a cooling fluid system 4 for cooling the part 2 when electricity is discharged, a heating fluid system 7 for heating the inside of the tank 1 to a temperature higher than the solidifying temperature of N₂O₅ and a changing-over means 8 for selecting the system 4 or the system 7.

Classifications:
International (IPC 8-9): C01B13/11 (Advanced/Invention);
C01B13/11 (Core/Invention)
International (IPC 1-7): C01B13/11



Family:

Publication number	Publication date	Application number	Application date
JP2002265204 A2	20020918	JP20010063464	20010307

Priority:
JP20010063464 20010307

Probable Assignee: TOSHIBA CORP
Assignee(s): (std): TOSHIBA CORP
Assignee(s): KABUSHIKI KAISHA TOSHIBA
Inventor(s): (std): KATAYAMA MASAHIRO