"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

VOLKOV, A.N.; BOGDANOVA, A.V.; KUGATOVA-SHEMYAKINA, G.P.

Synthesis of divinyl-α-diketones and dialkoxyethyl vinyl ketones. Izv. AN SSSR. Ser. khim. no.10:1913-1914 O '64. (MIRA 17:12)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGATOVA-SHEMYAKINA, G.P.; LAUMYANSKAS, G.A.; KRASIL'NIKOVA, G.K.; MOZOLIS, V.V.; KAYKARIS, P.A.

Synthesis of some unsaturated compounds of the cycloaliphatic series. Zhur.ob.khim. 34 no.1:122-126 Ja '64. (MIRA 17:3)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGATOVA-SHEMYAKINA, G. P.; VIDUGIRENE, V. I.

Oxidation and isomerization of secondary alchols of the cycloali-phatic series. Zhur. ob. Khim. 34 no.6:1729-1733 Je '64.
(MIRA 17:7)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGATOVA-SHEMYAKINA, G.P.; LUTSENKO, V.V.

Reactivity of allyl bromides of the Δ^3-cyclohexene series. Izv. AN SSSR. Ser. khim. no.8:1429-1436 Ag '64. (MIRA 17:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR i Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KAZLAUSKAS, D.A.; KUGATOVA-SHEMYAKINA, G.P.

Ethynylation of cycloaliphatic ketones. Izv. AN SSSR Ser. khim. no.1:95-103 '65. (MIRA 18:2)

1. Institut khimii prirodnykh soyedineniy AN SSSR i Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KIRIANOVA-SHEMYAKINA, G.F., doktor khim.nauk

Synthesis of new growth stimulants. Vest.AN SSSR 35 no.8:40-44 Ag '65. (MIRA 18:8)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

L 53997-65

ACCESSION NR: AP5017373 UR/0020/65/160/004/0960/0963

AUTHOR: Kugatova-Shemyakina, G. P.; Ushakova, V. F.; Rudenko, V. A.; Smirnova, G. P.; Grechushnikov, A. I.; Mishurovskaya, L. M.; Agakishiyev, D. A.; Pen'kov, L. A.

TITLE: New growth stimulators

3
B

SOURCE: AN SSSR. Doklady, v. 160, no. 4, 1965, 960-963

TOPIC TAGS: plant development

Abstract: Compounds from the following groups were synthesized by the authors and found to be highly active as plant growth stimulators: delta-3-cyclohexenyl- and cyclohexylbutanolones, delta-3-cyclohexenylbutenones, cyclohexylbutanes, and cyclohexylbutenones. The authors were particularly interested in determining the relationship between the structure and degree of activity of the compounds. Laboratory and field tests on the potato showed: (1) compounds of the cyclohexene series were more active than the corresponding compounds of the cyclohexane series; (2) the introduction of a methyl group into the ring, especially in position 2 or 6, significantly increased the activity of the compound; (3) the substitution of a phenyl for a methyl group increases the activity even more; (4) the introduction of a second methyl

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

L 53997-65

ACCESSION NR: AP5017373

group into the ring not only does not increase the activity of the compound, it may even decrease it; (5) growth stimulation also depends on the spatial structure of the molecule. Orig. art. has 6 tables.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry, Academy of Sciences, SSSR); Institut kartofel'nogo khozyaystva, Akademii nauk TurkmSSR (Institute of Potatoe Growing, Academy of Sciences TurkmSSR); Institut botaniki, Akademii nauk TurkmSSR (Institute of Botany, Academy of Sciences TurkmSSR); Institut ovoshchnogo khozyaystva, Akademii nauk TurkmSSR (Institute of Vegetable Growing, Academy of Sciences, TurkmSSR).

SUBMITTED: 02Jun64 ENCL: 00 SUB CODE: LS, OC

NR REF SOV: 004 OTHER: 001 JPRS

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

LITSENKO, V.V.; KUGATOVA-SHEMYAKINA, G.P.

Exchange reactions involving 1,2-dimethyl-5-bromo-Δ_3- cyclohexene. Zhur. org. khim. 1 no.9:1598-1602 S '65. (MIRA 18:12)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR. Submitted June 4, 1964.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

ACC NR: AP6034617 (A,N) SOURCE CODE: UR/0062/66/000/010/1799/1802

AUTHOR: Kugatova-Shemyakina, G. P.; Maymind, V. I.; Kazlauskas, D. A.

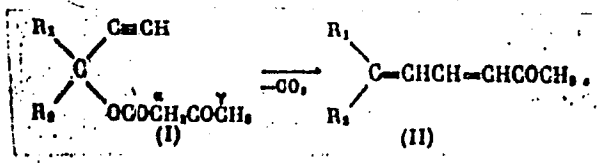
ORG: Institute of the Chemistry of Naturally Occurring Compounds, Academy of Sciences, SSSR (Institut khimii prirodnykh soyedineniy Akademii nauk SSSR)

TITLE: Mechanism of the pyrolysis of acetoacetates of tertiary acetylenic cycloaliphatic alcohols

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1966, 1799-1802

TOPIC TAGS: ~~acetylenic cycl~~aliphatic alcohol, ~~acetoacetate~~ acetate, pyrolysis ~~mechanism~~

ABSTRACT: Preparation and pyrolysis (at 180—190°C) of the C^{14}-labeled acetoacetate (V) was studied to establish the mechanism of the pyrolysis of acetoacetates of tertiary acetylenic cycloaliphatic alcohols (I) to form the corresponding unsaturated ketones (II):



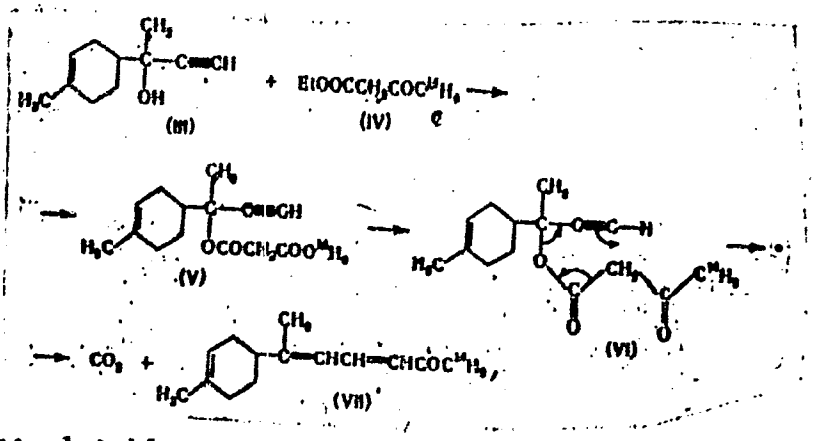
Card 1/2 UDC: 541.124+547.362+542.915

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

ACC NR: AP6034617

Measurement of activity of the initial compounds and of the pyrolysis products suggests that the pyrolysis proceeds by the following mechanism:



Orig. art. has: 1 table.

[W.A. 50]

SUB CODE: 07/ SUBM DATE: 10May64/ ORIG REF: 001/ OTH REF: 005

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

ACC NR: AP6034617 (A,N) SOURCE CODE: UR/0062/66/000/010/1799/1802

AUTHOR: Kugatova-Shemyakina, G. P.; Maymind, V. I.; Kazlauskas, D. A.

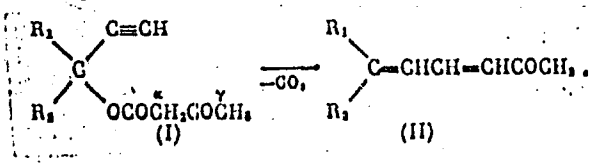
ORG: Institute of the Chemistry of Naturally Occurring Compounds, Academy of Sciences, SSSR (Institut khimii prirodnykh soyedineniy Akademii nauk SSSR)

TITLE: Mechanism of the pyrolysis of acetoacetates of tertiary acetylenic cycloaliphatic alcohols

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1966, 1799-1802

TOPIC TAGS: ~~acetylenic cycloaliphatic~~ aliphatic alcohol, ~~acetoacetate~~ acetoacetate, pyrolysis ~~mechanism~~

ABSTRACT: Preparation and pyrolysis (at 180—190°C) of the C^{14}-labeled acetoacetate (V) was studied to establish the mechanism of the pyrolysis of acetoacetates of tertiary acetylenic cycloaliphatic alcohols (I) to form the corresponding unsaturated ketones (II):



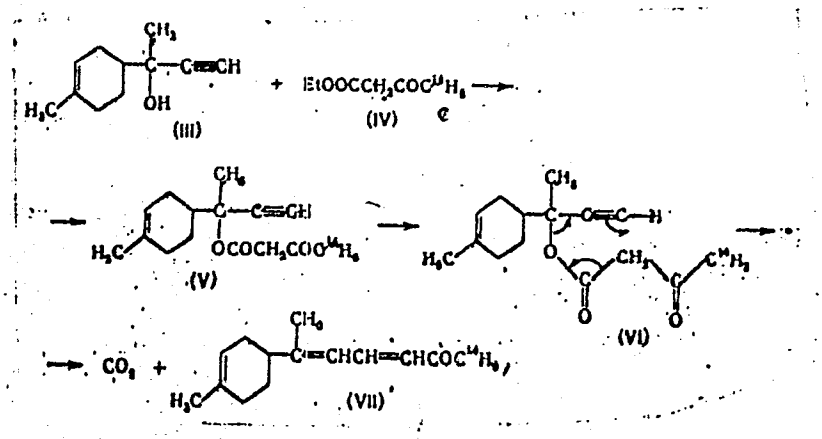
Card 1/2 UDC: 541.124+547.362+542.915

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

ACC NR: AP6034617

Measurement of activity of the initial compounds and of the pyrolysis products suggests that the pyrolysis proceeds by the following mechanism:



Orig. art. has: 1 table. [W.A. 50]

SUB CODE: 07/ SUBM DATE: 18May64/ ORIG REF: 001/ OTH REF: 005

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAY, L.N.

SOV/32-24-9-14/53

AUTHORS: Zalesov, Yu. P., Markman, A. L., Petrov, V. I., Bushenko, M. A., Korobtsov, A. A., Pilipenko, A. T., Kugay, L. N.

TITLE: Communications in Brief (Korotkiye soobshcheniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1070-1070 (USSR)

ABSTRACT: Yu. P. Zalesov and A. L. Markman (Sredneaziatskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta zhirov) (Central Asian Branch of the Allunion Scientific Fat Research Institute) have evolved a method for the determination of gossypol in cottonseed oil. Gossypol is extracted with an aqueous alkaline solution; in this process gossypolates are formed, which solve well in water, and which are eventually determined gravimetrically or volumetrically.
V. I. Petrov, M. A. Bushenko and A. A. Korobtsov (Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut) (Central Scientific Diesel Research Institute) have evolved a determination method for acetone in air, water, and waste gases. It is based on the reaction of acetone with hydrochloride hydroxyl amine. The resultant hydrochloric acid is determined photometrically, using a green light filter and methyl orange as an indicator.

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Communications in Brief

SOV/32-24-9-14/53

A. T. Pilipenko and L. N. Kugay (Institut metallokeramiki i spetsial'nykh splavov AN USSR) (Institute of Powder Metallurgy and Special Alloys of the AS UkrSSR) propose a method for the determination of boron and borides in some metals. With the borides of titanium, zirconium, niobium, tantalum, chromium, tungsten, and molybdenum, an alkaline fusion should be carried out in iron or nickel crucibles at 700°, the substance being 0,1 - 0,2 g, and small quantities of sodium peroxide being added. The analysis procedure is described.

ASSOCIATION: Sredneaziatskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta zhirov (Central Asian Branch of the All-Union Scientific Fat Research Institute)
Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut (Central Scientific Diesel Research Institute)
Institut metallokeramiki i spetsial'nykh splavov AN USSR (Institute of Powder Metallurgy and Special Alloys, AS UkrSSR)

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KUCAY, L.N.
P-2

PHASE I BOOK EXPLOITATION SOV/3624

Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'-nykh splavov

Metallokeramicheskiye materialy i metody ikh issledovaniya; informatsionnyye materialy (Cermet Materials and Methods of Their Analysis; Information Material) Kiyev, Izd-vo AN UkrSSR, 1959. 55 p. 1,500 copies printed.

Ed. of Publishing House: I.V. Kisina; Tech. Ed.: A.M. Lisovets
Editorial Board: I.N. Frantsevich, I.M. Fedorchenko, G.S. Pisarenko, G.V. Samsonov (Resp. Ed.), V.N. Yeremenko, and V.N. Paderno.

PURPOSE: This collection of articles is intended for scientific workers, designers, and engineering and technical workers in the metallurgical, machinery-manufacturing and other branches of industry.

COVERAGE: In this collection of articles the authors describe the production of carbides, nitrides and other heat resisting compounds, giving their physicochemical and mechanical properties. Their thermal processing and the processing installations are

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

also described. A new method is proposed for the production of rods from refractory compounds. Certain compounds are analyzed, and the energy dissipation in materials during high-frequency mechanical vibrations is determined. No personalities are mentioned. There are 7 schematic drawings, 7 diagrams, 6 tables and 17 references, 16 of which are Soviet.

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Verkhoglyadova, T.S. Preparation of Titanium Nitride From Titanium Sponge 45

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Kugay, L.N , and O.G. Seraya. Analysis of Vanadium Silicide 46

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Samsonov, G.V., T.S. Verkhoglyadova, M.M. Antonova, and T.V. Dubovik. Preparation of the Nitrides of High-Melting Metals 53

AVAILABLE: Library of Congress

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAY, L. N.

PHASE I BOOK EXPLOITATION SOV/3624

Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov

Metallokeramicheskiye materialy i metody ikh issledovaniya; informatsionnyye materialy (Cermet Materials and Methods of Their Analysis; Information Material) Kiyev, Izd-vo AN UkrSSR, 1959. 55 p. 1,500 copies printed.

Ed. of Publishing House: I.V. Kisina; Tech. Ed.: A.M. Lisoveta
Editorial Board: I.N. Frantsevich, I.M. Fedorchenko, G.S. Pisarenko, G.V. Samsonov (Resp. Ed.), V.N. Yeremenko, and V.N. Paderno.

PURPOSE: This collection of articles is intended for scientific workers, designers, and engineering and technical workers in the metallurgical, machinery-manufacturing and other branches of industry.

COVERAGE: In this collection of articles the authors describe the production of carbides, nitrides and other heat resisting compounds, giving their physicochemical and mechanical properties. Their thermal processing and the processing installations are also described. A new method is proposed for the production of rods from refractory compounds. Certain compounds are analyzed, and the energy dissipation in materials during high-frequency mechanical vibrations is determined. No personalities are mentioned. There are 7 schematic drawings, 7 diagrams, 6 tables and 17 references, 16 of which are Soviet.

Fedorchenko, I.M., and Yu.B. Yermolovich. Installation for Determining the Kinetics of Evaporation and the Vapor Tension of Metal Powders 13

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Ostranitsa, A.P. Device for Measuring the Thermoelectromotive Force of Semiconductor Materials at Room Temperature 30

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Samsonov, G.V., T.S. Verkhoglyadova, M.M. Antonova, and T.V. Dubovik. Preparation of the Nitrides of High-Melting Metals 53

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAY, L.N.

PHASE I BOOK EXPLOITATION SOV/5994

Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov. Seminar po zharostoykim materialam. Kiyev, 1960.

Trudy Seminara po zharostoykim materialam, 19-21 aprelya 1960 g. Byulleten' no. 6: Khimicheskiye svoystva i metody analiza tugoplavkikh soyedineniy (Transactions of the Seminar on Heat-Resistant Materials of the Insitute of Powder Metallurgy and Special Alloys of the Academy of Sciences of the Ukrainian SSR. Held 19-21 April, 1960. Bulletin no. 6: Chemical Properties and Methods of Refractory Compound Analysis). Kiyev, Izd-vo AN UkrSSR, 1961. 124 p. 1500 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Editorial Board: I. N. Frantsevich; G. V. Samsonov, Resp. Ed.; I. M. Fedorchenko, V. N. Yeremenko, V. V. Grigor'yeva, and T. N. Nazarchuk; Tech. Ed.: A. A. Matveychuk.

Card 1/

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Transactions of the Seminar (Cont.) SOV/5994

PURPOSE: This collection of articles is intended for chemists, engineers, workers at scientific research institutes and plant laboratories, senior students, and aspirants at chemical and metallurgical schools of higher education.

COVERAGE: Articles of the collection present the results of studies of the chemical properties of refractory compounds (carbides, borides, nitrides, phosphorides, silicides), refractory and rare metals, and their alloys, and some original methods of analyzing these materials, which are now being utilized in the new fields of engineering. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

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Nazarchuk, T. N. Boron Carbide. Chemical Properties and Methods of Analysis 5

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

35051
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D217/D304

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AUTHOR: Kugay, L. N.

TITLE: Chemical properties and methods of analyzing borides of transitional and rare earth metals

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov. Seminar po zharostoykim materialam. Kiyev, 1960. Trudy no. 6: Khimicheskiye svoystva i metody analiza tugoplavkikh soyedineniy. Kiyev, Izd-vo AS UkrSSR, 1961, 45-51

TEXT: A method has been developed for determining boron in borides of Ti, Zr, Nb, Ta, Cr, W, Mo, Ni and V. Nickel boride is decomposed by HNO_3, and the decomposition of the other borides is carried out by fusion with alkali in iron or nickel crucibles. Barium acetate is used in separating Ti, Zr, Nb, Ta, Cr and W from boron, whilst for the separation of Ni, Mo and V from boron, the diethyldithiocarbamate complexes of these elements are extracted with chloro-

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

form. For separating Mo and V from B, precipitation with $BaCO_3$ in the presence of Ca^{2+} or Fe^{3+} ions (for Mo) and in the presence of Fe^{3+} ions (for V) can be used. After separating the metals from B, the latter is determined alkalimetrically in the presence of invert sugar (a mixture of d-fructose and d-glucose). The borides of rare earth metals are analyzed by dissolving a weighed sample in HNO_3. The rare earth metals and B are determined from aliquot portions: The rare earth elements by titration against "trilon B", using "Arsenazo" as an indicator, and B, alkalimetrically after complexing the rare earth elements with an accurately fixed weight of "trilon B". A method for determining free B in zirconium diboride, based on the differential affinities for oxidation of free and combined B by a mixture of perhydrol and HNO_3, has been developed. There are 7 tables and 9 references: 5 Soviet-bloc and 4 non-Soviet-bloc.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN USSR (Institute of Powder Metallurgy and Special Alloys AS UkrSSR)

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

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S/700/61/000/006/008/018
D267/D304

15.2240

AUTHORS: Kosolapova, T. Ya., Kugay, L. N., Modylevskaya, K. D., Radzikovskaya, S. V. and Seraya, O. G.

TITLE: Chemical properties and methods of analyzing some silicides

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov. Seminar po zharostoykim materialam. Kiyev, 1960. Trudy no. 6: Khimicheskiye svoystva i metody analiza tugoplavkikh soyedineniy. Kiyev, Izd-vo AS UkrSSR, 1961, 69-74

TEXT: The author investigated the behavior of silicides in different media. The following disilicides were synthesized and investigated: $TiSi_2$, VSi_2, $TaSi_2$, $CrSi_2$, $MoSi_2$. They were comminuted ($\leqslant$ 270 mesh) and acid-treated at 100 - 120°C for 2 hours. The insoluble residue was weighed and the content of dissolved metal in the solution was determined. The tabulated results of these tests

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(carried out also with $ZrSi_2$, $NbSi_2$ and WSi_2) show that all disilicides dissolve fast and completely in the HF + HNO_3 and H_2SO_4 + H_3PO_4 mixtures. To determine total Si the authors recommend alkaline fusion, followed by acid extraction. To prevent the coprecipitation of the oxides of Ti, Zr, Nb, Ta and W the authors introduced a complex-forming agent which preserved the metals in an easily soluble form. The $HClO_4$ method was used in the case of Ti. A saturated solution of oxalic acid was introduced in the case of $NbSi_2$, $TaSi_2$ and WSi_2, after the solutions in H_2SO_4 had been evaporated to a concentration, at which SO_3 fumes appeared. Citric acid was used as complex former in the case of $ZrSi_2$, to ascertain the applicability of the colorimetric determination (as yellow silicomolybdic heteropolyacid) of free Si when dissolved in 1% NaOH. It was found that this method can be used for deter-

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mining free Si in the disilicides of Ti, Zr, Ta, Cr, V, Mo, Th, Fe and Mn and the suggested procedure is given. It is recommended determining metals in silicides after Si has been eliminated as SiF_4 by treating the silicide with a $HF + HNO_3$ mixture in a Pt dish. The authors developed a method of Co determination. After the silicide has been dissolved in the $HF + HNO_3$ mixture in a weighed Pt dish and after addition of H_2SO_4, Si evolves as SiF_4; then the remainder of H_2SO_4 is removed in the muffle furnace at 450 - 475°C, the remaining $CoSO_4$ is weighed. There are 4 tables and 8 references: 7 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN USSR (Institute of Powder Metallurgy and Special Alloys AS UkrSSR)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

S/137/62/000/009/031/033
A006/A101

AUTHOR: Kugay, L. N.

TITLE: Chemical properties and methods of analyzing borides of transition and rare-earth metals

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1962, 7, abstract 9K39 ("Byul. In-t metallokeram. i spets. splavov, AN UkrSSR", 1961, no. 6, 45 - 51)

TEXT: A method has been developed to determine B in Ti, Zr, Nb, Ta, Cr, W, Mo, Ni and V borides. Ni borides are decomposed with HNO_3, and the other borides by alkaline fusion in Fe or Ni crucibles. To separate Ti, Zr, Nb, Ta, Cr and W from B, $BaCO_3$ was used; Ni, Mo and V were separated from B by extracting their diethyl dithiocarbamate complexes with chloroform. To separate Mo and V from B it is possible to employ a method in which $BaCO_3$ is precipitated in the presence of Ca^{2+} or Fe^{3+} ions (for Mo) and in the presence of Fe^{3+} ions (for V). A method of analyzing rare-earth metals is presented. A boride batch is dissolved in HNO_3. The rare-earth element and B are determined from aliquot por-

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tions, i.e. the rare-earth elements by titration with "B" Trilon and an arsenazo tracer; B - by the alkalimetric method after binding the rare-earth element into a complex by a precise amount of "B" Trilon. The method of determining free B in Zr diboride is based on the different oxidizability of free B and B bound by a mixture of perhydrol and HNO_3. There are 9 references.

G. Svodtseva

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAY, L.N.; NAZARCHUK, T.N.

Analysis of transition metals and rare earth borides. Zhur.anal. khim. 16 no.2:205-208 Mr-Ap '61. (MIRA 14:5)

1. Institute of Metallo-Ceramics and Special alloys, Academy of Sciences U.S.S.R., Kiyev
(Rare earth borides)
(Transition metal borides)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAY, L.N.; NAZARCHUK, T.N.

Titrimetric method for the determination of molybdenum in its carbides, nitrides, borides, and silicides. Zhur.anal.khim. 17 no.9:1082-1085 D '62. (MIRA 16:2)

1. Institute of Metalloceramics and Special Alloys, Academy of Sciences, Ukrainian S.S.R., Kiev.
(Molybdenum--Analysis)
(Refractory materials)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

ACCESSION NR: AP4043462 S/0075/64/019/008/0980/0984

AUTHORS: Nazarchuk, T.N.; Popova, O.I.; Kugay, L.N.; Dzerzhanovskaya, Ye.V.; Kabannik, G.T.; Boremskaya, S.F.; Chugunnaya, N.K.

TITLE: Analysis of rare earth alloys with certain metals and oxides

SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 8, 1964, 980-984

TOPIC TAGS: complexometric titration, rare earth analysis, lanthanum oxide, magnesium oxide, scandium oxide, yttrium oxide, chromium oxide, nickel oxide, aluminum oxide

ABSTRACT: Two methods of separation and determination of rare earth elements were worked out. The first method involved titration with complexon III at different pH of the solution in the presence of different indicators. Here the fact that tetravalent elements such as titanium and zirconium, form complexes in strongly acid solutions (pH = 1), trivalent metals at pH 2 - 3 and alkaline earth elements at pH 10 - 11 was taken into account. The second method involved the use of masking substances such as potassium cyanide, triethanolamine, ammonium fluoride, thyron, 2,3-dimercapto-propanol. The analysis

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involved the determination of rare earths and magnesium in La_2O_3-MgO, Sc_2O_3-MgO, Y_2O_3-MgO, Cr_2O_3-La_2O_3, NiO-Sc_2O_3, La_2O_3-Al_2O_3, NiO-Sc_2O_3 and determination of lanthanum, aluminum and magnesium simultaneously in fluomicas. Orig. art. has: 8 tables.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR (Institute of Powder Metallurgy and Special Alloys, AN UkrSSR)

SUBMITTED: 29Jun63 ENCL: 00

SUB CODE: IC NR REF SOV: 004 OTHER: 002

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAYENKO, A.A.

DAVYDOV, L.S.; KUGAYENKO, A.A.

Procedure for tensile testing of concrete. Zav.lab.21 no.9:1106-1109 '55. (MLRA 9:1)

1.Vsesoyuznyy nauchno-issledovate'skiy institut zheleznodorozhnego stroitel'stva i proyektirovaniya.
(Concrete--Testing)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Kugayenko, A.A.

AUTHORS: Kazey, I. I., and Kugayenko, A. A.

TITLE: Pulsation Devices for Testing the Elements of Constructions for Repeated Loads (Pul'satsionyye ustanovki dlya ispytaniy elementov konstruktsiy na povtornyye nagruzki)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, No. 1, pp. 96-100 (U.S.S.R.)

ABSTRACT: A device is described consisting of a lever with a long arm and a short one. On the latter an object is placed that is to be tested. On the long arm a weight is placed which constitutes the load. If the object is a rod working under pressure and stretching conditions and its rigidity is great, the dynamic characteristic of the system remains practically constant. If the object is a beam tested for bending, the frequency of the natural vibrations may depend on the rigidity of the specimen. These and other principles are developed into a system described step by step with illustrations, namely: diagram of testing on the pulsation machine, electrical circuits, and gas rectifier.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Pulsation Devices for Testing the Elements of Constructions for Repeated Loads

ASSOCIATION: All-union Scientific-research Institute of Railroad Construction and Projecting (Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo stroitel'stva i proyektirovaniya)

PRESENTED BY:

SUBMITTED:

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAYENKO, M.Ya., inzhener; KOVYNEV, M.V., inzhener; MILLER, V.V., inzhener.

The use of textolite bearings with forced lubrication at the Voroshilov Metallurgical Plant. Metallurg no.4:32-34 Ap '56. (MLRA 9:9)
(Bearings (Machinery)) (Textolite)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Kugayenko, M. Ye.

137-1958-3-4976

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 73 (USSR)

AUTHOR: Kugayenko, M. Ye.

TITLE: Production of Medium Sheet Steel on the Model 2250 Mill (Proizvodstvo srednelistovoy stali na stane 2250)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii, 1956, Vol 10, pp 506-520

ABSTRACT: An account of the production of steel sheets in a medium sheet rolling mill (M) Model 2250, at the Voroshilov metallurgical plant. Placed in operation in 1952, the 2250 is USSR's first modern, high-production M with maximal mechanization, utilizing continuous production methods. The M is composed of two operating stands (S) arranged in series: a reversible roughing S equipped with two rolls (R) 900 mm in diameter and 2500 mm long, and a four-high reversible S with driving R's of 650 mm in diameter and supporting R's of 1200 mm in diameter, both pairs being 2250 mm long. Design improvements in the continuous furnace for pre-heating of slabs are also described. Good results were obtained by replacing the forged steel rolls in the roughing S with rolls made of cast iron alloyed with Mg.

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137-1958-3-4976

Production of Medium Sheet Steel on the Model 2250 Mill

The R's of the finishing S exhibit poor durability when the S is employed in the production of sheets 4-5 mm thick. Dual-layer Cr-Ni rolls have been employed but the problem of improving the durability of the driving R's of the four-roller S, when it is employed in the production of thin sheets, is as yet unsolved. Regimens for the rolling of sheets of various thicknesses and of various steel grades are given. Mechanical properties of the steel sheets are shown, together with the production indices of the M. Ref. RzhMet, 1957, Nr 12, 23684.

S. G.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

SOV/133-59-6-20/41

AUTHORS: Kugayenko, M.Ye., Meleshko, A.M. and Kovynev, M.V., Engineers

TITLE: Some Special Features of Rolling Plates with Rolled Edges in Mills with Vertical Rolls (Osobennosti prokatki tolstykh listov s katanoy kromkoy v stanakh s vertikal'nymi valkami)

PERIODICAL: Stal', 1959, Nr 6, pp 532-538 (USSR)

ABSTRACT: During transverse rolling of slabs tapering of the ends takes place which prevents the production of rectangular plates with parallel edges along the whole length. In vertical rolls of the roughing stand it is practically impossible to remove this tapering completely; even with rectangular plates, passed through vertical rolls, tapering of the ends takes place during subsequent rolling in horizontal rolls due to the non-uniformity of localised spread (thickening of the edges) along the length of the plate. The tapering is directly proportional to the side reduction and decreases with increasing intensity of subsequent reductions in horizontal rolls. As the middle part (along the length) of plates always has parallel edges

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Some Special Features of Rolling Plates with Rolled Edges in Mills with Vertical Rolls

it is possible to produce all sizes of plates with rolled edges, but the consumption of metal for cutting off tapered ends must unavoidably increase and the economy of metal expected from rolling the edges is decreased or completely lost. The basic condition for the production of wide plates with parallel edges, rolled along the whole length is widening the ends of the strip before rolling in vertical rolls which can compensate for subsequent tapering. Such preliminary widening of the ends for not such wide plates can be obtained by maximum longitudinal rolling of short slabs in the first passes before rolling for width. For wider plates, the effective method of widening ends would be transverse rolling (the use of which can increase lamination defects) or compression of small

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SOV/133-59-6-20/41

Some Special Features of Rolling Plates with Rolled Edges in Mills with Vertical Rolls

faces of slabs in vertical rolls which requires further study. There are 5 figures and 7 references, 6 of which are Soviet and 1 English.

ASSOCIATION: Alchevskiy metallurgicheskiy zavod (Alchevsk Metallurgical Works)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAYENKO, Mikhail Yevdokimovich; KOVYNEV, Mikhail Vasil'yevich; MILLER, Viktor Viktorovich; GOROBINCHENKO, V.M., red. izd-va; DOBUZHINSKAYA, L.V., tekhn. red.

[Sheet-rolling mill practice; manual for increasing the qualifications of workers in the industry]Listoprokatnoe proizvodstvo; posobie dlia povysheniia kvalifikatsii rabochikh na proizvodstve. Moskva, Metallurgizdat, 1962. 429 p. (MIRA 15:10)

(Rolling (Metalwork))

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAYENKO, M. YE.

(40)

PHASE I BOOK EXPLOITATION SOV/6044

Rokotyan, Ye. S., Doctor of Technical Sciences, Ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 2. Moscow, Metallurgizdat, 1962. 685 p. 8500 copies printed.

Authors: P. A. Aleksandrov, Doctor of Technical Sciences; V. P. Anisiforov, Candidate of Technical Sciences; V. I. Bayrakov, Candidate of Technical Sciences; N. V. Barbarich, Candidate of Technical Sciences; B. P. Bakhtinov, Candidate of Technical Sciences [deceased]; B. A. Bryukhanenko, Candidate of Economic Sciences; M. V. Vasil'chikov, Candidate of Technical Sciences; A. I. Vitkin, Doctor of Technical Sciences; S. P. Granovskiy, Candidate of Technical Sciences; P. I. Grudev, Candidate of Technical Sciences; I. V. Gunin, Engineer; M. Ya. Dzugutov, Candidate of Technical Sciences; V. G. Drozd, Candidate of Technical Sciences; N. P. Yermolayev, Engineer; G. N. Katsnel'son, Candidate of Technical Sciences; M. V. Kovynev, Engineer; M. Ye. Kugayenko, Engineer; N. V. Litovchenko, Candidate of Technical Sciences; Yu. M. Matveyev, Candidate of Technical

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Rolling Industry; Handbook SOV/6044

Sciences; V. I. Holoshko, Candidate of Technical Sciences; N. V. Holchov, Engineer; A. K. Hinburg, Candidate of Technical Sciences; V. D. Nosov, Engineer; B. I. Panchenko, Engineer; O. A. Plyatskovskiy, Candidate of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; I. A. Priymak, Professor, Doctor of Technical Sciences [deceased]; A. A. Protasov, Engineer; M. M. Saf'yan, Candidate of Technical Sciences; N. M. Fedosov, Professor; S. N. Filipov, Engineer [deceased]; I. N. Filippov, Candidate of Technical Sciences; I. A. Fomichev, Doctor of Technical Sciences; M. Yu. Shifrin, Candidate of Technical Sciences; E. R. Shor, Candidate of Technical Sciences; M. M. Shternov, Candidate of Technical Sciences; M. V. Shuralev, Engineer; I. A. Yukhvets, Candidate of Technical Sciences; Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This handbook is intended for engineering personnel of metallurgical and machine-building plants, scientific research

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Rolling Industry; Handbook SOV/6044

institutes, and planning and design organizations. It may also be used by students at schools of higher education.

COVERAGE: Volume 2 of the handbook reviews problems connected with the preparation of metal for rolling, the quality and quality control of rolled products, and designs of roll passes in merchant mills. The following topics are discussed: processes of manufacturing semifinished and finished rolled products (the rolling of blooms, billets, shapes, beams, rails, strips, wire, plates, sheets, and the drawing of steel wire), hot-dipped tin plates, lacquered plates, floor plates, tubes made by different methods, and special types of rolled products. Problems of the organization of rolling operations are reviewed, and types of rolled products manufactured in the USSR are shown. No personalities are mentioned. There are no references.

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KUGAYENKO, M. YE.

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PHASE I BOOK EXPLOITATION SOV/5985

Rokotyan, Ye. S., Doctor of Technical Sciences, ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 1. Moscow, Metallurgizdat, 1962. 743 p. Errata slip inserted. 9250 copies printed.

Authors of this volume: B. S. Azarenko, Candidate of Technical Sciences; V. D. Afanas'yev, Candidate of Technical Sciences; M. Ya. Brovman, Engineer; M. P. Vavilov, Engineer; A. B. Vernik, Engineer; K. A. Golubkov, Engineer; S. I. Gubkin, Academician, Academy of Sciences USSR; A. Ye. Gurevich, Engineer; V. I. Davydov, Candidate of Technical Sciences; V. G. Drozd, Engineer; N. F. Yermolayev, Engineer; Ye. A. Zhukovich-Stepha, Engineer; N. M. Kirilin, Candidate of Technical Sciences; M. V. Kovynov, Engineer; A. M. Kogos, Engineer; A. A. Korolev, Professor; M. Ye. Kugayenko, Engineer; A. V. Laskin, Engineer; B. A. Levitanskiy, Engineer; V. M. Lugovskoy, Engineer; I. M. Meyerovich, Candidate of Technical Sciences; M. S. Ovcharov, Engineer; V. I. Pastornak, Engineer; I. L. Perlin, Doctor of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; Ye. S. Rokotyan, Doctor of Technical Sciences; M. M. Saf'yan, Candidate of Technical Sciences; V. V. Smirnov, Candidate of Technical Sciences; V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; O. P. Sokolovskiy,

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Rolling Industry; Handbook SOV/5985

Engineer; O. P. Solov'yev, Engineer; M. A. Sidorkevich, Engineer; Ye. M. Trot'yakov, Engineer; I. S. Trishevskiy, Candidate of Technical Sciences; G. N. Khenkin, Engineer; and A. I. Tselikov, Corresponding Member, Academy of Sciences USSR. Introduction: A. I. Tselikov, Corresponding Member, Academy of Sciences USSR; Ye. S. Rokotyan, Doctor of Technical Sciences; and L. S. Al'shevskiy, Candidate of Technical Sciences.

Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This handbook is intended for technical personnel of metallurgical and machine-building plants, scientific research institutes, and planning and design organizations. It may also be useful to students at schools of higher education.

COVERAGE: The fundamentals of plastic deformation of metals are discussed along with the theory of rolling and drawing. Methods of determining the power consumption and the forces in rolling with plane surface or grooved rolls are

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AZARENKO, B.S., kand. tekhn. nauk; AFANAS'YEV, V.D., kand. tekhn. nauk; BROVMAN, M.Ya., inzh.; VAVILOV, M.P., inzh.; VENNIK, A.B., inzh.; GOLUBKOV, K.A.; GUBKIN, S.I., akademik [deceased]; GUREVICH, A.Ye., inzh.; DAVYDOV, V.I., kand. tekhn. nauk; DROZD, V.G., inzh.; YERMOLAYEV, N.F., inzh.; ZHUKEVICH-STOSHA, Ye.A., inzh.; KIRILIN, N.M., kand. tekhn. nauk; KOVYNEV, M.V., inzh.; KOGOS, A.M., inzh.; KOROLEV, A.A., prof.; KUGAYENKO, M.Ya., inzh.; LASKIN, A.V., inzh.; LEVITANSKIY, B.A., inzh.; LUGOVSKIY, V.M., inzh.; MEYEROVICH, I.M., kand. tekhn. nauk; OVCHAROV, M.S., inzh.; PASTERNAK, V.I., inzh.; PERLIN, I.L., doktor tekhn. nauk; POMEDIN, I.S., kand. tekhn. nauk; ROKOTYAN, Ye.S., doktor tekhn. nauk; SAF'YAN, M.M., kand. tekhn. nauk; SMIRNOV, V.V., kand. tekhn. nauk; SMIRNOV, V.S.; SOKOLOVSKIY, O.P., inzh.; SOLOV'YEV, O.P., inzh.; SIDORKEVICH, M.A., inzh.; TRET'YAKOV, Ye.M., inzh.; TRISHEVSKIY, I.S., kand. tekhn. nauk; KHENKIN, G.N., inzh.; TSELIKOV, A.I.; GOROBINCHENKO, V.M., red. izd-va; GOLUBCHIK, R.M., red. izd-va; RYMOV, V.A., red. izd-va; DOBUZHINSKAYA, L.V., tekhn. red.

[Rolling; a handbook] Prokatnoe proizvodstvo; spravochnik. Pod red. E.S.Rokotiana. Moskva, Metallurgizdat. Vol.1. 1962. 743 p. (MIRA 15:4)

1. Akademiya nauk BSSR (for Gubkin). 2. Chlen-korrespondent Akademii nauk SSSR (for Smirnov, TSelikov).
(Rolling (Metalwor))—Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

SHASKOL'SKAYA, M.P.; DOBRZHANSKIY, G.F.; Prinimali uchastiye: KUGAYENKO, O., student; MALAKHOV, G., student; PILIPENKO, N., student

Relation between the distribution of dislocations near the indentation mark and the strength of a crystal. Kristallografiia 7 no.1:103-106 Ja-F '62. (MIRA 15:2)

1. Moskovskiy institut stali i Institut kristallografii AN SSSR. 2. Moskovskiy institut stali (for Kugayenko, Malakhov, Pilipenko).

(Dislocations in crystals)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAYENKO, O.M.(Moskva); ROZENBERG, V.M.(Moskva); SHALIMOVA, A.V.(Moskva)

Density of slip traces on the surface and in the body of a specimen. Izv. AN SSSR.Otd.tekh.nauk. Met. i topl. no.5:126-127 S-O '62. (MIRA 15:10)

(Deformations (Mechanics)) (Metallography)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

L 14298-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AP3000105 S/0126/63/015/004/0612/0615

AUTHORS: Kugayenko, O. N.; Rozenberg, V. M.; Shalimova, A. V.

TITLE: Influence of initial substructure on the process of creep 15

58
57

SOURCE: Fizika metallov i metallovedeniye, v. 15, no. 4, 1963, 612-615

TOPIC TAGS: creep, substructure change

ABSTRACT: Changes in the artificially produced substructure of iron silicide polycrystals (3.4% Si) have been studied by the dislocation etching method. The results obtained were compared to those of a sample annealed at 1200C and practically free of substructure. The substructural variations have been evaluated quantitatively. A load of 1.5 kg/Sq mm applied to more highly developed substructures (greater degree of deformation) resulted in a smaller deformation during the creep. However, under the action of a 2.5 kg/Sq mm load the annealed sample and those with an induced substructure behaved almost identically. During the creep process an ever-increasing number of subboundaries was formed in the annealed sample. The opposite was true for samples with established initial substructures, in which the number of subboundaries diminished to the number in the annealed sample. The authors conclude that the substructure formed during creep does not

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L 14298-63

ACCESSION NR: AP3000105

depend on the initial substructure. When the substructures of different samples become alike their creep velocities become equal. The results obtained with the 2.5 kg/Sq mm load show that under sufficiently high loads the subboundaries either cease to be an obstacle to deformation, or that the initial substructure changes too rapidly (approaching that of the annealed sample) for its effect to be detected. The time interval required for reaching the point of failure is different in different samples. This is explained by the effect of the initial substructure. Orig. art. has: 5 figures.

ASSOCIATION: Institut metallofiziki TsNIIChM (TsNIIChM Institute of Physical Metallurgy)

SUBMITTED: 16Jul62 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: ML NO REF SOV: 004 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

35648

24.7800

S/589/61/000/053/006/008
B139/B104

AUTHORS: Gilinskiy, I. A., Kugayevskiy, A. F.

TITLE: Measurement of parameters of magnetic dielectrics in the decimeter wave range

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta no. 53 (113). 1961. 88-93. Issledovaniya v oblasti radiotekhnicheskikh izmereniy.

TEXT: The measurement of parameters of magnetic dielectrics with the aid of coaxial resonators using the open-circuit and short-circuit method is studied. To determine the magnitudes of ε' and μ', the resonance length of the resonator must be measured at three different positions of the test piece: a) At the distance $\lambda/4$ from the piston (λ is the wavelength in the empty resonator), b) close to the piston, c) without test piece.

The results obtained are $\mu = \mu' = \frac{z_d \cdot \beta_d}{z_o \cdot \beta_o}$ and $\varepsilon = \varepsilon' = \frac{z_o \cdot \beta_d}{z_d \cdot \beta_o}$.

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

z_0 and β are the wave impedance and the phase constant in the air-filled portion of the resonator, z_d and β_d are the wave impedance and the phase constant of the test piece. The stored energy density is $W = \frac{1}{4}\left[C\,|U|^2 + L\,|J|^2\right]$. L and C are the inductance and the capacitance per unit of length. By integrating over the resonator length, the following is obtained for the position of the test piece

$$\text{a)}\quad W_n = |A_1|^2 \cdot C_1\left[l - d + \frac{\sin^2\beta(l-d)}{\cos^2\beta_d d}\left(\varepsilon d + \frac{\lambda}{4}\right)\right]$$

and for the position of the test piece

$$\text{b)}\quad W_n' = |A_1'|^2 \cdot C_1\left[L_2 - d + \frac{\sin^2\beta(L_2-d)}{\sin^2\beta_d d}\,\varepsilon d\right]$$

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

C_1 is the capacitance per unit of length of the sections designated in the drawing by I and III. For the losses the authors develop the formulae

$$\frac{1}{Q_1}-\frac{1}{Q_0}=\frac{\varepsilon\cdot\frac{\cos^2\beta(\Delta l_1+d)}{\cos^2\beta_A d}\left[\left(d+\frac{\sin 2\beta_A d}{2\beta_A}\right)\cdot \mathrm{tg}\,\delta_\varepsilon+\left(d-\frac{\sin 2\beta_A d}{2\beta_A}\right)\cdot \mathrm{tg}\,\delta_\mu\right]}{\frac{\lambda}{4}-d+\Delta l_1+\frac{\cos^2\beta(\Delta l_1+d)}{\cos^2\beta_A d}\left(\varepsilon d+\frac{\lambda}{4}\right)} \qquad (29)$$

and

$$\frac{1}{Q_1'}-\frac{1}{Q_0'}=\frac{\varepsilon\cdot\frac{\sin^2\beta(\Delta l_2+d)}{\sin^2\beta_A d}\left[\left(d+\frac{\sin 2\beta_A d}{2\beta_A}\right)\cdot \mathrm{tg}\,\delta_\mu+\left(d-\frac{\sin 2\beta_A d}{2\beta_A}\right)\cdot \mathrm{tg}\,\delta_\varepsilon\right]}{\frac{\lambda}{2}-d+\Delta l_2+\frac{\sin^2\beta(\Delta l_2+d)}{\sin^2\beta_A d}\varepsilon\cdot d}, \qquad (30)$$

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Q_1 is the Q-factor of the resonator for the test piece-position (a), measured with respect to the disturbance of the resonance curve; Q_1' is the Q-factor of the resonator for the test piece-position (b) (Fig.). V. I. Sarafanov, "Radiotekhnika i elektronika" v. 1, no. 3, 1956, K voprosu ob izmerenii kompleksnykh dielektricheskikh i magnitnykh pronitsayemostey v magnitodielektrikakh na santimetrovykh volnakh (Measurement of complex dielectric and magnetic permeability in magnetic dielectrics on centimeter waves) is mentioned. There is 1 figure.

ASSOCIATION: NGIMIP

SUBMITTED: January 8, 1960

Card 4/5

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

34673

S/115/62/000/002/009/009
E192/E382

9,2571 (1147, 1163)

AUTHOR: Kugayevskiy, A.F.

TITLE: Determination of the complex permeability of ferrites at metre waves

PERIODICAL: Izmeritel'naya tekhnika, no. 2, 1962, 53 - 55

TEXT: A variant of the short-circuit and open-circuit method of measuring the complex permittivity $\mu = \mu' - j\mu''$ is described. The measurement is based on the system illustrated in Fig. 1, consisting of 1 - non-modulated signal generator; 2 - an admittance or impedance-measuring device; 3 - a section of coaxial line; 4 - an investigated sample (in the shape of a toroid); 5 - a shorting plunger and 6 - a receiver. The portion of the line between the sections AA' and CC' (see Fig. 1) is filled with the investigated sample and is regarded as a line having a wave impedance Z_g and propagation constant γ_g which can be expressed as:

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

$$Z_g = \frac{1}{2\pi}\sqrt{\frac{\mu^* \mu_o}{\varepsilon^* \varepsilon_o}} \ln \frac{b}{a}$$

$$\gamma_g = j\omega\sqrt{\mu^* \mu_o \varepsilon^* \cdot \varepsilon_o} \qquad (2)$$

where $\varepsilon^* = \varepsilon' - j\varepsilon''$;

μ_o and ε_o are the permeability and permittivity of a vacuum;

the symbols b and a in Eqs. (2) are explained in Fig. 1. It can easily be shown that Z_g and γ_g can be expressed as:

$$Z_g = Z_o\sqrt{\frac{\mu^*}{\varepsilon^*}} \qquad (5)$$

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$$\gamma_g = \gamma_o \sqrt{\mu^* \varepsilon^*} \qquad (6)$$

where Z_o and γ_o represent the wave impedance and the propagation constant of the line without the measured sample. For a line short-circuited at the end, the input impedance at the sections AA' is given by:

$$Z_{Bx_1} = Z_g \text{ th } \gamma_g d \qquad (8)$$

where d is the thickness of the measured sample. When the sample is taken out, the input impedance becomes:

$$Z_{Bx_2} = Z_o \text{ th } \gamma_o d \qquad (9) .$$

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

If the sample is thin, it can be shown that the imaginary and the real components of μ^* are given by:

$$\mu'' = R_{Bx}/Z_o\beta_o d \qquad (12)$$

$$\mu' - 1 = X_{Bx}/Z_o\beta_o d \qquad (13)$$

where $\beta_o = 2\pi/\lambda$ and R_{Bx}, X_{Bx} represent the differences between the real and imaginary components of the input impedances expressed by Eqs. (8) and (9), respectively. The case when the coaxial line is short-circuited at the section CC' (see Fig. 1) is also analyzed. The above method was developed at NGIMIP and was found useful for the measurement of μ^* of ferrites at frequencies from 1 to 150 Mc/s.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

37804

S/120/62/000/002/034/047
E194/E435

24.7700

AUTHOR: Kugayevskiy, A.F.

TITLE: Measurement of complex permittivity and permeability of materials on a Q-meter

PERIODICAL: Pribory i tekhnika eksperimenta, no.2, 1962, 143-146

TEXT: The usual methods of determining the complex permittivity and permeability of a Q-meter are laborious, inaccurate and involve much calculation. A method and a special specimen holder have been developed in which the Q-meter measurements serve only to indicate resonance when measuring permittivity or permeability and when measuring the latter no auxiliary winding is required on the specimen. The specimen holder consists of a variable capacitor, the inductance of which can be adjusted. The real component of permittivity or permeability is determined from the ratio of the distances between electrodes of the variable capacitor and the imaginary component from the Q-value of the holder with and without the specimen in place. An equivalent circuit is given, the operating principles are described and the necessary formulae are derived. The holder was developed at the

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Tesla Works, Brno, for permittivity measurements at frequencies of up to 3000 Mc/s and was improved in the Novosibirsk State Institute of Measures and Measuring Instruments. Its construction is described and illustrated. The electrode spacing can be measured to within ± 0.005 mm. The inductance can be varied by means of a co-axial line with movable short-circuiting piston. The equipment was used to measure the permeability of carbonyl iron and various ferrites and the permittivity of polystyrene and fluoroplast. The results obtained are compared with those obtained by an earlier method and agreement is good at frequencies up to 110 Mc/s; at higher frequencies the older method is subject to certain errors which do not occur in the new. Sources of error in the equipment are analysed and it is considered that at frequencies of up to 190 Mc/s, the error in determining the real component of permeability or permittivity is 2 to 3% and of the imaginary component 6 to 8% (for loss angles from 0.1 to 0.005). There are 4 figures.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

Measurement of complex ... S/120/62/000/002/034/047
E194/E435

ASSOCIATION: Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Instruments)

SUBMITTED: July 22, 1961

Card 3/3

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

GROKHOL'SKIY, A.L.; KUGAYEVSKIY, A.F.

Device for the measurement of magnetic characteristics of ferromagnetic materials in a frequency range of 10 kilocycles -750 megacycles. Trudy inst. Kom.stand.mer i izm. prib no.64: 214-217 '62. (MIRA 16:5)

(Ferromagnetism) (Magnetic measurements--Equipment and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

GROKHOL'SKIY, A.L.; KUGAYEVSKIY, A.F.

Set of high-frequency permeameters for determining the permeability and the loss angle of ferromagnetic materials. Izm. tekh. no.7:36-37 Jl '63. (MIRA 16:8)

(Permeameter)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAYEVSKIY, A.F.

Variable-length coaxial cylindrical cavity for the determination of electromagnetic parameters of materials at normal and high temperatures. Izm.tekh. no.11:44-46 N '63. (MIRA 16:12)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

GROKHOL'SKIY, A.L.; KUGAYEVSKIY, A.F.

Determination of the magnetic permeability and angle of losses of ferromagnetics by means of a coulometer. Zav. lab. 29 no.9:1101-1104 '63. (MIRA 17:1)

1. Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

ACCESSION NR AT3013127 S/2589/63/000/072/0053/0058

AUTHOR Grokhol'skiy, A.L., Kugayevskiy, A. F.

TITLE Broadening of the frequency range of high-frequency permeameters

SOURCE USSR. omitet standartov, mer i izmeritel'ny*kh priborov. Trudy* institu v Komiteta, no. 72, 1963, 53-58

TOPIC TAGS permeameter, permeability measurement, magnetic loss angle measurement, coaxial sample holder, compensation sample holder, magnetic material quality control

ABSTRACT A method is considered for the measurement of magnetic permeability and the loss angle of ferromagnetic materials using coaxial and compensation-type sample holders. The method makes it possible to control the quality of magnetic materials and to investigate the infrequency spectra. It is shown that the coaxial holder can be used in a frequency range up to 200 Mcs, which is beyond the range of permeameter, and its advantages are that no expensive apparatus is employed and there is no need for placing a separate winding

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ACCESSION NR AT3013127

over the sample. An improved model (the compensation holder) uses essentially a comparison method so that many of the errors due to the apparatus are eliminated. Holders of this type were constructed at the NGIMIP and showed satisfactory operation with accuracy ± 3 per cent for the permeability and ± 10 per cent for the loss angle. The temperature variation of the permeability and the loss angle can also be measured by modifying the equipment somewhat. Orig. art. has 3 figures and 9 formulas.

ASSOCIATION NGIMIP

SUBMITTED 13Mar62 DATE ACQ: 28Oct63 ENCL 03

SUB CODE MA, ML NO REF SOV 002 OTHER 001

Card 2/$2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGAYEVSKIY, A.F.; GROKHOL'SKIY, A.L.

Apparatus for measuring temperature dependencies of the parameters of magnetic materials. Zav. lab. 30 no.1:103-104 '64. (MIRA 17:9)

1. Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

ACC NR: AR6028414 SOURCE CODE: UR/0196/66/000/005/B002/B002

AUTHOR: Gorbunov, N. V.; Kugayevskiy, A. F.; Petrov, V. P.

TITLE: Chambers for testing ferromagnetic materials at low temperatures

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 5B4

REF SOURCE: Tr. in-tov Gos. kom-ta standartov, mer i izmerit. priborov SSSR, vyp. 79(139), 1965, 93-97

TOPIC TAGS: ferromagnetic material, dielectric material, ferrite, ~~low temperature~~ cryogenic ~~research~~

ABSTRACT: Construction of two thermo-chambers are described: With a carbon-dioxide cooling (-60C) and with liquid nitrogen (-180C). The uniformity of cooling and low inertia are the principal advantages of these chambers. The time of reaching the lowest temperature in the first chamber amounts to a few minutes; in the second, 20--25 min. The results are presented of investigations of the effect of temperatures (293--93K) on the magnetic permeability, dielectric constant, magnetic-loss angle, and dielectric-loss angle of some ferrites and dielectrics at high and superhigh frequencies; these tests were conducted in the above chambers. Six figures. Two tables. Bibliography of 3 titles. [Novosibirsk State Institute of Measures and Measuring Instruments] I. Shcherbinin [Translation of abstract]

SUB CODE: 13, 09 11

Card 1/1 UDC: 621.318.13

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

L 08371-67 EWT(1) IJP(c) WW/GG

ACC NR: AR6028146 SOURCE CODE: UR/0058/66/000/005/E113/E113

AUTHOR: Gorbunov, N. V.; Kugayevskiy, A. F.; Petrov, V. P.

70

TITLE: Chambers for the investigation of ferromagnetic materials at reduced temperatures

SOURCE: Ref. zh. Fizika, Abs. 5E862

REF. SOURCE: Tr. in-tov Gos. kom-ta standartov. mer i izmerit. priborov SSSR, vyp. 79(139), 1965, 93-97

TOPIC TAGS: ferromagnetic material, dielectric material, magnetic property, dielectric constant, low temperature research, ferrite, test chamber

ABSTRACT: Constructions are described of two thermal test chambers for measurement of the properties of ferromagnets at low temperatures: one cooled with carbon dioxide (-60C) and one cooled with liquid nitrogen (-180C). Their main advantages are homogeneity of cooling and small time delay. The time necessary to lower the temperature to the minimum is several minutes in the first chamber and 20 -- 25 minutes in the second. Results are presented of the measurements of the magnetic and dielectric constants and of the angles of the magnetic and dielectric losses of certain ferrites and dielectrics, as functions of the temperature at high and microwave frequencies in the temperature range 293 -- 93K, carried out with the proposed test chambers. I. Shcherbinin. [Translation of abstract]

Card 1/1 nst SUB CODE: 20

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

L 57538-65 EWT(d)/EWT(m)/EWP(c)/EWA(d)/EWP(v)/T/ EWP(t)/EWP(k)/EWP(h)/ EWP(b)/EWP(1)/EWA(c) Pf-4 JD/HW

ACCESSION NR: AR5015178 UR/0137/65/000/005/D035/D035

SOURCE: Ref. zh. Metallurgiya, Abs. 5D212

37
B

AUTHOR: Rozenfel'd, N. B.; Bykov, F. M.; Kuryatnikov, A. V.; Mogilevkin, F. D.; Kugayevskiy, N. V.; Karpenko, L. N.; Yerokhin, S. A.; Finkel'shteyn, Ya. S.

[illegible]asing accuracy in the production of thin walled tubes in a type 114 [illegible]pparatus

CITED SOURCE: Sb. Proiz-vo svarn. i besshovn. trub. Vyp. 2. M., Metallurgiya, 1964, 84-88

TOPIC TAGS: metal tube, metal boring, milling machine, metalworking machine/ 114 automatic apparatus

TRANSLATION: The article demonstrates the possibility of manufacturing tubes with diameters of 76, 83, and 89 mm with a wall thickness of 3.25 mm under existing technology. A study was made of the influence of the form of the boring instrument on the accuracy of the wall thickness of rolled tubes, and the expediency of using an automatic mill bit with an "ovalization" of 0.04-1.0% is pointed out. It is established that with a redistribution of the deformation between the first and second passages of an automatic mill (that is, with a decrease in the difference

Card 1/2

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L 57538-65

ACCESSION NR: AR5015178

between the diameters of the mandrels to 1 mm), the accuracy of the tubes is increased. A. Leont'yev.

SUB CODE: MM, IE ENCL: 00

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGEL', A., inzhener.

Equipment for lowering lower electrodes in welding machines. Stroitel' 2 no.6:14 J4 '56. (MLRA 10:1)
(Electric welding--equipment and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

KUGEL', A.

Device for dropping lower electrodes of welding machines. Suggested by A.Kugel'. Rats.i izobr.predl.v stroi. no.8: 132-133 '58. (MIRA 13:3)

1. Po materialam Orgstroya Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.

(Electric welding--Equipment and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Determination of manganese and chromium in one sample. A. V. Kugel. *Zavodskaya Lab.* 5, 1245(1936). The assumption is made that the persulfate method, without boiling, can be used for the detn. of Mn and thus, by boiling, the Cr^{+++} can be oxidized to $Cr_2O_7^{--}$. C. B.

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B-I-4

Determination of bismuth in brass, copper, and zinc. A. V. Kuzne. (Zavod. Lab., 1936, 5, 1508).—20 g. of metal are dissolved in 140 ml. of 50% HNO_3 and 20 ml. of HCl, excess of aq. NH_3 and H_2O to 400 ml. are added, the solution is filtered, and the washed ppt. dissolved in dil. HNO_3. The solution is conc. to 50 ml., an excess of 80 ml. of 10% KOH added, the ppt. collected, washed, and dissolved in 50% HNO_3, 2 ml. of H_2SO_4 are added, and the solution is evaporated to evolution of SO_3, diluted, and filtered, and Bi determined colorimetrically in the filtrate.

R. T.

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BC

B-I-5

DETERMINATION OF SULPHUR IN CAST IRON BY COMBUSTION IN AIR. A.V. Kugel (Zavod. Lab., 1937, 6, 420-421).— Combustion of cast Fe in O_2, as practised in Kassler's method, proceeds too energetically, leading to partial oxidation of SO_2 to SO_3 and to rapid destruction of combustion tubes. Satisfactory results are obtained by air oxidation at 1350-1450°. (R.T.)

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Ca

9

Rapid method for determining moisture content in molding sand for castings. A. Y. Kugel. *Zavodskaya Labs.* 6, 1281-2(1937).—The use of the CaC_2 method is described and illustrated. Chas. Blanc

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CA 1

Electric filters for cleaning gases for sulfur determination in cast iron by the oxygen combustion method. A. V. Kugel. *Zavodskaya Lab.* 8, 493-501(1939).—The detn. of S in cast iron by the Gutman and Horbield method (*Ibid.* 7, 399-404(1938)) presents difficulties because of the clogging of the filter with Fe_2O_3 dust. The flow of the gas is delayed thereby; thus the SO_2 + O mixt. is exposed longer to a temp. of 810-30°. Under these circumstances and in the presence of Fe_2O_3, SO_2 is oxidized to SO_3 and erroneous results are obtained. To remedy this an electric filter was substituted for the mech. one. Detns. of S in cast iron and steel samples run by this improved method and by the standard Schulte method showed that the new method gave fewer deviations. This was confirmed in actual practice. Through *Chem. Zentr.* 1940, II, 2789.

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C 1

120. Determination of specific gravity of cast iron. A. V. Kagal. [illegible] 1941—1942.—An apparatus for measuring the d of Fe and a special slide rule for calculating the results are described. I. I. B.

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NOSOVA, Yelizaveta Mikhaylovna; KUGEL', Arkadiy Vasil'yevich; KUZNETSOV, Nikolay Andreyevich; CHUNAKHENKO, T., redaktor; VUYEK, M., tekhnicheskiy redaktor

[A founder's manual] Spravochnik liteishchika. Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1955. 455 p. (MLRA 8:6)
(Founding)

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NOSOVA, Yelizaveta Mikhaylovna; KUGEL', Arkadiy Vasil'yevich; KUZNETSOV, Nikolay Andreyevich; ZHAROV, N.T., kand. tekhn. nauk; LUPANDIN, I.V., red.; GORKAVENKO, L.I., tekhn. red.

[Foundryman's handbook] Spravochnik liteishchika. Izd.2., perer. i dop. Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1961. 610 p. (MIRA 14:10)

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VASHCHENKO, K.I.; AVRINSKIY, P.V.; FIRSTOV, A.N.; NESELOVSKIY, V.L.;
Prinimali uchastiye: VARENIK, P. A.; YAKOVENKO, G.F.; SHEVCHUK, R.S.;
NOSOVA, Ye. M.; KUGEL', A.V.; SHTYKA, G.N.; MONDZELEVSKIY, S.P.

Vats for the fusion of caustic soda. Lit. proizv. no.6:4-6 Je '61.
(MIRA 14:6)

(Iron founding)
(Chemical engineering—Equipment and supplies)

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BURTSEV, A.D.; SAGUSHYY, V.V.; LUPANOV, B.P.; BOGACHEV, A.F.; SMIRNOV, G.P.; ANDRONOVA, Ye.I.; GIZMAYYER, V.K.; PINES, A.V.; SHEVCHUK, R.S.; NOSOV, Ye.S.; DOROSHENKO, S.P.; KUGEL', D.B.; ZOLOTNIKOV, N.M.; SHPILENKO, A.M.; VASILYUK, A.P.; SVIRIDOV, I.A.

Using exothermic mixtures for heating the heads of steel castings. Prom.energ. 15 no.6:14 Je '60. (MIRA 13:7)
(Founding)

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KUGEL, D.I.

Applying electric current in the rodent control. Zashch. rast. ot vred. i bol. 7 no.8:55 Ag '62. (MIRA 15:12)
(Rodent control) (Electricity)

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KUGEL', I.S.

Specific cutting performance in milling oak and birch. Sbor. nauch.trud.BLTI no.10:330-340 '57. (MIRA 11:12)
(Oak) (Birch)

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KUGEL', I.S., inzh.

Milling deciduous woods. Der.prom. 7 no. 6:11-14 Je '58. (MIRA 11:8)

1. Belorusskiy lesotekhnicheskiy institut im. S.M.Kirova.
(Woodworking)

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KUGEL', I. S., Cand Tech Sci -- (diss) "Research into the process of cylindrical cutting of wood of the oak and the birch." Minsk, 1960. 16 pp; (Ministry of Higher, Secondary Specialist, and Professional Education Belorussian SSR, Belorussian Forestry Engineering Inst im Kirov); 180 copies; price not given; (KL, 21-60, 124)

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KUGEL', K.Sh. (Mogilevskaya bolast, Grudinovskiy sel'sovet

Midwife M.P.Sirman. Fel'd. i akush. 22 no.11:57 N '57.
(MIRA 11:2)

1. Zaveduyushchaya Ryzhkovskim sel'skim uchastkom.
(SIRMAN, MELAN'IA PETROVNA, 1897-)

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KUGEL', K.Sh.

Revaccination against tuberculosis for school children at a rural medical center. Zdrav. Bel. 7 no. 4:27-28 Ap '61. (MIRA 14:4)

1. Zaveduyushchiy Ryzhkovskim sel'skim vrachebnym uchastkom Mogilevskoy oblasti.
(MOGILEV PROVINCE—TUBERCULOSIS—PREVENTIVE INOCULATION)

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KUGEL', M.B.

KUGEL', M.B.

Tuberculosis and its prevention. Rab.i sial. 33 no.9:22-23 S '57. (MLRA 10:9)

(TUBERCULOSIS--PREVENTION)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827220017-2

IRGER, L.I.; KUGEL', M.B.

Dispensary treatment of fibrocavernous tuberculosis with antibacterial preparations. Zdrav. Belor. 5 no.9:13-14 S '59. (MIRA 12:12)

1. Iz Minskogo gorodskogo protivotuberkuleznogo dispansera No.1.
(TUBERCULOSIS)

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KUGEL', M.B.

White Russian branches of the All-Russian League for the Control of Tuberculosis. Zdrav. Bel. 7 no.8:65-66 Ag '61. (MIRA 15:2)

1. Minskiy gorodskoy protivotuberkuleznyy dispanser No.1.
(WHITE RUSSIA--TUBERCULOSIS)
(WHITE RUSSIA--MEDICAL SOCIETIES)

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FIRSOVA, L.P., kand.med.nauk; KUGEL', M.B.; PUTAN, A.A.

Artificial pneumothorax combined with antibacterial preparations. Zdrav.Bel. 7 no.11:5-7 N '61. (MIRA 15:11)

1. Iz Belorusskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - kand.med.nauk M.N.Lomako), I protivotuberkuleznogo dispansera Minska (glavnyy vrach L.I.Irger) i 2 protivotuberkuleznogo dispansera Minska (glavnyy vrach A.A.Putan).
(TUBERCULOSIS) (PNEUMOTHORAX)

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KUGEL', M.B.

First antituberculosis ambulatorium in White Russia. Zdrav.Bel. 8 no.12:70-71 D '62. (MIRA 16:1)

1. Iz Minskogo gorodskogo protivotuberkuleznogo dispansera No.1.
(MINSK--TUBERCULOSIS--HOSPITALS AND SANTORIUMS)

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