PETROV, K.A.; NIFANT'YEV, E.Ye.; LYSENKO, T.N.; YEVDAKOV, V.P.

Synthesis of esters of phosphorous and phosphinic acids by alcoholysis of their amides. Zhur.ob.khim. 31 no.7:2377-2380 Jl '61. (MIRA 14:7)
(Phosphorous acid) (Phosphinous acid)

PETROV, K.A.; YEVDAKOV, V.P.; SERGEYEVA, L.N.; LEDOVSKIKH, V.A.

2, 4, 5-trichlorophenyl esters of methylthiophosphinic and methylphosphinic acids. Zhur.ob.khim. 31 no.10:3414-3417 O '61. (MIRA 14:10)

(Phosphinothioic acid) (Phosphinic acid)

PETROV, K.A.; YEVDAKOV, V.P.; BILEVICH, K.A.; RADCHENKO, V.P.; NIFANT'YEV, E.Ye.

Properties of phosphorus acid amides. Part 1: Reactions of amidophosphites with phenols. Zhur.ob.khim. 32 no.3:920-923 Mr '62. (MIRA 15:3)

(Phosphoramidous acid) (Phenols)

PETROV, K.A.; YEVDAKOV, V.P.; BILEVICH, K.A.; KOSAREV, Yu.S.

Properties of phosphorus acid amides. Part 2: Phenolysis, alcoholysis, and hydrolysis of amidophosphonites. Zhur.ob.khim. 32 no.6:1974-1977 Je '62. (MIRA 15:6)

(Phosphonamidous acid)

PETROV, K.A.; YEVDAKOV, V.P.; ABRAMTSEVA, G.I.; STRAUTMAN, A.K.

Properties of phosphorus acid amides. Part 5: Reaction of phosphoramidous and phosphonamidous acids with thiophenol and mercaptans. Zhur.ob.khim. 32 no.9:3070-3074 S '62. (MIRA 15:9)
(Phosphoramidous acid) (Phosphonamidous acid)
(Thiols)

PETROV, K.A.; YEVDAKOV, V.P.; MIZRAKH, L.I.; ROMODIN, V.P.

Properties of phosphorus acid amides. Part 3: New method of synthesizing thiophosphites and thiophosphonites. Zhur.ob.khim. 32 no.9:3062-3065 S '62. (MIRA 15:9)
(Phosphoramidothioic acid) (Phosphonamidothioic acid)

S/0190/64/006/001/0010/0012

ACCESSION NR: AP4009143

AUTHORS: Petrov, K. A.; Yevdakov, V. P.; Bilevich, K. A.; Kosy*rev, Yu. S.; Radchenko, V. P.

TITLE: Properties of amides of phosphorus acids. 7. A new method for the synthesis of phosphorus-containing polyesters

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 1, 1964, 10-12

TOPIC TAGS: phosphorus acid, phosphinous acid, amides, polyester, polycondensation, hydroquinone, sulfur, oxygen, tetraethyldiamide, hexaethyltriamide

ABSTRACT: Polyesters of trivalent phosphorus acids were obtained by the reaction of tetraethyldiamides of phosphorous or phosphinous acids with hydroquinone in a 1:1 molar ratio. The ingredients are heated at 120C during the initial 1-2 hour period, then at 220C during the subsequent 3 hours, vacuum being applied to remove the evolving diethylamine. The resulting products are yellowish transparent substances, the polyphosphinites being solid and the polyphosphites of rubber-like consistency, the latter possessing good adhesion to glass. The reaction product of hexaethyltriamidophosphite with hydroquinone yields a brittle trimeric polyester. The

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ACCESSION NR: AP4009143

products obtained had a specific viscosity of 0.04-0.25 (in a 1.5% solution in dimethylformamide) and a decomposition range of 280-490C. Upon treatment with sulfur or oxygen, the trivalent phosphorus of the polyesters became converted to the pentavalent form. In conclusion, the authors call attention to the fact that while the polyesters obtained by their technique had softening points within the 130-150C range, the corresponding products obtained by the conventional method from phosphorus dihalides and diatomic phenols had softening points which were 70-80C lower. Orig. art. has: 3 formulas and 1 table.

ASSOCIATION: none

SUBMITTED: 16Apr62 DATE ACQ: 10Feb64 ENCL: 00

SUB CODE: CH NO REF SOV: 007 OTHER: 003

Card 2/2

YEVDAKOV, V. P.; MIZRAKH, L. I.

Interaction of methylphosphinic acid anhydride with hydroxyl-containing compounds. Zhur. ob.Khim. 34 no.6:1848-1851 Je '64.
(MIRA 17:7)

PETROV, K.A.; YEVDAKOV, V.P.; BILEVICH, K.A.; CHERNYKH, V.I.

Properties of phosphorus acid amides. Part 4: Reaction of aminolysis and phenolysis of amidophosphites and amidophosphonites. Zhur.ob.khim. 32 no.9:3065-3069 S '62. (MIRA 15:9)
(Phosphoramidous acid) (Phosphonamidic acid)

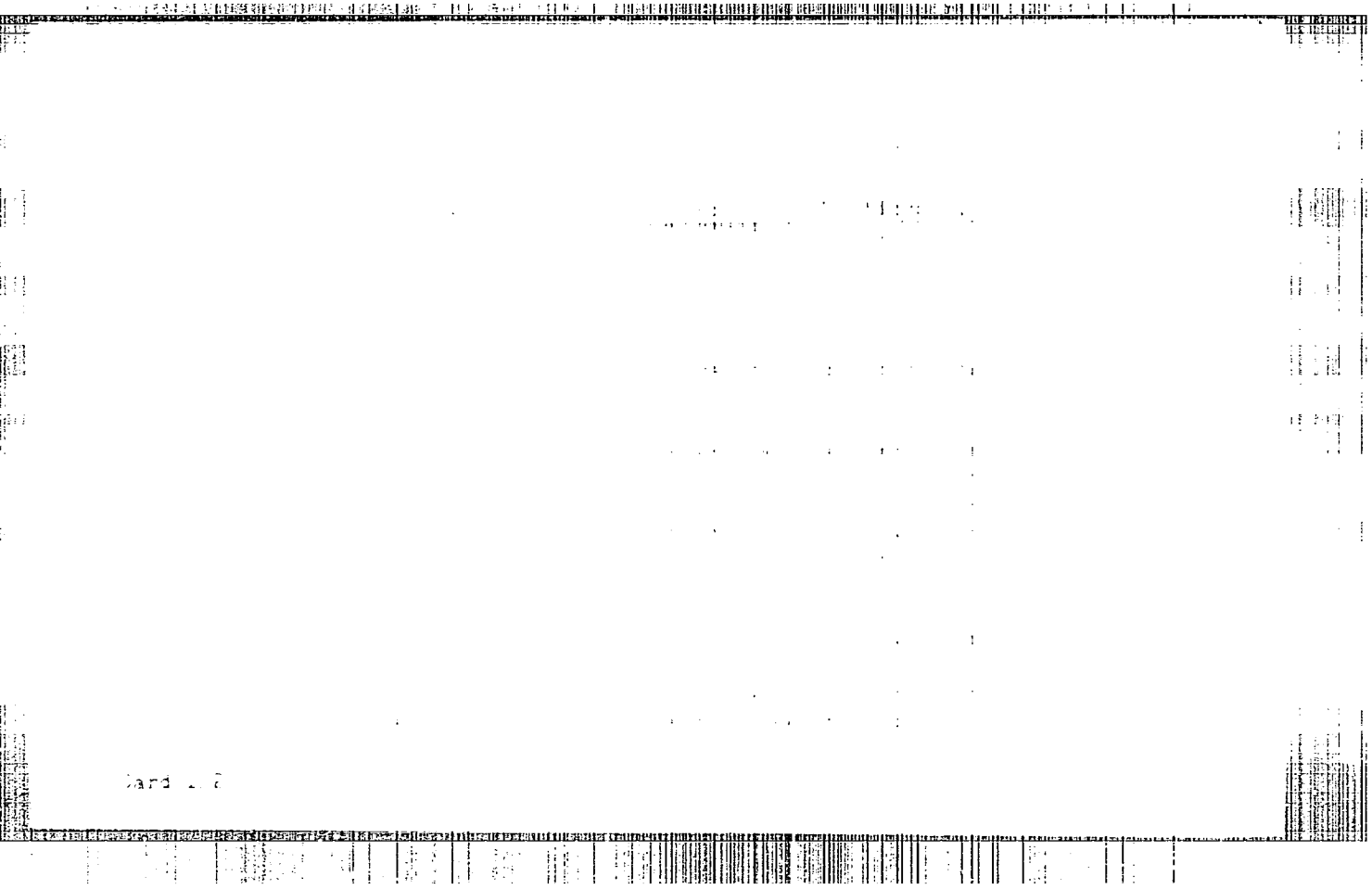
PETROV, K.A.; YEVDAKOV, V.P.; MIZRAKH, L.I.

Properties of amides of phosphorus acids. Part 6: Synthesis of 1,2,5-trimethyl-4-piperidyl esters phosphorus acids. Phosphorus analog of "promedol." Zhur.ob.khim. 33 no.4:1246-1251 Ap '63. (MIRA 16:5)

(Phosphorus acids) (Piperidinol)

PETROV, K.A.; BASYUK, A.A.; YEVDAKOV, V.P.; MIZRAKH, L.I.

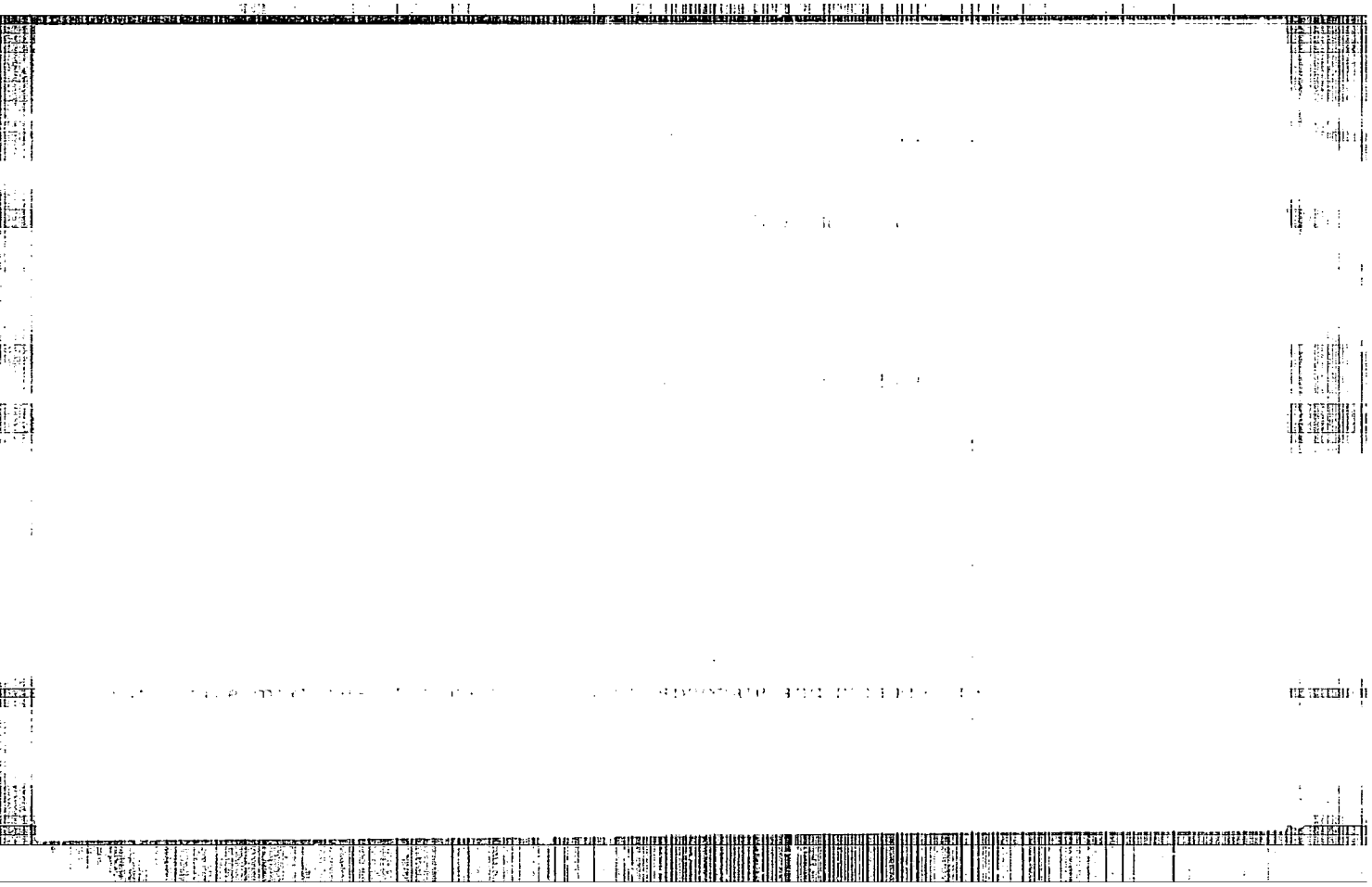
Thiophosphinites. Zhur. ob. khim. 34 no.7:2226-2228 Jl '64.
(MIRA 17:8)



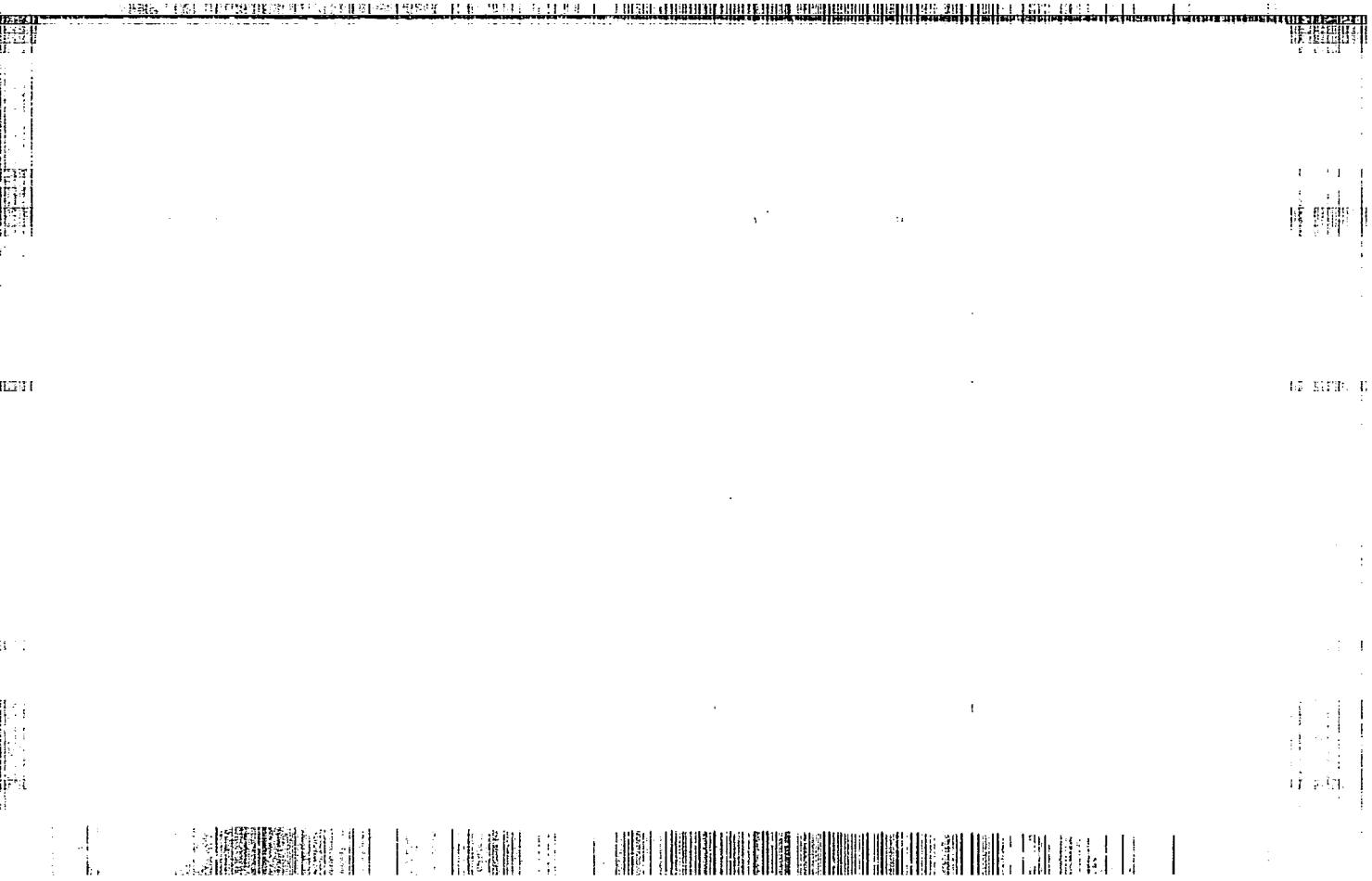
ACCESSION NR: AP5002561

phinous acid with n-heranol produced the n-hexyl ester of phenylli... phinous acid. Orig. art. has 3 formulas.

SUBMITTED: 15Jun64 ENCL: 00



APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962920020-0"



YEVDAKOV, V.P.; MIKHAKH, I.I.; SANDALOVA, L.Yu.

Synthesis of mixed trivalent and pentavalent phosphorus acid anhydrides. Zhur. ob. khim. 34 no.9:3124 S '64.

(MIRA 17:11)

1. Institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

YEVDAKOV, V.P.; MIZRAKH, L.I.; SIZOVA, G.P.

Reaction of methylphosphonic acid anhydrides with certain acids and their salts. Zhur. obsh. khim. 34 no.12:3952-3954 D '64
(MIRA 18:1)

YEVDAKOV, V.P.; SHLENKOVA, Ye.K.; BILEVICH, K.A.

Amides and anhydrides of phosphorus acids. Part 4: Phosphorylation of hydroxyl-containing compounds with p-diethylamido-p-acethl-O-alkyl phosphites. Zhur. ob. khim. 35 no.4:728-731 Ap '65. (MIRA 18:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

YEVDAKOV, V.P.; SHLENKOVA, Ye.K.

Amides and anhydrides of phosphorus acids. Part 5: Reaction of amides of phosphorous and phosphinic acids with acetic anhydride. Zhur. ob. khim. 35 no.4:739-741 Ap '65. (MIRA 18:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

SANDALOVA, L.Yu.; MIRSKIY, L.I.; YEVLAKOV, V.P.

Reaction of dialkylamides of dialkylphosphorous acid with ketones.
Zhur. ob. khim. 35 no.7:1314 Jl '65. (MIRA 18:8)

YEVDAKOV, V.P.; ALIFOVA, Ye.I.

Amides and anhydrides of phosphorus acids. Part 7: Synthesis and some conversions of phosphinic acid anhydrides. Zhur. ob. khim. 35 no.9:1584-1587 S '65. (MIRA 18:10)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

YEVDAKOV, V.P.; SHLENKOVA, Ye.K.

Amides and anhydrides of phosphorus acids. Part 3. Reaction of amides of phosphorous acid with carboxylic acid anhydrides. Zhur. ob. khim. 35 no.9:1587-1591 S '65. (MIRA 18:10)

1. Institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

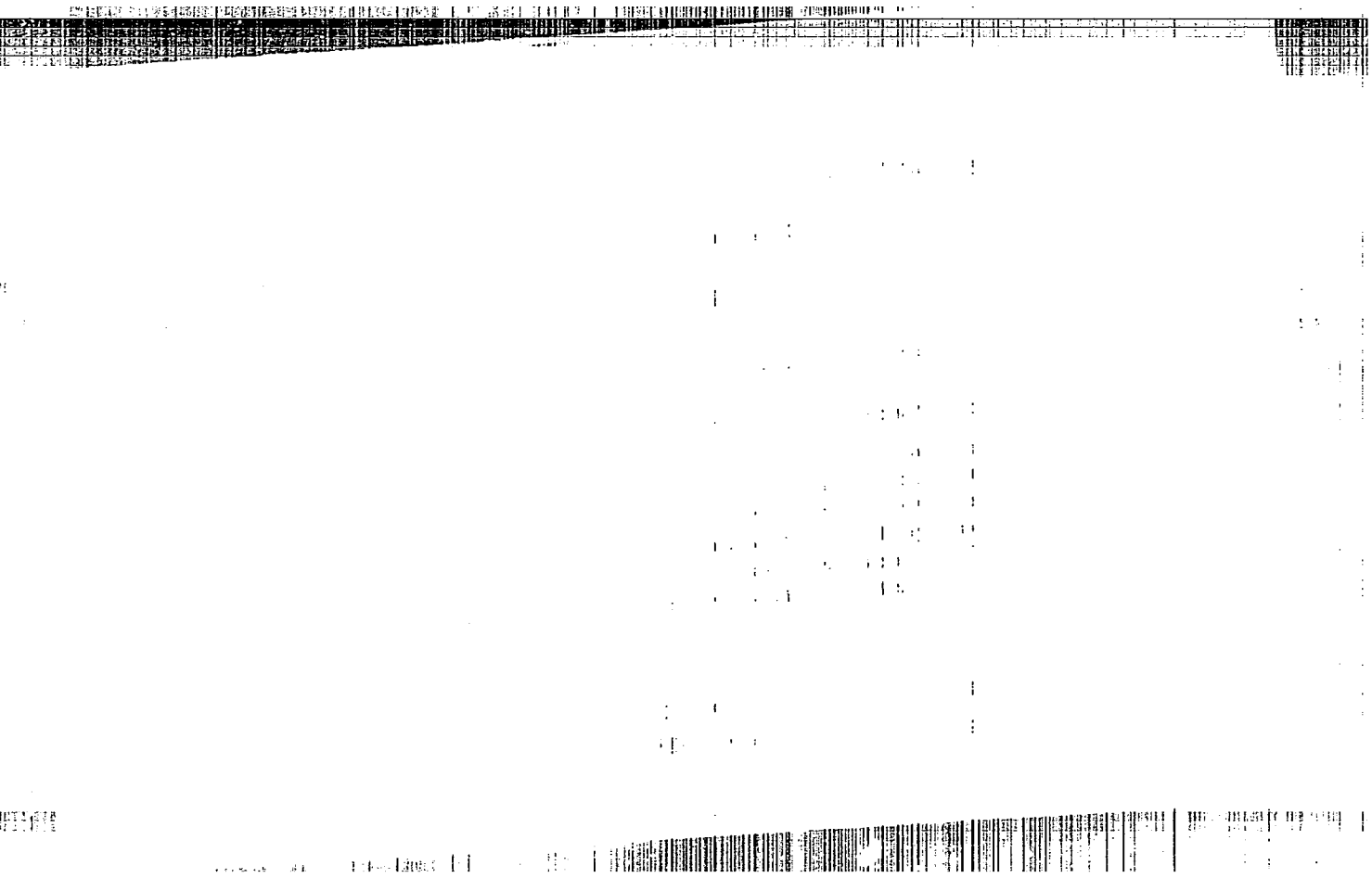
YEVDAKOV, V.P.; MIZRAKH, L.I.; DANDALOVA, L.Yu.

Reaction of dialkyl amides of dialkylphosphorous acid with aldehydes. Dokl. AN SSSR 162 no.3:573-576 My '65. (MIRA 18:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza. Submitted November 14, 1964.

MIZRAKH, L.I.; YEVDAKOV, V.P.; SANDALOVA, L.Yu.

Amides and anhydrides of phosphorus acids. Part 6: Mixed acid anhydrides of trivalent and pentavalent phosphorus. Synthesis and some properties. Zhur. ob. khim. 35 no.10:1871-1876 O '65. (MIRA 18:10)



APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962920020-0"

L 3025-66 EWT(m)/EPF(c)/EWP(j)/T RM

ACCESSION NR: AP5022010 UR/0286/65/000/014/0078/0078
678.85

AUTHOR: Petrov, K. A.; Yevdakov, V. P.; Bilevich, K. A.; Radchenko, V. P.; Kosarev, Yu. S.

TITLE: A method for producing organic phosphorus polymers. Class 39, No. 172996

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 78

TOPIC TAGS: organic phosphorus compound, polymer, phosphorous acid

ABSTRACT: This Author's Certificate introduces a method for producing organic phosphorus polymers based on amides of phosphorous and phosphonous acids. A wider selection of raw materials is provided by using dihydroxyl-containing aryls as the second component for polymerization.

ASSOCIATION: none

SUBMITTED: 31Oct61 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 000 OTHER: 000

Card 1/1

L 4959-66 EWT(m)/EPF(c)/EWP(j)/EWP(t)/EWP(b) IJP(c) JD/RM

ACC NR: AP5025678 SOURCE CODE: UR/0286/65/000/018/0025/0026

AUTHORS: Yevdakov, V. P.; Alipova, Ye. I.

ORG: none

TITLE: A method for obtaining the anhydride of vinylphosphonic acid and its acid esters. Class 12, No. 174625 announced by State Scientific Research and Planning Institute for the Nitrogen Industry and Organic Synthesis Products (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 25-26

TOPIC TAGS: vinylphosphonic acid, anhydride, phosphor organic compound, phosphonic acid, formic acid

ABSTRACT: This Author Certificate presents a method for obtaining the anhydride of vinylphosphonic acid and its acid esters by reacting the dichloroanhydride of vinylphosphonic acid with anhydrous formic acid at 10C and by subsequent heating to 120-130C. The resulting anhydride of vinylphosphonic acid is then treated with

Card 1/2 UDC: 547.419.1-312.07

0901 1571

L 4959-66

ACC NR: AP5025678

hydroxyl-containing compounds at a temperature of 120-130°.

SUB CODE: 00/ SUBM DATE: 10Jul64

Card 2/2

L 21857-66 EWP(1)/EWT(m) RM

ACC NR: AP6012653 SOURCE CODE: UR/0079/65/035/002/0365/0368

AUTHOR: Bilevich, K. A.; Yevdakov, V. P.

ORG: State Scientific Research and Design Institute, Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

TITLE: Alcoholysis and phenolysis of acetylphosphites

SOURCE: Zhurnal obshchey khimii, v. 35, no. 2, 1965, 365-368

TOPIC TAGS: phosphorylation, organic phosphorous compound, acetic anhydride, alcohol, glycol, tertiary amine, phenol

ABSTRACT: Mild phosphorylation of various hydroxyl-containing compounds can be successfully carried out with acetyl phosphites, readily synthesized by reaction of dialkylamides of dialkylphosphorous acid with acetic anhydride.

$$(RO)_2PN(C_2H_5)_2 + O(OCCH_3)_2 \longrightarrow (RO)_2POCOCH_3 + CH_3CON(C_2H_5)_2$$

The reaction occurs endothermally, and acetyldialkylphosphites are formed at high yield. It was found that esteramides of phosphoric acid react with acetic anhydride to form mixed anhydrides. It was shown that dialkylacetylphosphites phosphorylate primary, secondary, and tertiary alcohols, glycols, and phenols in the presence of tertiary amines or dialkylamides of dialkylphosphorus acid at room temperature. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 05Sep63 / ORIG REF: 005 / OTH REF: 001

Card 1/1 nst UDC: 546.183

L 25680-66 EWT(m)/EWP(j) RM

ACC NR: AP6016692 SOURCE CODE: UR/0079/65/035/009/1587/1591

AUTHOR: Yevdakov, V. P.; Shlenkova, Ye. K.

ORG: Institute of the Nitrogen Industry and Products of Organic Synthesis (Institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

great evolution of heat. Tetraalkyldiamides of phosphorous acid react with anhydrides of monobasic carboxylic acids to form acyl phosphites: diacyl phosphites in the reaction of two moles of the anhydride, amidoacyl phosphites in the reaction with one mole of the anhydride. Dialkylamidoacyl phosphites and amidoacyl phosphites are unstable and decompose almost entirely to the amide of the corresponding acid and metaphosphite when heated. They are also

Card 1/2 UDC: 546.161'1.27.29

L 25680-66

ACC NR: AP6016692

effective phosphorylating agents, reacting with alcohols to form dialkyl phosphite and the diethylamide of the carboxylic acid. Phosphorylation of alcohols can be conducted in one step without isolation of the amidoacyl phosphites by successively treating the tetraalkyldiamide of alkylphosphorous acid with an acid anhydride and an alcohol. Anhydrides of dibasic acids (phthalic, succinic) also react with amides of phosphorous acid. Orig. art. has: 3 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 30Jun64 / ORIG REF: 007 / OTH REF: 001

Card 2/2 dda

L 25681-66 EWT(m)/EWP(i)/T RM

ACC NR: AP6016691 SOURCE CODE: UR/0079/65/035/009/1584/1587

AUTHOR: Yevdakov, V. P.; Alipova, Ye. I.

ORG: State Scientific Research and Planning Institute, Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

TITLE: Investigation in the field of amides and anhydrides of phosphorus acids. VII. Synthesis and some transformations of anhydrides of phosphinic acids

SOURCE: Zhurnal obshchey khimii, v. 35, no. 9, 1965, 1584-1587

TOPIC TAGS: phosphinic acid, organic synthetic process, formic acid, ester, fluorinated organic compound

ABSTRACT: Continuing a study of anhydrides of phosphorus acids, the authors synthesized anhydrides of alkyl-, cycloalkyl-, and arylphosphinic acids by the reaction of the corresponding dichlorides with anhydrous formic acid or with water. The corresponding anhydrides are produced in high yield at 130-140° for the alkyl and cycloalkyl compounds, and at 150-160° for the aryl derivative. The anhydride synthesis can also be conducted in the presence of solvents and organic compounds, which sharply reduces the reaction temperature but makes isolation of the anhydride formed from the hydrochloride of the organic base and further isolation of the acid ester difficulty.

Card 1/2 UDC: 546.185+547.26'118

L 25681-66

ACC NR: AP6016691

Acid esters of phosphinic acids were produced by heating the anhydrides with primary, secondary, and fluorinated alcohols, as well as with phenol, forming monoalkyl (aryl) phosphonates in high yield. The authors propose a nucleophilic substitution reaction at the tetrahedral phosphorus atom, with the phosphorus atom pentavalent in the transition state, for the reaction of phosphinic acid anhydrides with hydroxyl-containing compounds. Orig. art. has: 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 29Jun64 / ORIG REF: 002 / OTH REF: 002

Card 2/2 dda

L 36498-66 EWT(m)/EWP(j) RM

ACC NR: AP6027085 SOURCE CODE: UR/0079/65/035/010/1871/1876

AUTHOR: Mizrakh, L. I.; Yevdakov, V. P.; Sandalova, L. Yu.

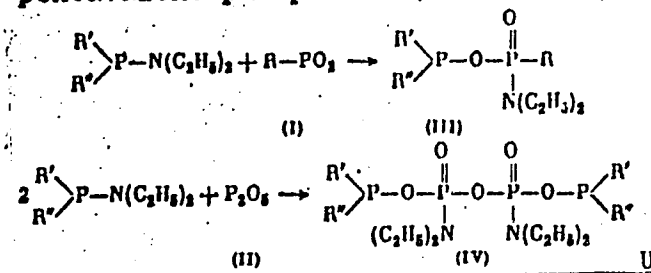
ORG: none

TITLE: Amides and anydrides of phosphorus acids. Part 6: Mixed anhydrides of acids of tri- and pentavalent phosphorus. Synthesis and some properties

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1871-1876

TOPIC TAGS: phosphorus compound, organic amide, acetic anhydride, chemical synthesis, chemical bonding, phosphoric acid, phosphinic acid, reaction mechanism, hydrolysis

ABSTRACT: The reaction of compounds containing a P^{III}-N bond with anhydrides of acids of epntavalent phosphorus was studied. Anhydrides of phosphoric and phosphinic acids (I, II) react with amides of phosphorous and phosphinous acids to form mixed anhydrides of acids of tri- and pentavalent phosphorus (III and IV):



(I) (III)

(II) (IV)

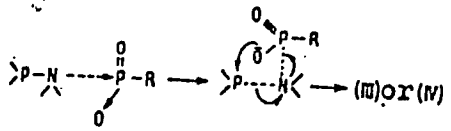
UDC: 546.183+546.185

Card 1/2

L 36498-66

ACC NR: AP6027085

A similar shift of the dialkylamide group and formation of a p^{III}-O-P^{V} bond are observed when di- and triamides of acids of trivalent phosphorus are involved in the reaction. The mechanism of formation of mixed anhydrides (III) and (IV) most probably consists in a nucleophilic attack of the free electron pair of nitrogen, followed by a heterolytic cleavage of the p^{III}-N bond:



Data of the analysis of the synthesized compounds (III) and (IV) and their constants are tabulated. Certain conversions (hydrolysis, alcoholysis, etc.) were carried out in order to demonstrate the structure of these compounds and to study their properties. The mixed anhydrides were found to have good phosphorylating properties.

Orig. art. has: 2 tables. [JPRS: 36,328]

SUB CODE: 07 / SUBM DATE: 29Jun64 / ORIG REF: 005 / OTH REF: 003

Card 2/2 mlp

L 34793-66 EWT(m)/EWP(j) RM

ACC NR: AP6021420 SOURCE CODE: UR/0413/66/000/011/0021/0021

INVENTOR: Yevdakov, V. P.; Shlenkova, Ye. K.

ORG: none

TITLE: Preparation of cyclic alkyl phosphites. Class 12, No. 182157 [announced by State Scientific Research and Design Institute of the Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 21

TOPIC TAGS: organic synthetic process, organic phosphorus compound, phosphorous acid derivative, cyclization, cyclic ester

ABSTRACT: The subject of this invention is a simplified method for the preparation of cyclic alkyl phosphites from N,N,N',N'-tetraalkylphosphorous diamides which are treated with acetic anhydride and glycols. [JK]

SUB CODE: 07/ SUBM DATE: 06Apr65

Card 1/1 UDC: 547.419.1.07

L 31809-66 EWT(m)/EWP(j) RM

ACC NR: AP6021677 SOURCE CODE: UR/0079/66/036/003/0469/0475

AUTHOR: Kizraldh, L. I.; Yevdakov, V. P. 37 B

ORG: none

TITLE: Investigation in the fields of amides and anhydrides of phosphorus acids. III. Hydrolysis and acidolysis of derivatives of phenylphosphinous acid 1

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 469-475

TOPIC TAGS: organic phosphorus compound, organic amide, hydrolysis, nonmetallic organic derivative, chemical decomposition, hydrogen sulfide, esterification, chemical synthesis

ABSTRACT: Anhydrides of phenylphosphinous and phenylthiophosphinous acids were produced by the reaction of the dichloride and tetraethyldiamide of phenylphosphinous acid with water and hydrogen sulfide, respectively. The anhydrides produced were apparently pentamers. Treatment of the anhydride of phenylphosphinous acid with water yielded phenylphosphinic acid. Through the addition of sulfur, the anhydrides were converted to anhydrides of phenylphosphinic and phenyldithiophosphinic acids, respectively, which reacted with alcohols to form monoalkyl esters of the corresponding acids. The reactions of the anhydride of phenylthiophosphinous acid with bromine and sulfuryl chloride are discussed. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 21Dec63 / ORIG REF: 006 / OTH REF: 005

Card 1/1 UDC: 547.558.1

L 11394-67 EWT(m)/EWP(j) RM

ACC NR: AP7003660 SOURCE CODE: UR/0079/66/036/008/1451/1454

12

AUTHOR: Sandalova, L. Yu.; Mizrakh, L. I.; Yevdakov, V. P.

ORG: State Scientific Research and Planning Institute of the Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

TITLE: Research in the field of amides and anhydrides of phosphorus acids. XI. Interaction of amides of phosphorous acids with alpha-diketones

SOURCE: Zhurnal obshchey khimii, v. 36, no. 8, 1966, 1451-1454

TOPIC TAGS: amide, ketone, organic phosphorus compound

ABSTRACT: 1,2-Cyclohexadione, like diacetyl, was found to react with amidophosphites to form cyclic aminophosphoranes. In addition to the phosphorane, an unsaturated amino ketone was also formed. A diketone was also isolated, indicating the formation of the corresponding amidophosphate. The aminophosphoranes underwent hydrolysis, splitting off an amine and forming the corresponding ketocyclohexyl phosphate. The aminophosphoranes were found to enter into an alcoholysis reaction with cleavage of the P-N bond, and retention of the petacovalent structure. The authors thank I. A. Titov and A. V. Upadyshev for taking the infrared spectra. [JPRS: 38,970]

SUB CODE: 07 / SUBM DATE: 02Jun65 / ORIG REF: 006 / OTH REF: 001

UDC: 547.448.1

Card 1/1 jb

ACC NR: AP7010714 SOURCE CODE: UR/0020/66/171/005/1116/1119

AUTHOR: Mizrakh, L. I.; Sandalova, L. Yu.; Yevdakov, V. P.

ORG: State Scientific Research and Design Institute of the Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

TITLE: Reaction of aminophosphorans with acid anhydrides. Mixed esters of α, α' - enedioles

SOURCE: AN SSSR. Doklady, v. 171, no. 5, 1966, 1116-1119

TOPIC TAGS: acetic anhydride, ester, chemical reaction, phthalic anhydride, amide derivative

SUB CODE: 07

ABSTRACT: Aminophosphorans with the phospholene ring were interacted with acid anhydrides to produce mixed esters of 2,3-butene-2-diole, apparently formed by regrouping of intermediate acyl derivatives with opening of the phospholene ring. Acyl derivatives of pentacovalent phosphorus were not detected in the reaction products of aminophosphorans with various anhydrides of mono- and dicarboxylic acids. An equimolar quantity of the aminophosphoran was added dropwise to the acid anhydride and the solution was distilled

UDC: 547.448+547.379+547.423

Card 1/2

ACC NR: AP7010714

after mixing for 20-25 minutes. The constants and yield of the resultant esters are tabulated. In the case of succinic anhydride, the reaction mass was heated for 30 minutes at 60°C. Interaction with phthalic anhydride was done with heating to 100°C until complete dissolution of the anhydride. The mixture was heated for two hours at 130°C in the case of acetyl phosphite. In the reaction with acetanhydride, a 50% yield of diethylacetamide is produced in addition to the corresponding ester. In the reaction with chloroacetic acid anhydride, a 31.4% yield of N,N-diethylchloracetamide is produced in addition to the ester. The resultant data on physical properties and reaction rates agree satisfactorily with the data in the literature. The authors are sincerely grateful to A. V. UPADYSHEVA and I. A. TITOVA for taking the infrared spectra. This article was presented by Academician M. I. Kabachnik on 9 March 1966. Orig. art. has: 4 formulas and 1 table. [JPRS: 40,351]

Card 2/2

ACC NR: AP7010718 SOURCE CODE: UR/0062/66/000/012/2207/2208

AUTHOR: Khorlin, A. Ya.; Snyatkova, V. I.; Yevdakov, V. P.; Shlenkova, Ye. K.

ORG: Institute of the Chemistry of Natural Compounds, Academy of Sciences USSR (Institut khimii prirodnykh soyedineniy AN SSSR)

TITLE: Synthesis of 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyldibutyl-phosphite

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 12, 1966, 2207-2208

TOPIC TAGS: chemical synthesis, pyridine, phosphate ester, nuclear magnetic resonance

SUB CODE: 07

ABSTRACT: The action of dibutylacetylphosphite as a phosphorylating agent for carbohydrate derivatives with a free hemiacetal hydroxyl was investigated using 2,3,4,6-tetra-O-acetyl-β-D-glucopyranose as an example. The condensation proceeded without inversion of the configuration, forming 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyldibutylphosphite. The reaction was conducted in absolute benzene medium, in the presence if absolute pyridine as an acetic acid acceptor. The structure of the reaction product was proven by element analysis, hydrolysis upon standing, acid methanolysis to the methylglucoside, and a study of the nuclear magnetic resonance spectrum. The phosphite could subsequently be oxidized to the corresponding phosphate. Orig. art. has: 1 formula. [JPRS: 40,351]

UDC: 542.91 + 547.454 + 661.718.1

Card 1/1

ACC NR: AP7012441 SOURCE CODE: UR/0413/66/000 018 0040 0040

AUTHOR: Yevdakov, V. P.; Mizrakh, L. I.; Sandalova, L. Yu.

ORG: none

TITLE: Method for preparing salts of amido acid of pentavalent phosphorus. Class 12, No. 185914 [Announced by State Scientific Research and Design Institute of the Nitrogen Industry and Products of Organic Synthesis]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 18, 1966, 40

TOPIC TAGS: amine salt, amino acid, organic amide, organic phosphorus compound

SUB CODE: 07

ABSTRACT: A method is claimed for the preparation of salts of amido acids of pentavalent phosphorus, in which mixed anhydrides of tri- and pentavalent phosphorus acids are treated with amides. [JPRS: 40,422]

UDC: 547.419.1.07

0932 1393

Card 1/1

ACC NR: AP6035686 (A,N) SOURCE CODE: UR/0413/66/000/019/0031/0031

INVENTOR: Mizrakh, L. I.; Yevdakov, V. P.; Sandalova, L. Yu.

ORG: none

TITLE: Preparation of mixed esters of α-enediols containing phosphorus. Class 12, No. 186471 [announced by State Design and Planning Scientific Research Institute of the Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 31

TOPIC TAGS: ~~organic~~ phosphorus compound, mixed ester, indole, acid anhydride, acetic anhydride

ABSTRACT: In the proposed method, mixed esters of α-enediols containing phosphorus are obtained by the reaction of aminophosphoranes with acid anhydrides.

[PS]

[WA-50; CBE No. 14]

SUB CODE: 07/ SUBM DATE: 05Aug65

UDC: 547.26.118.07

Card 1/1

ACC NR: AP7013150 SOURCE CODE: UR/0413/66/000/021/0039 0039

INVENTOR: Yevdakov, V. P.; Shlenkova, Ye. K.

ORG: none

TITLE: Method for preparing mixed acid anhydrides of tri- and pentavalent phosphorous, Class 12, No. 187780 [Announced by State Design and Planning Scientific Research Institute of the Nitrogen Industry and Products of Organic Synthesis]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 39

TOPIC TAGS: phosphorous acid, inorganic amide, phosphoric acid

SUB CODE: 07

ABSTRACT: 1. A method is claimed for the preparation of mixed acid anhydrides of tri- and pentavalent phosphorous by reaction of derivatives of phosphorous acids with phosphoric amide or phosphoric acid with heating, differing in that for the purpose of simplication and further utilization of resources, mixed anhydrides of phosphoric or thiophosphoric acids and carboxylic acids are used as phosphorous acid derivatives. 2. The method as outlined in paragraph one with the heating being conducted at 20-100°C.

[JPRS: 40,422]

UDC: 547.419.1.07

0933 0860

Card 1/1

YEVDAKOVA, V.P., assistent

Early therapy of congenital clubfoot in children. Zdrav. Kazakh. 17 no.12:16-19 '57. (MIRA 12:6)

1. Iz detskogo otdeleniya gospital'noy khirurgicheskoy kliniki Kazakhskogo gosudarstvennogo meditsinskogo instituta.
(FOOT--ABNORMITIES AND DEFORMITIES)

YEVDAKOVA, V.P., Cand Med Sci -- (diss) "Congenital talipes. [illegible] attempt-at early treatment, and remote results." Alma-Ata, 1958, 10 pp (Kazakh State Med Inst) 300 copies (KL, 27-58, 116)

YEVDASIN M.I.

AUTHOR: Yevdasin, M.I. 3-2-5/32

TITLE: Developing Collective Forms of Work (Razvivat' kollektivnyye raboty)

PERIODICAL: Vestnik vysshey shkoly, Feb 1957, # 2, p 21-24 (USSR)

ABSTRACT: As is known, the quality of teaching depends not only on the individual teacher's endeavors but also on the efforts of the Chair as a whole. The present article tells of the experiences of the Chair of Sociology of one of the military institutes. For a more detailed briefing on the national and international situation, the Chair regularly organizes lectures by highly qualified scholars. Thus, the lecture on "Agriculture and the 6th Five-Year Plan" was given by a representative of the Gosplan, S.Ya. Dunin, and the lecture on "Science and Modern War" was delivered by G.F. Pokrovskiy, Doctor of Technical Sciences. Furthermore, theoretical discussions on the works of Lenin were arranged. Preparing themselves for such a discussion the teachers studied about 30 works of Lenin. An extended meeting of the Institute's Council dealt with theoretical questions raised by the 20th Communist Party Congress. In order to increase the teachers' knowledge of economics, the Chair organized excursions to collective farms, State farms, tractor stations and large enterprises.

Card 1/2

SEMENOV, V.T., dorozhnyy master (Stantsiya Biysk, Zapadno-Sibirskoy dorogi); YEVDAYEV, B.N., starshiy inzh, (g.Baku); LETUCHIY, N.A.; POLUKEYEV, A.G.

Letters to the editor. Put' i put.khoz. 5 no.10:45-46 O '61.
(MIRA 14:10)

1. Nachal'nik Semenovskoy distantsii puti, Gor'kovskoy dorogi (for Letuchiy). 2. Zamestitel' nachal'nika distantsii puti, stantsiya Likhaya, Yugo-Vostochnoy dorogi.
(Railroads)

YEVDAYEV, D.N., starshiy inzh. (Baku)

Multihinged instrument for track alignment. Put' i put.khoz. no.7:38 '62. (MIRA 15:7)

(Railroads—Tools and implements)

YEVDAYEV, B.N., starshiy inzh. sluzhby puti (Baku)

An outstanding section. Put' i put.khoz. 6 no.6:12 '62. (MIRA 15:7)
(Railroads—Maintenance and repair)

YEVDOCHENKO, Ye.A., kand.med. nauk

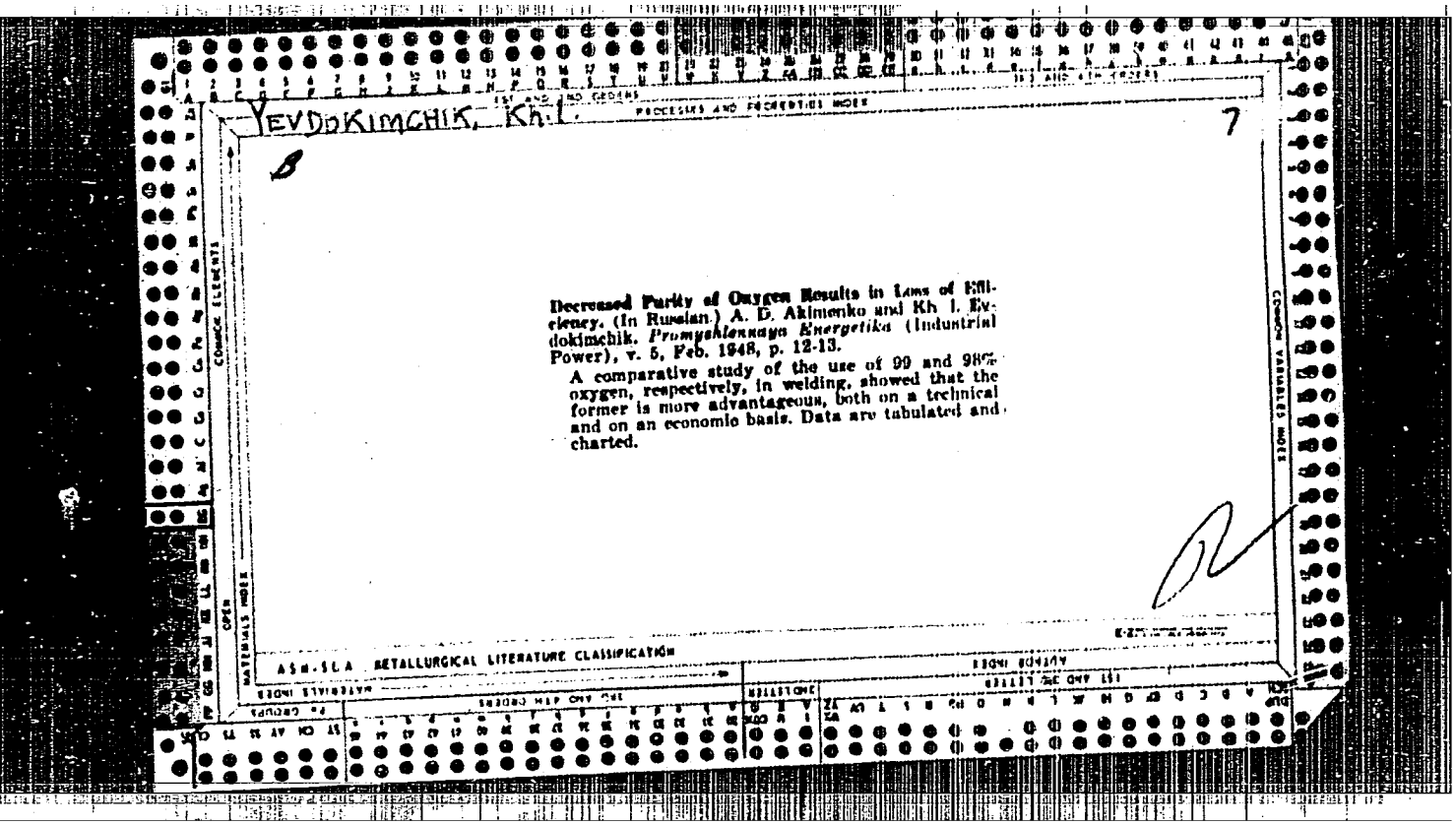
Methodology of surgery on the stapes in an experiment. Zhur. ush. nos. i gorl. bol. 23 no.2:3-8 Mr-Ap'63. (MIRA 16:8)

1. Iz Nauchno-issledovatel'skogo instituta otolaringologii Ministerstva zdravookhraneniya UkrSSR (direktor - zasluzhennyy deyatel' nauki prof. A.I.Kolomiychenko)
(TYMPANAL ORGAN—SURGERY)

KRUGLOVA, V.G.; CHERNOV, B.S.; YEVDOKHIN, A.G.; PASTUKHOVA, Ye.S.

Characteristics of the molybdenum stockwork deposit in eastern Transbaikalia. Sov. geol. 8 no.3:118-124 '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.



YEVDOKIMCHIK, Kh. I.

8

7

Decreased Purity of Oxygen Results in Loss of Efficiency. (In Russian.) A. D. Akimenko and Kh. I. Evdokimchik. *Promyshlennaya Energetika* (Industrial Power), v. 5, Feb. 1948, p. 12-13.

A comparative study of the use of 99 and 98% oxygen, respectively, in welding, showed that the former is more advantageous, both on a technical and on an economic basis. Data are tabulated and charted.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

YEVDOKIMCHIK, Kh.I., inzh.

Destruction of the moisture trap of the oxygen compressor. Kislorod 10 no.3:34-35 '57. (MLRA 10:11)

(Oxygen) (Compressors)

YEVDOKIMCHIK, Kh.I., inzhener.

Upper limit of heating for compressor air. Prom.energ. 12 no.9:14 S '57. (MIRA 10:10)
(Air compressors)

YEVDOKIMCHIK, Kh. I.

ABRAMOVICH, I.I., prof., ANBINDER, A.G., inzh., ANTOSHIN, Ye.V., inzh., ARKHANGEL'SKIY, L.A., inzh., ASTAF'YEV, S.S., kand. tekhn. nauk, AFANAS'YEV, L.A., inzh., BARGSHTEYN, I.I., inzh., BORISOV, Yu. S., inzh., red., BYALYY, I.L., inzh., VETVITSKIY, A.M., inzh., GERSHMAN, D.Kh., inzh., GINZBURG, Z.M., inzh., GOROSHKIN, A.K., inzh., YEVDOKIMCHIK, Kh.I., inzh., ZHIKH, V.A., kand. tekhn. nauk, ZABYVAYEV, Ye. I., kand. tekhn. nauk, [deceased], ZOBIN, V.S., inzh., IVANOV, G.P., kand. tekhn nauk, KAPRANOV, P.N., inzh., KONDRATOVICH, V.M., inzh., KOSTEREV, S.K., inzh., KOVAL'SKIY, N.N., inzh., KRUGLYAK, L.A., inzh., LUKYANOV, T.P., inzh., LAPIDUS, A.S., kand. tekhn. nauk, LIVSHITS, G.A., kand. tekhn. nauk, LISHANSKIY, I.M., inzh., MIGALINA, Ye.Ya., inzh., NOSKIN, R.A., kand. tekhn. nauk; ., PRONIKOV, A.S., doktor tekhn. nauk, REGIRER, Z.L., kand. tekhn. nauk, RUDYK, M.A., inzh., SOKOLOVA, N.V., inzh., SAKLINSKIY, V.V., inzh., SAKHAROV, V.P., inzh., TOKAR', M.KH., inzh., TKACHEVSKIY, G.I., inzh., KHRUNICHEV, Yu.A., kand. tekhn. nauk, TSOPIN, K.G., inzh., red.; SHEYNGOL'D, Ye. M., inzh., SOKOLOVA, T.F., tekhn. red.

[Handbook for machinists of machinery plants in two volumes] Spravochnik mekhanika mashinostroitel'nogo zavoda v dvukh tomakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry. Vol. 2. [The technology of repair work] Tekhnologiia remonta. Otv. red. toma IU. S. Borisov, 1958. 1059 p. (MIRA 11:10)

(Machinery--Maintenance and repair)
(Machine-shop practice)

ANTOSHIN, Ye.V.

.25(5) p-3 PHASE I BOOK EXPLOITATION SOV/1361

Spravochnik mekhanika mashinostroitel'nogo zavoda v dvukh tomakh. t. 2: Tekhnologiya remonta (Handbook for Mechanics of Machine-building Plants in Two Volumes. Vol. 2: Technology of Repair Operations) Moscow, Mashgiz, 1958. vii, 1059 p. 40,000 copies printed.

Resp. Ed.: Yu.S. Borisov, Engineer; Ed.: K.G. Tsopin, Engineer; Tech. Ed.: T.F. Sokolova; Eds. of Set: Yu.S. Borisov, Engineer, A.P. Vladziyevskiy, Doctor of Technical Sciences, and R.A. Noskin, Candidate of Technical Sciences; Managing Ed. for Reference Literature (Mashgiz): V.I. Krylov, Engineer.

PURPOSE: This handbook is intended for personnel responsible for repair and maintenance operations in a machinery-manufacturing plant.

COVERAGE: The handbook contains information pertinent to the organization of repair and maintenance operations, design-preparation of maintenance work, and economics of maintenance. Information on scientific research organizations and plants participating in preparation of this volume is included in the coverage of Volume 1 (SOV/1359). There are no references. Basic topics covered include reconditioning and making of parts in maintenance operations; metal-working, hoisting, and pipe-fitting; finishing operations involved in maintenance work; checking parts for precision; basic bench and assembly work; maintenance of power equipment; and maintenance of foundations.

Card 22/25

5(1)

AUTHOR: Yevdokimchik, Kh. I., Engineer

SOV/67-58-6-8/22

TITLE: On the Utilization of Liquid Oxygen for the Cooling of Parts (Ob ispol'zovanii zhidkogo kisloroda dlya okhlazhdeniya detaley)

PERIODICAL: Kislorod, 1958, Nr 6, pp 30 - 31 (USSR)

ABSTRACT: Both liquid oxygen and liquid nitrogen are widely employed today in the thermal treatment of parts in compression and expansion, in the assembling and re-assembling of machines, etc. Instructions for the use of oxygen for these purposes are given in publications because of the great danger of explosion. The non-observance of these rules was responsible for an explosion that occurred in a machine-building plant in the removal of a screwed nut from a friction press (220 ton). Low-temperature cooling with liquid oxygen to loosen the nut proved of no avail. The nut was then knocked upon, and after a few such attempts the explosion occurred. Investigation of the scattered fragments showed traces of grease and other impurities in the thread of the nut. The oxygen directly touching the grease and the knocking effect were the cause of explosion.

Card 1/2

On the Utilization of Liquid Oxygen for the Cooling of Parts SOV/67-58-6-8/22

To prevent that in future, the use of liquid oxygen is now allowed only for direct low-temperature cooling of parts to be disassembled. In the above-described case, the sole use of liquid nitrogen should have been prescribed in order to prevent the explosion. There is 1 figure.

Card 2/2

YEVDOKIMCHIK, Kh. I.

94-4-6/25

AUTHOR: Yevdokimchik, Kh.I., Engineer.

TITLE: The Operation of Compressed-air Lines Without Risk of Explosion (O vzryvobezopasnoy ekspluatatsii vozdukh-oprovodov)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol.13, No.4, pp. 13 - 14 (USSR).

ABSTRACT: An explosion occurred in the compressed-air lines in an engineering works. An emergency arrangement existed whereby on failure of the normal methods of delivering fuel oil from the storage tanks, compressed air was used. The valves between the fuel-oil storage tanks and the compressed-air system did not give a perfect seal and, since the fuel tank was under pressure, fuel-oil and light fractions thereof, entered the compressed-air system and formed an explosive mixture. Since this accident, the use of the compressed-air lines to deliver fuel-oil to open-hearth furnaces has been forbidden. The safety rules should be amended to take account of such cases.
There is 1 figure.

AVAILABLE: Library of Congress

Card 1/1

YEVDOKIMENKO, A.

Technical and economic indexes for operation of rotary cement kilns. Stroi. mat., izdel. i konstr. 2 no.7:20-22 Jl '56. (MLRA 9:10)

1. Starshiy inzhener Glavzapadtsementa.
(Cement kilns)

8

AUTHOR: Yevdokimenko, A.D. SOV/101-58-6-4/13

TITLE: Supplying the Industrial and Home Construction of the Moscow Oblast With Cement From Plants in the Moscow Area (Obespecheniye promyshlennogo i zhilishchnogo stroitel'stva Moskovskoy oblasti tsementom s podmoskovnykh zavodov)

PERIODICAL: Tsement, 1958, 24/71 Nr 6, pp 13-15 (USSR)

ABSTRACT: In the Moscow area, four large plants are operating: Tsementnyy zavod "Gigant" (Cement Plant "Giant"), Voskresenskiy tsementnyy zavod (Voskresensk Cement Plant), Podol'skiy tsementnyy zavod (Podol'sk Cement Plant), and Shchurovskiy tsementnyy zavod (Shchurovo Cement Plant). Production has increased due to an increase in the hourly output per furnace from 9.8 tons to 13.1 tons in the Voskresensk plant and from 9.1 tons to 11.6 tons in the Podol'sk plant. The idle time of the furnaces was reduced from 11% in 1940 to 3.2% in 1956 due to the increase of the service time of

Card 1/2

Supplying the Industrial and Home Construction of the Moscow Oblast With Cement From Plants in the Moscow Area

the furnace linings. There is a shortage of portland cement in the Moscow area, but a surplus of magnesia slag portland cement and puzzuolanic cement. The production of portland cement is 36.2% of the total production, but slag portland cement is 44.5%. Every year 1.5 million tons of cement are imported into the area and 0.5 million tons are exported. It is planned to install several new 150-m furnaces, which would increase production by 1.2 million tons a year. Prospecting will be increased in the coming years, to find raw materials for two new cement plants.

Card 2/2

YEVDOKIMENKO, A.D.

Expansion of glass and ceramic manufacture in Moscow Province. Stek.i ker. 17 no.7:39-41 Jl '60. (MIRA 13:7)

(Moscow Province--Glass manufacture)
(Moscow Province--Ceramic industries)

YEVDOKIMENKO, A.D.

Planning costs of cement production. TSement 27 no.1:23-24 Ja-F '61. (MIRA 14:2)

(Cement industries--Costs)

YEVDOKIMENKO, A. I.

Mbr., Energetics Inst. im. G. M. Krzhizhanovskiy, Dept. Tech. Sci., Acad. Sci., -c1948-.

"Gas Burners Made from Ceramics", Stal', No. 9, 1948

YEVDOKIMENKO, A. I. Cand Tech Sci

Dissertation: "Surface Burning of the Fine Jets of Gas."

27/4/50

Power Engineering Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR

SO Vecheryaya Moskva
Sum 71

YEVDOKIMENKO A.I.

DIOMIDOVSKIY, Dmitriy Aleksandrovich, professor, doktor tekhnicheskikh nauk; MIKHAYLENKO, A.Ya., kandidat tekhnicheskikh nauk, retsenzent; KRAPUKHIN, V.V., kandidat tekhnicheskikh nauk, retsenzent; YEVDOKIMENKO, A.I., kandidat tekhnicheskikh nauk, retsenzent; YEGOROV, F.G., inzhener, retsenzent; MIKHAYLENKO, A.Ya., redaktor; ARKHANGEL'SKAYA, M.S., redaktor izdatel'stva; BERLOV, A.P., tekhnicheskiy redaktor

[Furnaces for nonferrous metallurgy; construction, analysis, theory, calculation] Pechi tsvetnoi metallurgii; konstruktsii, issledovanie, teoriia, raschet. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 459 p. (MLRA 9:12)

(Metallurgical furnaces)

YEVDOKIMENKO, A.I.
~~BUNTOVNIKOV, A.S.~~

137-58-9313

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 75 (USSR)

AUTHORS: Yevdokimenko, A.I., Yegunov, V.S., Berseneva, I.I., ~~Buntovnikov, A.S.~~

TITLE: Lead Smelting Process in a Shaft Furnace as Characterized by Experimental Data (Shakhtnaya svintsovaya plavka po eksperimental'nym dannym)

PERIODICAL: Sb. nauchn. tr. Gos. n.-i. in-t tsvetn. met., 1957, Nr 13, pp 305-330

ABSTRACT: The basic factors characterizing the smelting process were studied on an operating industrial furnace. Experimental data were employed to represent graphically the variations in a number of characteristics (the charge level and the rate of its descent, the gas pressures, air consumption, temperature, etc.), the location of the isotherms in the furnace, and the zone in which the charge undergoes transformation. It is established that, as it descends, the material in the shaft becomes richer in coke, a fact which points to the existence of a coke layer on the bottom of the charge column. The gas pressure in the plane of the tuyeres decreases from the periphery toward the center,

Lead Smelting Process in (cont.)

which characterizes the movement of gases in this region as that of two-dimensional filtration. The gas current directed toward the center of the furnace increases with increasing temperatures and with the rate of blowing. The temperature along the entire height of the axis of the furnace is 30-45% lower than it is along the walls, a fact which, to some extent, is characteristic of the existence of peripheral movement of gases. The burning of coke in the furnace conforms to the general theory on heterogeneous combustion of C in a layer. The zone of intense coke combustion, that is, the focal region of the furnace, has the shape of a ring situated near the periphery of the furnace and is attached to the openings of the tuyeres; it terminates appx. 800 mm above the tuyeres and varies with time. The temperature of the focal region is determined by the intensity of coke combustion, the composition and temperature of the blast, and the intensity of heat removal; maximum temperature values in the focal region amount to 1300-1650°C. The temperature in the focal region determines the temperature field in the column of material above the tuyeres. The focal region is surrounded by a relatively small region of intense slag formation; the position of this layer is determined by the temperature of fusion of the slag. In the greater part of the charge column the temperature is independent of the fusion temperature of slags and is lower than the latter. The temperature of the hearth and of outgoing liquid products is determined by the

137-58-5-9313

Lead Smelting Process in (cont.)

temperature and position of the focal region and by the melting points of the slag, matte, and Pb.

L. P.

1. Lead--Production 2. Lead ores--Processing 3. Slags--Properties
4. Furnaces--Thermodynamic properties

Card 3/3

137-58-4-6504

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 25 (USSR)

AUTHOR: Yevdokimenko, A.I.

TITLE: Heating FluoSolids Furnaces (Otopleniye pechey s kipyashchim sloyem)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 17, pp 19-22

ABSTRACT: A description is offered of laboratory experiments in the combustion of kerosene, heavy oil, and solar oil in a Fluo-Solids layer of limestone or sand, 0.15-0.20 mm size, in cylindrical furnaces. The results of the tests demonstrate the possibility of employing heavy oil as a fuel for Fluo-Solids purposes, provided the required temperature and adequate contact between the fuel and the air in the FluoSolids layer are obtained.

G.G.

1. Furnaces--Heating 2. Kerosene--Applications 3. Oils --Applications

Card 1/1

SOV/137-59-1-34

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 4 (USSR)

AUTHORS: Yevdokimenko, A.I., Yegorov, F.G.

TITLE: Scale-model Investigation of Furnaces (Issledovaniye pechey na modelyakh)

PERIODICAL: V sb.: Materialy Soveshchaniya po vopr. raboty pechey tsvetn. metallurgii i razvitiya pirometallurgich. protsessov. Moscow, 1957, pp 38-53

ABSTRACT: A report of the main findings of a scale-model investigation of shaft and reverberatory furnaces. In order to study the movement of gases in Pb-smelting shaft furnaces, investigations were carried out on a "plastiglass" model of a rectangular shaft furnace on a 1:10 scale. A description is given of a laboratory shaft furnace used as an actual firing model for the fundamental smelting processes. A description is adduced of a method of model simulation using an electrothermal analogy for calculating the temperature field in a multi-layer mass having a complex configuration, such as the foundation of a reverberatory furnace where it is practically impossible to measure its temperature during actual operation. The

Card 1/2

Scale-model Investigation of Furnaces

work was prompted by the disintegration of the existing foundations of reverberatory furnaces caused by an unfavorable distribution of temperatures throughout the whole mass. On the basis of experimental findings ideas for selection of foundation materials are expressed.

Yu. O.

SOV/136-59-7-6/20

AUTHORS: Reznik, I.D., Yevdokimenko, A.I., Zaberezhnyy, I.I., Sherman, B.P., Kudrin, A.N., Serpov, V.I., Petrov, L.K.

TITLE: Shaft Smelting of Sintered Oxidized Nickel Ores With Hot Blast

PERIODICAL: Tsvetnnye metally, 1959, Nr 7, pp 30-36 (USSR)

ABSTRACT: The use of hot blast in shaft smelting in non-ferrous metallurgy is comparatively recent. The authors describe production experiments made by the kombinat (combine) Yuzhuralnikel' together with Gintsvetmet and Gipronikel'. Aside from the authors the following participated in the work. From Yuzhuralnikel': S. Ye. Lyumkis, M.M. Zolkina, A.G. Ushakov, V.T. Gritskova, U.D. Shaymukhambetov, N.V. Sukhin, I.S. Firyago, V.I. Mannanikov; from Gintsvetmet: A.S. Buntovnikov, M.S. Kruglyakova, Yu. N. Skvortsov, L.I. Yevdokimova; from Gipronikel': N.P. Malyk, Ye. M. Simonov, N.N. Sin'ko, A.N. Derevnin. The furnace used had a cross section in the tuyere zone of 7.2 m^2 and a width of 2m; stack height was 8 m and the slit tuyeres dipped at 15°.

Card 1/3

Shaft Smelting of Sintered Oxidized Nickel Ores With Hot Blast

Blast heating was provided by a specially designed oil-fired heater. Suitable instrumentation was provided. The experiments were conducted as during a previous investigation (Ref 4) on the same furnace; a parallel investigation of stack processes was carried out (Ref 5). Blast temperatures of 190, 300 and 400°C were used, the furnace working smoothly (Fig 1 shows the blast-pressure chart) and without difficulties. Compared with cold-blast operation on the same furnace a coke saving of 28.9% was obtained by blast heating to 300°C; allowing for the oil used in the blast heater the economy was 15.2% by weight, 11.5% if the difference in calorific value of oil and coke is taken into account. Fig 2 shows that top gas composition is best at 300°C. This temperature is also close to the optimum for fuel economy (Fig 3) and smelting and coke burning rates (Fig 4). The authors conclude that the tests have shown that blast heating should be introduced into practice. They recommend that oil- or gas-fired blast heaters should be designed, and that the development of methods for blast heating using the heat

Shaft Smelting of Sintered Oxidized Nickel Ores With Hot Blast

contents of slags and top gases should be accelerated. There are 4 figures, 2 tables and 5 references, 4 of which are Soviet and 1 French.

ASSOCIATION: Gintsvetmet (I. D. Reznik, A. I. Yevdokimenko, I.I. Zaberezhnyy); Kombinat (Combine) Yuzhuralnikel' (B. P. Sherman, A. N. Kudrin, V. I. Serpov); Gipronikel' (L. K. Petrov)

YEVDOKIMENKO, A.I.; YEGUNOV, V.S.; YEGOROV, F.G.

Investigation of furnaces on models. Sbor. nauch. trud. GINTSVETMET no.15:233-256 '59. (MIRA 14:4)
(Metallurgical furnaces--Models)

LUR'YE, Aleksandr Yudimovich, prof., vrach (1897-1958); MAKARCHENKO, A.F., prof., otv. red.; YEVDOKIMOV, A.I., kand. med. nauk, red.; KALINICHENKO, T.Ya., kand. med. nauk, red.; KRUPKO, Yu.A., kand. med. nauk, red.; LOGUNOVA, A.G., kand. med. nauk, red.; PAP, A.G., kand. med. nauk, spets. red.; PANCHENKO, N.I., kand. med. nauk, red.; SAVITSKIY, V.N., doktor med. nauk, prof., red.; SVESHNIKOVA, N.V., kand. med. nauk, red.; TEL'NOVA, R.I., kand. med. nauk, red.; TIMOSHENKO, L.V., kand. med. nauk, spets. red.; YANKELEVICH, Ye.Ya., prof., red.; YANKOVSKAYA, Z.B., red. izd-va; MATVEYCHUK, A.A., tekhn. red.

[Selected works] Izbrannye trudy. Kiev, Izd-vo Akad. nauk USSR. 1960. 425 p. (MIRA 14:7)

1. Chlen-korrespondent Akademii nauk USSR (for Lur'ye, Makarchenko) (GYNECOLOGY)

YEVDOKIMENKO, A.I.; ZABEREZHNYY, I.I.; RAFALOVICH, I.M.; REZNIK, I.D.; Prinimali uchastiye: SHERMAN, B.P.; KUDRIN, A.N.; GALITSKIY, L.M.; SERPOV, V.I.; VOROB'YEV, V.A.; STEPANOV, A.S.; RODIONOVA, N.M.; BUNTOVNIKOV, A.S.; YEVDOKIMOVA, L.Ye.

Air blast preheating for shaft furnaces. Tsvet. met. 33 no.10:12-20 O '60. (MIRA 13:10)

1. Gosudarstvennyy institut po tsvetnym metallam (for Yevdokimenko, Zaberezhnyy, Rafalovich, Reznik, Rodionova, Buntovnikov, Yevdokimova). 2. Yuzhno-Ural'skiy nikelevyy zavod (for Sherman, Kudrin, Galitskiy, Serpov, Vorob'yev, Stepanov).

(Air preheaters)

(Metallurgical furnaces--Equipment and supplies)

YEVDOKIMENKO, A.I.

Dependence of gas flow in shaft furnaces on their basic dimensions and parameters of the blow. Sbor. nauch. trud. Gintsvetmeta no.18:245-258 '61. (MIRA 16:7)

(Metallurgical furnaces) (Gas flow)

YEVDOKIMENKO, A.I.; KOTLYARENKO, V.V.

Transfer of periodic processes in nonferrous metallurgy to continuous ones. Sbor. nauch. trud. Gintsvetmeta no.19:521-535 '62. (MIRA 16:7)

(Nonferrous metals--Metallurgy)

YEVDOKIMENKO, A.I.; VOLYANOV, I.I.; POLYVYANNYY, T.R.; AGAPOV, Yu.A.; KALNIN, Ye.I.; POPKOV, A.N.; KOVGAN, P.A.; OVCHARENKO, V.F.; SUL'CHINSKIY, V.V.

Natural gas and hot blowing in shaft furnace lead smelting. TSvet. met. 38 no.7:28-35 Jl '65. (MIRA 18:8)

REZNIK, I.D.; YEVDOKIMENKO, A.I.

Ways of replacing coke by natural gas in shaft furnace smelting of oxidized nickel ores. TSvet.met. 38 no.7:36-40 Jl '65. (MIRA 18:8)

YEVDOKIMENKO, A.I.; KOTLYARENKO, V.V.

Studying the dispersion and circulation of liquid metals in drop condensers. Sbor. nauch. trud. Gintsvetmeta no.23:182-193 '65. (MIRA 18:12)

YEVDOKIMENKO, A.I.

Continuous fuming of slags. Sbor. nauch. trud. Gintsvetmeta no.18:231-244 '61. (MIRA 16:7)

(Slag) (Nonferrous metals—Metallurgy)
(Metallurgical furnaces)

YEVDOKIMENKO, A.I.; KOTLYARENKO, V.V.; Prinimali uchastiye: RABICHEVA, L.M.; SYROVEGINA, K.V.; LEVIN, I.Kh.; GAVRILENKO, A.F.; RYABOV, A.V.; ALYUSHIN, Ye.I.; MARCHENKO, V.G.; BOLOTIN, L.G.; AFONIN, P.I.; SEVER'YANOV, G.N.

Heat exchange and the condensation of zinc vapor in drop condensers. Sbor. nauch. trud. Gintsvetmeta no.19:536-549 '62. (MIRA 16:7)

1. Sotrudniki Gosudarstvennogo nauchno-issledovatel'skogo instituta tsvetnykh metallov (for Rabicheva, Syrovegina, Levin, Gavrilenko, Ryabov). 2. Belovskiy tsinkovyy zavod (for Alyushin, Marchenko, Bolotin, Afonin, Sever'yanov).

SAITOVSKAYA, L.A.; [illegible], [illegible]; [illegible], G.A.; YEVDOKIMENKO, [illegible];
LUKMANKINA, I.[illegible]

Electrodeposition of gallium on a gallium cathode from [illegible] aluminate solutions. Report no.3. Trudy Inst. met. i [illegible]. AN Kazakh. SSR 12:49-51 '65. (MIRA [illegible])

YEVDOKIMENKO, I., inzhener (Chernigov)

Combine with a grain dryer. Tekh.mol. 29 no.4:38 Ap '61. (MIRA 14:5)

(Combines (Agricultural machinery)) (Grain—Drying)

SERGEYEV, P. (Ordzhonikidze); YAROPOLOV, G. (Leningrad); YEVDOKIMENKO, I., inzhener-mekhanik (Chernigov); MIKHALEV, V. (Moskva); BUSLAYEV, V.; GEL'BRAS, A.; SAMOYLOV, K. (Hoginsk)

Opening the mail. Tekh.mol. 29 no.9:32-33 '61. (MIRA 14:10)
(Technological innovations)

YEVDOKIMENKO, I., inzh.

Tractor-mounted conveyor. Mekh. tekh. 7 no.6:17-19 S '62.
(MIRA 16:6)

1. Rukoveditel' konstruktorskogo kruzhka Chernigovskoy stantsii yunykh tekhnikov.

(Conveying machinery--Models)

AUTHOR: Yevdokimenko, N., Deputy Director SOV-27-58-9-27/28

TITLE: Movie-Lectures "40 Years VLKSM" (Kinolektoriy "40 let VLKSM")

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958, Nr 9, p 32 (USSR)

ABSTRACT: The author relates how by means of film-aids lecture-propaganda is being supplemented in the cultural-educational work of the Simferopol' Technical School Nr 4. The general interest of students in lectures increased considerably and through these films, discipline was improved.

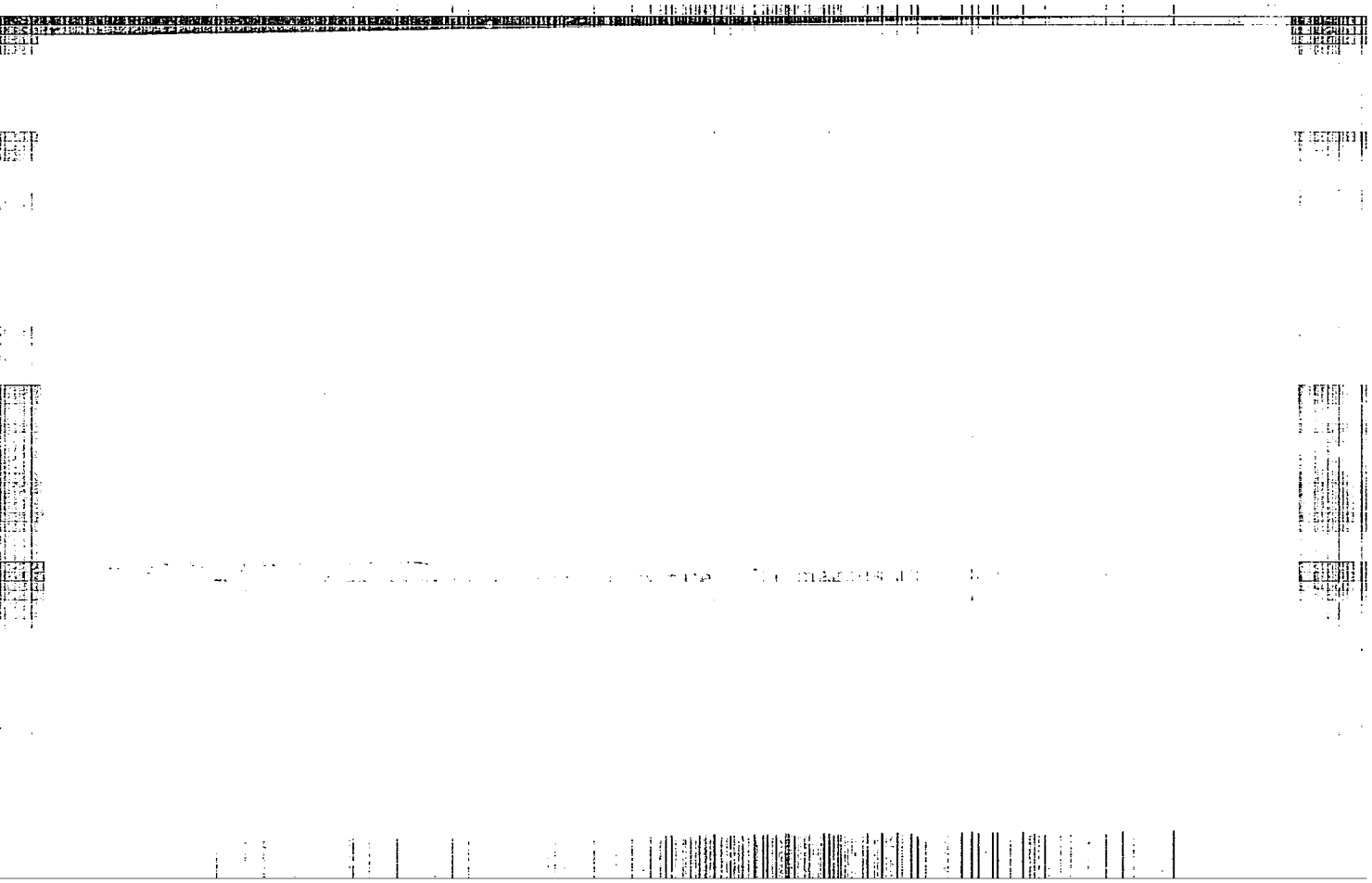
ASSOCIATION: Tekhnicheskoye uchilishche Nr 4, g. Simferopol' (The Technical School Nr 4, of the town of Simferopol')

1. Propaganda--USSR

Card 1/1

YEVDOKIMENKO, V. [IEvdokymenko, V.], kand.filosof.nauk

"Sociopolitical, philosophic and atheistic views of T.G.Shevchenko" by I.D.Nazarenko. Reviewed by V.IEvdokymenko. Nauka i zhyttia 11 no.3:15-16 Mr '62. (MIRA 15:8)
(Shevchenko, Taras, 1814-1861)
(Shevchenko, T.G.) (Nazarenko, I.D.)



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YEVDOKIMENKO, V.I.; KRIPYAKEVICH, P.I.

Crystalline structures of compounds rich in magnesium in the systems La - Mg, Ce - Mg, and Nd - Mg. Kristallografiia 8 no.2:186-193 Mr-Ap '63. (MIRA 17:8)

1. L'vovskiy gosudarstvennyy universitet imeni Franko.

KRIPYAKEVICH, P.I. [Kryp'iakevych, P.I.]; GLADYSHEVSKIY, Ye.I. [Hladysheve'kyi, IE.I.]; ZALUTSKIY, I.I. [Zaluts'kyi, I.I.] pri uchastii studentok; YEVDOKIMENKO, V.I. [IEvdokymenko, V.I.]; BORUSEVICH, L.K. [Borusevych, L.K.]

Crystal structure of the compounds $ZrNi_4$, ZrMnNi, and $ZrV_{0.5}Ni_{1.5}$.

Nauk.zap.L'viv.un. 46:118-123 '58. (MIRA 12:7)
(Systems (Chemistry))

ACCESSION NR: AT4035160 S/0000/63/000/000/0067/0070

AUTHOR: Gladyshevskiy, Ye. I.; Kripyakevich, P. I.; Cherkashin, Ye. Ye.; Zarechnyuk, O. S.; Zalutskiy, I. I.; Yevdokimenko, V. I.

TITLE: Crystalline structure of intermetallic compounds of rare-earth elements

SOURCE: AN SSSR. Institut geokhimii i analiticheskoy khimii. Redkozemel'nyye elementy (Rare-earth elements). Moscow, Izd-vo AN SSSR, 1963, 67-70

TOPIC TAGS: rare earth, transition element, geochemistry, binary alloy, ternary alloy, intermetallic compound, alloy crystal structure, zinc, aluminum, germanium

ABSTRACT: The existence of compounds of the rare-earth elements with metals, their composition and the type of crystalline structure were investigated, with particular attention to the similarities and differences between the various rare-earth elements, as well as between these elements and their neighbors in the periodic table. The systems of La, Ce, Pr, Nd, Dy, Er, Gd, Tu and Y with magnesium were investigated first. It was found that there are no complete analogies in these systems, but that the system Y/Mg is closer to Er/Mg than to the La/Ce system. In the systems of rare-earth elements with zinc, aluminum and germanium, new compounds were found, the structural parameters of which are given. It is interesting that the system Y/Al differs from the system Er/Al and is similar to the system with

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ACCESSION NR: AT4035160

La, Ce, Pr and Nd. Compounds of La and Ce with Ge have rhombic modifications in addition to the tetragonal one. Systems with cobalt and iron were also investigated and their parameters are given. In the La/Fe system no compounds are formed. A weakening tendency to form compounds with a decreasing order number of rare-earth elements is also found in many systems with manganese. Finally, the ternary systems cerium-transition metal (or copper)-aluminum and cerium-aluminum-silicon were investigated and their lattice constants are given. Orig.art.has: no graphics.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii AN SSSR (Institute of Geochemistry and Analytical Chemistry, AN SSSR)

SUBMITTED: 31Oct63 DATE ACQ: 30Apr64 ENCL: 00

SUB CODE: IC, ES NO REF SOV: 000 OTHER: 001

Card 2/2