L 12058-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG/WB
ACC NR: AP6001302 SOURCE CODE: UR/0363/65/001/008/1354/1359

AUTHOR: Ivanov, V. Ye.; Nechiporenko, Ye. P.; Zmiy, V. I.; Krivoruchko, V. M.; Verkhorobin, L. F.; Aleksandrov, O. M.; Mitrofanov, A. S.; Poltavtsev, N. S.

ORG: Physicotechnical Institute, Academy of Sciences UkrSSR (Fiziko-tekhnicheskiy institut Akademii nauk UkrSSR)

TITLE: Study of the oxidation kinetics of molybdenum disilicide at 1500 — 1800C

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1354-1359

TOPIC TAGS: molybdenum compound, silicide, oxidation kinetics, silicon dioxide

ABSTRACT: Molybdenum disilicide samples (prepared by siliciding molybdenum at 1250, 1300, and 1350C) were oxidized for 10 hr at 1500 and 1600C and for 1 hr at 1700 — 1800C. The oxidation is represented as follows: (1) $5MoSi_2 + 7O_2 \rightarrow Mo_5Si_3 + 7SiO_2$, (2) $2MoSi_2 + 7O_2 \rightarrow 2MoO_3 + 4SiO_2$. X-ray analysis shows that reaction (1) predominates over (2); the latter is of decisive importance at the start, when the SiO_2 film is formed. The increase in the oxidation rate is related to the orientation of the crystals. The structure of $MoSi_2$ may be considered to consist of layers of silicon and molybdenum atoms alternating in the direction of axis c; if it is kept in mind that the bonding forces between like atoms in a layer are weaker than the forces between the layers, the layer orientation parallel to the surface ($MoSi_2$

UDC: 546.77'281

Card 1/2

L 12058-66

ACC NR: AP6001302

samples obtained at 1250 and 1300C) will cause a lower oxidation rate than in samples where the layer orientation is perpendicular to the surface (silicides obtained at 1350C). It is concluded that the oxidation rate of $MoSi_2$ is affected by many factors, but it has not been possible to determine which is the most important one. Orig. art. has: 2 figures.

SUB CODE: 07, 11 / SUBM DATE: 24May65 / ORIG REF: 006 / OTH REF: 007

Card 2/2

SOV-128-58-9-12/16

AUTHORS: Moskovtsev, F.I., Polychalov, Yu.M., Verkhoshapov, A.I., Redenskiy, V.A., Kul'bitskaya, A.Ya., Dvali, G.S., Pomin, S.F., Ebralidze, L.I., Shkundin, R.M.

TITLE: Letters to the Editor (Nam pishut)

PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 9, pp 23-24 (USSR)

ABSTRACT: In the letters, an improved hammer head for pile-drivers is described and a device for preventing the sticking of molding matter by compressed air. Methods of casting the ball bearing of the refrigerating compressor type ChAU-8 by centrifugal power, to produce distributing plates for foundry heads from quartz sand, and to charge the blast apparatus with metal shot, are also described.
There are 5 diagrams.

1. Pile drivers--Equipment 2. Molding materials--Performance
3. Compressed air--Applications 4. Ball bearings--Casting
5. Sand--Applications 6. Quartz--Applications 7. Shot blasting --Equipment

Card 1/1

VERKHRATS'KA, D.A., dots.

Changes in the reactivity of the physiological system of connective tissue during labor. Medych.zhur. 19 no.3:83-91 '49. (MIRA 10:12)

1. Z akushers'ko-ginekologichnoi kliniki (direktor - prof. M.N. Leichtman) i kafedra patofiziologii (zav. kafedri - prof. Yu.A. Spasokukots'kiy) Stanislavs'kogo medichnogo institutu.
(CONNECTIVE TISSUES) (LABOR (OBSTETRICS))

VERKHOLOMOV, D.F.

Equations of the type $y'''=R(y';y,x)y''^{2}$ with stationary critical points. Ukr.mat.zhur. 2 no.2:84-93 '50. (MLRA 7:10)
(Differential equations)

VERKHOLOM(V, Ye.Ye., podpolkovnik meditsinskoy sluzhby; KLIMOV, V.A., kapitan meditsinskoy sluzhby

[Etiology of intestinal dysfunction following appendectomy. Voen.med.zhur. no.12:65-66 D '56. (MLRA 10:3)
(APPENDIX, surg.
in causing bacillary dysentery etiol.)
(DYSENTERY, BACILLARY, etiol. and pathogen.
appendictomy)

VERKHOLOMOV, Ye.Ye., podpolkovnik meditsinskoy sluzhby; DOLGOV, A.F., kapitan meditsinskoy sluzhby

Using a dysentery vaccine in table form to examine patients who have recovered from acute intestinal infections. Voen. med.zhur. no.3:86-87 '59. (MIRA 12:6)
(DYSENTERY) (INTESTINES--DISEASES)

SLAVNIN, N.I., polkovnik meditsinskoy sluzhby; VERKHOLOMOV, Ye.Ye., kand. med. nauk, podpolkovnik meditsinskoy sluzhby; LEBED'KO, G.I., polkovnik meditsinskoy sluzhby; KELLER, A.A., mayor meditsinskoy sluzhby; GAL'PERIN, Ya.L., podpolkovnik meditsinskoy sluzhby.

Epidemiology of Salmonella heidelberg infection. Voen. med. zhur. no.4:20-23 Ap '59. (MIRA 12:8)

(SALMONELLA INFECTIONS,
heidelberg, food pois, (Rus))

VERKHOLOMOV, Ye. Ye. (Leningrad, Nevskiy pr., 50, kv. 28)

Some characteristics of the growth of Bact. prodigiosum in the presence of blood serum of patients suffering from stomach cancer. Vop. onk. 6 no.12:43-47 '60. (MIRA 15:7)

1. Iz voyennogo gospitalya (nach. - K. S. Artemenko, glavnyy khirurg - N. S. Timofeyev) i Sanitarno-epidemiologicheskoy laboratorii (nach. - I. N. Rozhanskiy).

(SERRATIA MARCESCENS) (SERUM) (STOMACH--CANCER)

VERKHOLOMOV, Ye. Ye.

FD-3314

USSR/Medicine - Newcastle Dysentery

Card 1/1 : Pub 148-10/24

Author : Verkholomov, Ye. Ye. and Dolgov, A. F.

Title : Several facts on the epidemiology of Newcastle dysentery

Periodical : Zhur. mikro. epid. i immun. 10, 46-48, Oct 1955

Abstract : A five year study of persons suffering from dysentery revealed that the number of Newcastle dysentery patients increased from 9.4% in 1950 to 28.5% in 1954. A gas-generating variant, isolated for the first time by Gol'dberg in 1949, of the Newcastle bacillus appeared only in isolated instances in persons investigated in 1950, but in 55.6% of those examined in 1954. This variant, apparently, caused no variation in the course of Newcastle dysentery. Epidemiological data showed that all the persons suffering from Newcastle dysentery had come from, or recently visited either Lithuania or Belorussia up until 1953. In 1954 persons from the Ukraine were found to be infected with the Newcastle bacillus. The data are presented on a chart. No references are cited.

Institution : A Sanitary-Epidemiological Laboratory (Chief - I. N. Rozhanskiy)

Submitted : December 10, 1954

MANIKHIN, P.I., kapitan meditsinskoy sluzhby; VERKHOLOMOV, Ye.Ye., podpolkovnik meditsinskoy sluzhby

Adapting a hand atomizer for insecticide powder to a compressed air system. Voen.-med.zhur. no.7:75-76 Jl '56. (MLRA 9:11)
(SPRAYING AND DUSTING EQUIPMENT)

Verkholomov, Ye. Ye.

VERKHOLOMOV, Ye.Ye.; DOLGOV, A.F.

Further epidemiological observations of the occurrence of Newcastle dysentery (gas-forming variant). Zhur.mikrobiol.epid. i immun., supplement for 1956:54 '57 (MIRA 11:3)

1. Iz sanitarno-epidemiologicheskoy laboratorii
(SHIGELLA)

VERKHOLOMOV, Ye. Ye.,

Data on Epidemiology of One of the Central Points of Dysentery.

VOYENNO-MEDITSINSKIY ZHURNAL (MILITARY MEDICAL JOURNAL), No 3, 1955. p. 71.

VERKHOPYATNITSKIY, Pavel Dmitriyevich; SAVCHENKO, L.T., inzh., retsenzent; TURKIN, V.I., kand. tekhn. nauk, retsenzent; AVERKIYEV, L.S., nauchn. red.; NIKITINA, M.I., red.; KOROVENKO, Yu.N., tekhn. red.

[Electrical elements of automatic-control systems] Elektricheskie elementy avtomatiki. Leningrad, Sudpromgiz, 1963. 534 p. (MIRA 16:11)
(Automatic control) (Electricity on ships)
(Electric apparatus and appliances)

YEFIMENKO, I.N. (Khar'kov); [illegible], I.F. (Khar'kov); MATYUSHENKO, N.N. (Khar'kov); [illegible] [illegible]SHENKO, I.A.; POLOVTSEV, N.I.

Tungsten-rich area of the constitutional diagram tungsten - silicon. Izv. AN SSSR. Met. no.4:163-[illegible] Jl-Ag '65.

(MIRA 18:8)

S/070/62/007/006/005/020
E132/E435

AUTHORS: Matyushenko, N.N., Verkhorobin, L.F., Pugachev, N.S., Sivokon', N.V.

TITLE: The crystal structures of the higher beryllides of molybdenum, tungsten and rhenium

PERIODICAL: Kristallografiya, v.7, no.6, 1962, 862-864

TEXT: The highest beryllides of Mo, W and Re were made by allowing refined beryllium to diffuse at above 1100°C into these metals until saturation was reached. Sectioning a foil incompletely saturated showed distinct layers corresponding to Mo-$MoBe_2$-$MoBe_{12}$-$MoBe_{22}$. A foil of Mo, 0.2 mm thick, was completely saturated. X-ray powder photographs were taken (spacings tabulated) and corresponded to a cubic structure with a = 11.63 (Mo), 11.63 (W) and 11.54 Å (Re). Chemical analysis gave a formula $MoBe_{22}$. A structure with the space group O_h^7 = Fd3m was proposed having 8Mo in (b), 16Be in (c), 16Be in (d), 48Be in (f) and 96Be in (h) positions. Observed and calculated structure factors were compared for the assumed parameters x (Be in f) = 0.125 and x (Be in h) = 0. After

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the study it was found that the structure was like that of $ZrZn_{22}$ (Sten Samson. Acta crystallogr., v.14, no.12, 1961, 1229). The volume of the unit cell is substantially identical with the sum of the volumes of the component metals. There are 1 figure and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR
(Physicotechnical Institute AS UkrSSR)

SUBMITTED: November 28, 1961

MATYUSHCHENKO, N.N.; VERKHOROBIN, L.F.; KAREV, V.N.

Strontium beryllide. Kristallografiia 9 no.2:273-275 Mr-Ap '64. (MIRA 17:5)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.

S/0070/64/009/002/0273/0275

ACCESSION NR: AP4024994

AUTHORS: Matyushenko, N. N.; Verkhorobin, L. F.; Karev, V. N.

TITLE: Strontium beryllide

SOURCE: Kristallografiya, v. 9, no. 2, 1964, 273-275

TOPIC TAGS: strontium beryllide, cubic lattice, stoichiometric formula, space group, x-ray diffraction, powder photograph

ABSTRACT: The compound was prepared by reducing SrO with Be, with the simultaneous formation of BeO according to the equation:

$$SrO + 14Be = SrBe_{13} + BeO.$$

The powders were mixed and placed in a tantalum crucible, and the reaction was carried out in a vacuum of 10^{-3} mm Hg at a temperature of 1200-1250C. The product was a porous, light-brown mass. The presence of beryllide was established by x-ray studies. Powder photographs showed no BeO, but chemical analyses gave 11.8%

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ACCESSION NR: AP4024994

Characteristics established for the new compound are: stoichiometric formula of $SrBe_{13}$, crystalline structure of the $NaZn_{13}$ type, space group O_h^6 - Fm3c, parameters y = 0.175 and z = 0.110, cubic lattice with a lattice constant of a = 10.157 ± 0.001 Å, computed density of 2.35 g/cm^3. Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR (Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 22Jul63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: PH NO REF SOV: 002 OTHER: 001

Card 2/2

MATYUSHENKO, N.N.; KUNCHENKO, V.V.; VERKHOROBIN, L.F.

High temperature vacuum camera for reciprocal lattice photographing. Zav.lab. 28 no.10:1257-1259 '62. (MIRA 15:10)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.
(X rays—Equipment and supplies)

S/126/62/013/001/006/018
E021/E580

AUTHORS: Verkhorobin, L.F., Ivanov, V.Ye., Matyushenko, N.N., Nechiporenko, Ye.P., Pugachev, N.S. and Somov, A.I.

TITLE: Diffusion reactions in the Mo-Si, W-Si and Ta-Si systems

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.1, 1962, 77-81

TEXT: The processes occurring during the saturation of molybdenum, tungsten and tantalum by silicon on thermal diffusion were studied. Metallic samples were heated in silicon powder in a vacuum of 10^{-5} mm mercury in the range 1150-1350°C. The silicide layer, formed on the surface of the metals, was examined by metallographic and X-ray analysis. The results showed that the saturated layer was produced, in the main, through the vapour phase. The first stage was the formation of lower silicides. Afterwards, higher silicides are formed. At 1240°C, the disilicide appears after 0.5, 1 and 3 hours on W, Ta and Mo, respectively. Once the disilicide has appeared, further growth occurs largely by this phase, and only after a definite thickness has been attained is there a retardation in growth of disilicide

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and increased growth in the layers of lower silicide. It was shown from X-ray analysis and from the change in form of the samples during diffusion that preferential diffusion of silicon through the silicide layer occurred, and the reaction leading to the formation of the phase takes place mainly at the internal boundary of the layer. There are 5 figures and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR
(Physico-technical Institute AS UkrSSR)

SUBMITTED: April 25, 1961

VERKHOROBIN, L.F.; IVANOV, V.Ye.; MATYUSHENKO, N.N.; NECHIPORENKO, Ye.P.; PUGACHEV, N.S.; SOMOV, A.I.

Reaction diffusion in systems Mo - Si, W - Si, and Ta - Si. Fiz. met.i metalloved. 13 no.1:77-81 Ja '62. (MIRA 15:3)

1. Fiziko-tekhnicheskiy institut AN USSR.
(Silicides) (Diffusion)

MATYUSHENKO, N.N.; KAREV, V.N.; VERKHOROBIN, L.F.

Samarium, europium, and ytterbium beryllates of the composition ABe_{13}. Zhur. neorg. khim. 8 no.7:1788-1789 Jl '63. (MIRA 16:7)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.
(Beryllium compounds)
(Rare earth compounds)

S/032/62/028/010/009/009
B117/B186

AUTHORS: Matyushenko, N. N., Kunchenko, V. V., and Verkhorobin, L. F.

TITLE: High-temperature vacuum chamber for back reflection X-ray photography

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 10, 1962, 1257 - 1259

TEXT: The authors designed a vacuum chamber for precision X-ray photography of interplanar spacings and for the measurement of electric resistance in crystal lattices of high-melting metals and alloys at temperatures ranging from room temperature up to 2000°C. The apparatus can also be used for detecting phase transition points, determining coefficients of linear expansion and observing recrystallization processes in fixed samples. The vacuum chamber comprises a cylindrical hollow water-cooled casing (height - 60 mm, inner diameter - 120 mm) fastened to a hollow support which is connected to the pumping system. Oscillations in the plane perpendicular to the X-ray beam are imparted by a worm gear driven by a three-phase motor through reduction gear. The sample (maximum length 100 mm) is fixed between two water-cooled brass electrodes which are sealed

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by rubber packings. The sample is heated by an a-c current from a step-down transformer with an accuracy of ± 1% for the stabilized voltage at the input. Inlets for thermocouples and electric measurement units are at right angles to the axes of the electrodes. Temperature is measured by an optical pyrometer, type ОППИ-09 (OPPI-09), through a viewing window provided with a shutter. Precision at 2000°C is not inferior to 2%. Opposite the viewing window a second window, for taking X-ray pictures, is fixed in the cover of the casing. This window can be closed by 0.3-mm thick beryllium foil which is protected from heat radiation and dust by a second Be shield, not thicker than 0.1 mm. The X-ray unit comprises a flat multi-frame film badge and a sharp-focused tube designed by B. Ya. Pines and V. S. Kogan. When altering the distance specimen - film from 50 to 300 mm, Braggs angles of from 67 to 88° can be recorded. The chamber was used to investigate the interplanar spacing (130) of a molybdenum specimen, measuring 100·8·2 mm, within a temperature range of from 900 to 2000°C. The vacuum chamber sustained the long period of heating at 2000°C without any disturbance of the vacuum ($5 \cdot 10^{-5}$ mm Hg). The electric resistance could be measured from 900°C upward with an accuracy of ±3%. X-ray pictures were taken by using the characteristic K_{α} radiation of the Fe plate, focusing

the (130) line. At a plate voltage of 30 kv and a current of 2 ma, the exposure lasted 3 - 5 min. Spacings were determined with an accuracy of 0.02%. Results of the experiments agreed well with known literature data. There are 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk USSR (Physico-technical Institute of the Academy of Sciences UkrSSR)

Card 3/3

YEFIMENKO, L.N.; VERKHOROBIN, L.F.; SHVYDCHENKO, A.G.

Oxidation of lower tungsten and molybdenum silicides. Izv. AN SSSR. Neorg. mat. 1 no.11:1911-1916 N '65. (MIRA 18:12)

1. Fiziko-tekhnicheskiy institut AN UkrSSR, Khar'kov. Submitted May 25, 1965.

NECHIPORENKO, Ye.P.; KRIVORUCHKO, V.M.; VERKHOROBIN, L.F.; MITROFANOV, A.S.; POLTAVTSEV, N.S.

Effect of impurities on the kinetics of vacuum siliconizing of molybdenum. Izv. AN SSSR. Neorg. mat. 1 no.12:2212-2218 D '65. (MIRA 18:12)

1. Fiziko-tekhnicheskiy institut AN UkrSSR, Khar'kov.

L 13288-66 EWT(d)/EWP(m)/EWP(v)/EWP(j)/T/EWP(k)/EWP(h)/EWP(l) RM

ACC NR: AP6000321 (A) SOURCE CODE: UR/0286/65/000/021/0010/0010

INVENTOR: Bulotelov, N. A.; Verkhorubov, B. A.; Kal'noy, V. G.; Kryuchkov, A. D.; Litvin, A. F.; Mel'nichenko, V. Z.; Morozov, G. N.; Oleninskiy, B. I.; Klebanova, I. S.; Solnyshkin, L. M.; Fridman, A. N.; Shilov, L. A.; Shchutskiy, S. V.; Yanovskiy, E. A.

ORG: none

TITLE: A device for automatic control of an installation for polymerizing gaseous olefins. Class 12, No. 175923 [announced by the Leningrad Affiliate of the All Union Scientific Research and Design Institute for Chemical Machine Building (Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i konstruktorskogo instituta khimicheskogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 10

TOPIC TAGS: polymerization, olefin, chemical engineering, automatic control equipment

ABSTRACT: This Author's Certificate introduces a device for automatic control of an

UDC: 66.05-5 : 66.095.26 : 678.742.2

Card 1/3

L 13288-66

ACC NR: AP6000321

installation for polymerizing gaseous olefins, e.g. in production of low pressure polyethylene. The unit consists of two temperature controllers connected to a flow regulator for the product reactor, and a pressure regulator connected to the controller for the coolant. For increased productivity and optimization of the process, one temperature controller is connected through a speed reducer to the pressure controller which is connected through a second speed reducer to the flow regulator for the product reactor. The other temperature controller is connected to the flow regulator for the coolant.

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L 13288-66

ACC NR: AP6000321

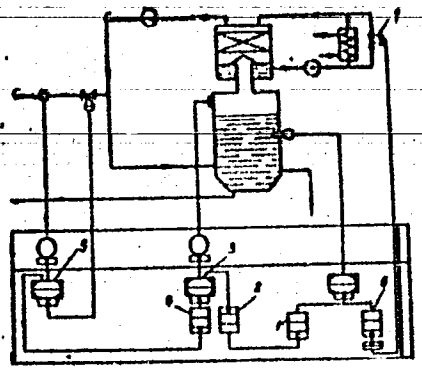


Fig. 1. 1 - first temperature controller; 2 - first speed reducer; 3 - pressure regulator; 4 - second speed reducer; 5 - flow regulator for the product; 6 - second temperature controller; 7 - flow regulator for the coolant.

SUB CODE: 07/ SUBM DATE: 01Feb65/

Card 3/3

L 5297-66 EWT(m)/EPF(c)/EWP(j)/T RM
ACC NR: AP5025033 SOURCE CODE: UR/0286/65/000/016/0083/0083

AUTHORS: Verkhorubov, B. A.; Fridman, A. N.; Oleinskiy, B. I.; Monakhova, Ye. V.; Chaplin, Yu. V.; Petrova, L. V.; Vavilova, I. I.

ORG: none

TITLE: A method for obtaining polyolefin. Class 39, No. 173945

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 83

TOPIC TAGS: polyolefin, monomer, organometal, catalyst

ABSTRACT: This Author Certificate presents a method for obtaining polyolefin by high-pressure circulation of gaseous monomer through a polymerizer filled with a solvent and an active complex, and containing an organometallic catalyst. To prevent polyolefin, formed in the early stage of the reaction, from sticking to the walls of the polymerizer, the latter is first filled with pure solvent. The active complex is then added to the solvent.

SUB CODE: MT, GC/ SUBM DATE: 23Jan63/ ORIG REF: 000/ OTH REF: 000

Card 1/1 UDC: 678.742

VERKHORUBOVA, A. N.

USSR/Chemistry - Platinum, Analysis
Chemistry - Copper, Analysis

Sept/Oct 48

"Droplet Method for Detecting Iridium, Palladium, Platinym, Thallium, Copper," N. A. Tananayev(Deceased), N. P. Rukksha, A. N. Verkhorubova, Lab of Res Shop, Factory No 170, Sverdlovsk, 5 pp

"Zhur Analit Khimii" Vol III, No 5

Describes droplet method of detecting subject metals. Method has been introduced into factory practice and has been of considerable value in the analysis of platinoid alloys and of molten platinum. Submitted 5 Sept 1947.

PA 13/49T19

VERKHOSHANSKAYA, O. V.

IVANOVA, G.I.; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik.

Cranberries in powdered form and concentrates made from them.
Trudy VNIIKOP no.6:161-168 '56. (MLRA 10:5)
(Cranberries)

PROKOF'YEVA, A.M.; VERKHOSHANSKAYA, O.V.

Vegetable and fruit powders produced by drum drying. Kons. i ov. prom. 13 no.10:21-22 O '58. (MIRA 11:10)

1.TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Vegetables, Dried)

VOLKOV, Ye.N., kand.tekhn.nauk; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik

Pea concentrates which do not need cooking. Trudy VNIIKOP no.10:3-15 '59. (MIRA 14:8)
(Peas) (Food, Concentrated)

VOLKOV, Yu.N., kand.tekhn.nauk; PROKOF'YEVA, A.M., starshiy nauchnyy sotrudnik; IVANOVA, G.A., starshiy nauchnyy sotrudnik; KHAKHINA, L.P., starshiy nauchnyy sotrudnik; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik

For a greater variety of food concentrates. Trudy VNIIKOP no.10:115-120 '59. (MIRA 14:8)

(Food, Concentrated)

VOLKOV, Ye.N., kand.tekhn.nauk; PROKOF'YEVA, A.M., starshiy nauchnyy sotrudnik; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik

Preparing vegetable and fruit powder in a roller dryer. (MIRA 14:8)
Trudy VNIIKOP no.10:121-127 '59.
(Vegetables, Dried) (Fruit, Dried)

PROKOF'YEVA, A.M., starshiy nauchnyy sotrudnik; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik

Keeping qualities of cereals enriched with vegetable and fruit powder and of puree-like vegetable soups for children. Trudy VNIIKOP no.10:159-162 '59. (MIRA 14:8)
(Cereals as food) (Soups)

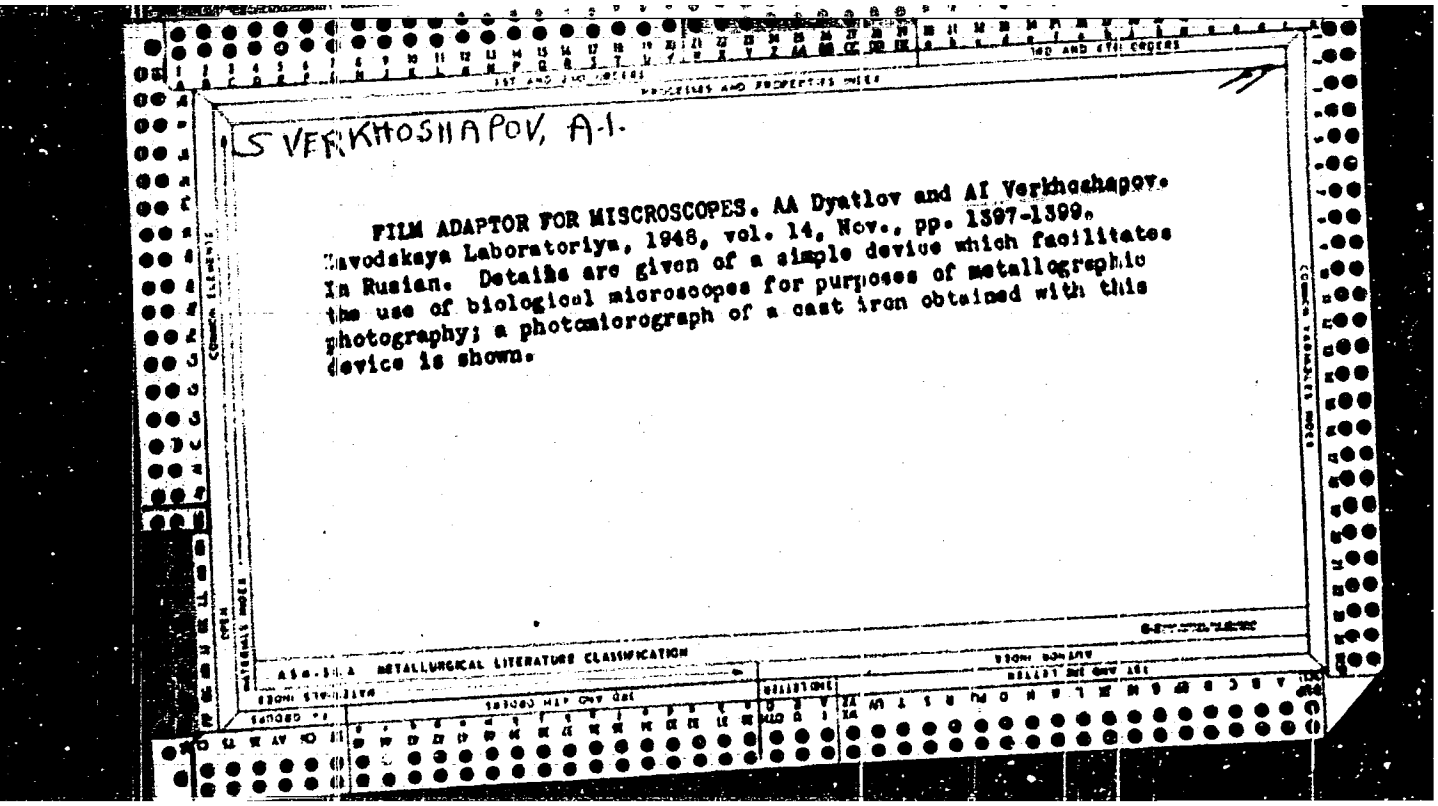
VOLKOV, Ye.N., kandidat tekhnicheskikh nauk.; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik.

Study of varieties of peas as a raw material for the production of concentrates. Ref. nauch. rab. VNIIKOP no.3:71-76 '55. (MLRA 9:11)
(Peas--Varieties)

VERKHOSHAPOV, A., kand.tekhn.nauk, dotsent; CHUVIN, V., starshiy inzh.

Corrosion of shell and tube condensers in cooling plants. Mor. flot 22 no.1:29-30 Ja '62. (MIRA 15:1)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti (for Verkhoshapov). 2. Chernomorskoye parokhodstva (for Chuvin).
(Refrigeration and refrigerating machinery--Corrosion)



SVERKHOSHAPOV, A.I.

FILM ADAPTOR FOR MISCROSCOPES. AA Dyatlov and AI Verkhoshapov. Zavodskaya Laboratoriya, 1948, vol. 14, Nov., pp. 1397-1399. In Russian. Details are given of a simple device which facilitates the use of biological microscopes for purposes of metallographic photography; a photomicrograph of a cast iron obtained with this device is shown.

A54-51A METALLURGICAL LITERATURE CLASSIFICATION

VERKHOSHAPOV, A.I.; REDENSKIY, V.A.

Centrifugal casting practices. Lit. proizv. no.9:24 S '58.
(Centrifugal casting) (MIRA 11:10)

ACC NR: AP7002938 (A) SOURCE CODE: UR/0020/66/171/006/1352/1354

AUTHOR: Rafikov, S. R. (Academician AN KazSSR); Rode, V. V.; Verkhotin, M. A.; Andrianov, K. A. (Academician)

ORG: Institute of Heteroorganic Compounds, Academy of Sciences SSSR (Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR)

TITLE: Mechanism of thermal stabilization of polydimethylsiloxane by titanium and iron compounds

SOURCE: AN SSSR. Doklady, v. 171, no. 6, 1966, 1352-1354

TOPIC TAGS: lubricant additive, lubricant, silicone lubricant, silicone lubricant thermal stability

ABSTRACT:

A study was made of the mechanism of the effect of small amounts of titanium and iron compounds on the thermal degradation of polydimethylsiloxane (PS) in vacuum under isothermal conditions. The results were compared with previously obtained thermal degradation data on polytitanodimethylsiloxane (PTS) (PS containing Ti atoms in the backbone). The additives tested were tetrabutoxytitanium (BT), dibutoxytitanium bis(acetylacetonate) (AT), iron acetylacetonate (AI), titanium oxides (OT), and iron oxides (OI). The amount of BT, AT, or AT to be added was calculated so there was one equivalent of metal per 62 repeat units of PS, the same ratio as in the PTS.

Card 1/2 UDC: 547'128

ACC NR: AP7002938

BT, AT, and AI were introduced by mixing their solutions in dry benzene with a similar solution of PS, and subsequently evaporating the solvent. OT and OI were introduced by adding a ten-fold excess over theory to concentrated benzene solutions of PS, with subsequent drying and milling. The thermal degradation criteria used were weight loss, intrinsic viscosity of benzene-soluble fraction, amount of gel fraction, and amount of volatiles formed, all at 200—500C for 4 hr. Experimental results are given in graphic form. It was found that the additives have a beneficial effect on thermal stability similar to, but less pronounced than, that of the presence of titanium in the backbone at the onset (PTS). It was concluded that the beneficial effect of metal compounds is due to their reacting with the PS macromolecules in the process of thermal degradation to form a new high-thermal-stability, high-molecular-weight compounds containing metal atoms in the backbone. Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: 02Apr66/ ORIG REF: 007/ OTH REF: 003/ ATD PRESS: 5112

Card 2/2

L 41227-66 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6023430 SOURCE CODE: UR/0190/66/008/007/1226/1230

AUTHOR: Verkhotin, M. A.; Andrianov, K. A.; Zhdanov, A. A.; Kurasheva, N. A.; Rafikov, S. R.; Rode, V. V. 44 B

ORG: Institute of Hetero-organic Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Thermal degradation of certain polymetallodimethylsiloxanes 15

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 7, 1966, 1226-1230

TOPIC TAGS: polysiloxane, titanium compound, polymer degradation, organoaluminum compound, depolymerization, elastomer

ABSTRACT: The thermal degradation of polyaluminodimethylsiloxane (PAS) and polytitanodimethylsiloxane (PTS) (see Fig. 1) was studied in a vacuum at various temperatures. The predominant process in the thermal aging of the polymers was found to be depolymerization involving rupture of the Si-O bond and formation of hexamethylcyclotrisiloxane. The depolymerization begins after the gel formation maximum has been reached; at the same time, the aluminum atom in the elastomer chain slightly increases and the titanium atom considerably decreases the depolymerization rate as compared to polydimethylsiloxane. The gel formation maximum in polytitanodimethylsiloxane is shifted by 200° toward higher temperatures as compared to polyaluminodimethylsiloxane. In addition to the depolymerization, a homolytic rupture of Si-C and C-H bonds with the liberation of hydrogen, methane, and ethane takes place during the thermal degra-

Card 1/2 UDC: 678.01:541678.84

dation of polyalumino- and polytitanodimethylsiloxane. Orig. art. has: 2 figures and 2 tables.

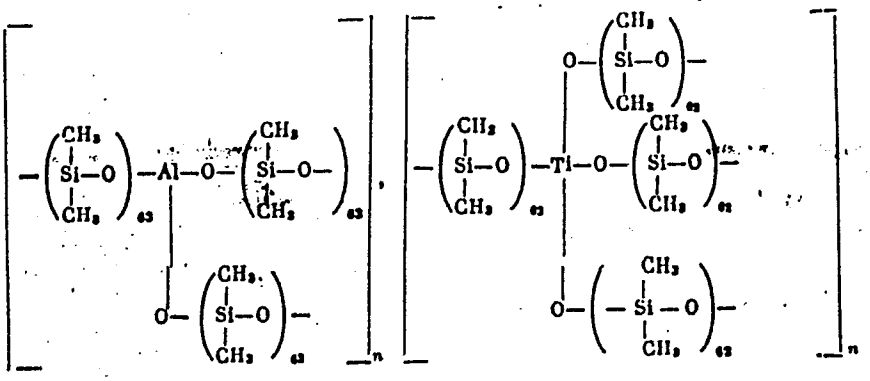


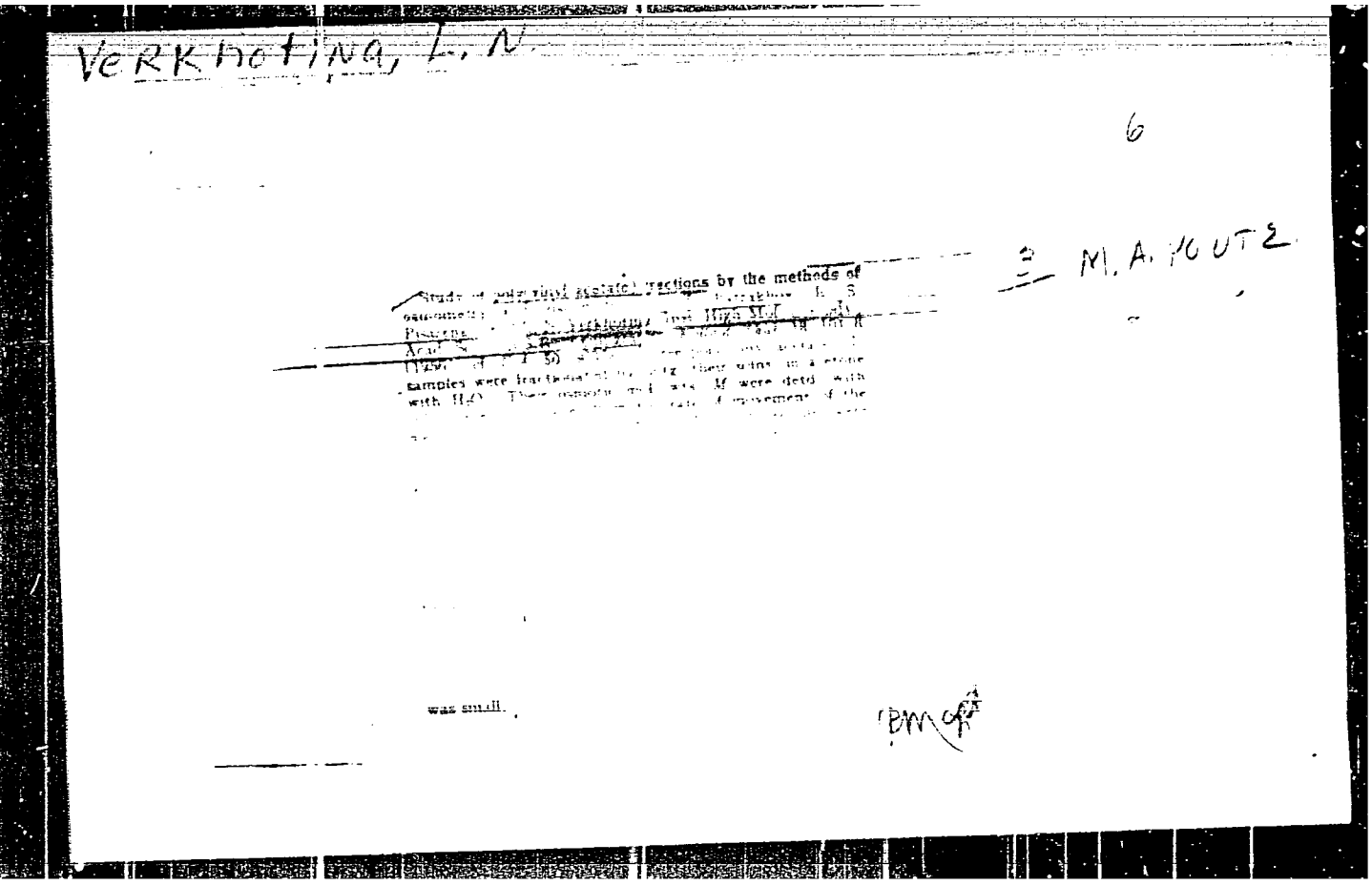
Fig. 1. Formulas of PAS and PTS.

SUB CODE: 07/ SUBM DATE: 16Jun65/ ORIG REF: 007/ OTH REF: 003

TSVETKOV, V.N.; VERKHOTINA, L.N.

Photoelastic effect in methylmethacrylate and poly-p-tertiary-butylphenylmethacrylate polymers and their copolymers. Zhur. tekh. fiz. 28 no.1:97-108 Ja '58. (MIRA 11:3)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR, Leningrad.
(Methacrylic acid) (Photoelasticity)



VERKHOTINA, L. N.

6

M. A. 40 UT 2

was small.

VERKHOTINA, L.N.

FATTAKHOV, K.Z.; PISARENKO, E.S.; VERKHOTINA, L.N.

Osmometric and viscometric studies of polyvinyl acetate fractions [with English summary in insert]. Koll.zhur. 18 no.1:101-106 Ja-F '56. (MLRA 9:6)

1.Institut vysokomolekulyarnykh soyedineniy AN SSSR, Leningrad. (Acetic acid)

NECHIPORENKO, V.G., kand.tekhn.nauk; PRIKHODCHENKO, P.P., inzh.; ZAYTSEV, V.A., inzh.; TSAPOV, V.P., inzh.; VERKHOTUROV, A.D., inzh.

Cutting worm spiral with a variable pitch and profile height of the turn. Mashinostroenie no.6:82-84 N-D '65. (MIRA 18:12)

VERKHOTUROV, B.Ya.

Using the "magic eye" in measuring small holes. Izm. tekh. no.9:12-14 S '62. (MIRA 15:11)
(Measuring instruments)

VERKHOTUROV, B.Ya.

Difference method for checking kinematic errors of gear wheels. Izm. tekh. no.8:11-15 Ag '63. (MIRA 16:10)

VERKHOTUROV, B.Ya.

New designs of magnetoelectric kinemometers. [illegible] no.4: 37-38 Ap '65. (MIRA 18:5)

VERKHOTUROV, B.Ya.

Synthesis of the original error function directly from the results of its different measurements. Izm. tekh. no.12:10-13 D '64. (MIRA 18:4)

VERKHOTUROV, B.Ya.; MARKOV, N.N.

Device for checking the kinematic precision of mechanisms. Stan.i instr. 35 no.9:21-24 S '64. (MIRA 17:10)

VERKHOTUROV, B.Ya.; MARKOV, N.N.

Determining cyclic errors of spur helical gears. Izm.tekh. no.12:5-8 D '62. (MIRA 15:12)

(Gearing—Testing)

PROSKURYAKOV, Yu. O., BEZZUBENKO, N.K., VERKHOTUROV, B. Ya.

High-speed gear milling with hard-alloy-tipped worm hobs. Stan.i instr. 31 no.4:18-22 Ap '60. (MIRA 13:6)
(Gear cutting)

VERKHOTUROV, B.Ya.; KANDALOV, M.I.

Instruments manufactured at the Chelyabinsk Plant. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. no.11: 61-65 '62. (MIRA 15:11)

(Chelyabinsk--Instrument industry)

S/115/62/000/009/001/001
E194/E184

AUTHOR: Verkhoturov, B.Ya.

TITLE: Use of a 'magic eye' to measure small holes

PERIODICAL: Izmeritel'naya tekhnika, no.9, 1962, 12-14

TEXT: The Chelyabinskiy zavod izmeritel'nykh instrumentov (Chelyabinsk Measuring Instrument Works) has developed an instrument for measuring small holes in parts placed on a microscope stage and has made a prototype. The principle of measurement is that a measuring tip is inserted into the hole and then the microscope stage is moved until contact occurs between the measuring tip and the side of the hole. Contact is recognised by connecting the measuring tip to a 'magic eye' circuit based on a tube type 6E5; the circuit is given. The method of ensuring that the measurement is made correctly across the full diameter of the hole is explained. Sources of error are analysed and selection of the optimum diameter of tip for a given size of hole is explained. The 'magic eye' provides an extremely sensitive method of establishing that contact has occurred.

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Use of a 'magic eye' to measure ... S/115/62/000/009/001/001
E194/E184

Tests were made with rings ranging in diameter from 1 to 20 mm using probes of diameter from 0.5 to 4.04 mm. It is concluded that the total error of measurement of the instrument is 1.065 microns; it is the most accurate of contact methods and is recommended for measuring holes of the first class of accuracy.
There are 4 figures.

Card 2/2

VERKHOTUROV, KH. N.

PA 16/49T100

USSR/Mining Methods
Drilling

Oct 48

"The Use of Drilling With Flushing at the Nikitov Ore Deposits," Kh. N. Verkhoturov, Mining Engr, 2 pp

"Gor Zhur" No 10

Nikitov mercury deposits are located on axial plane of main Donets anticline. Ore-bearing sandstones contain 94% silica (90% of which is free quartz). It is therefore necessary to reduce dust formation to minimum to avoid silicosis. One method adopted is drilling with flushing. Results are illustrated graphically.

FDB

16/49T100

VERKHOTUROV, M.V., inzh.

Pneumatic coal preparation in the Kuznetsk Basin. Nauch.trudy KuzNIIU-gleobog. no.2:55-69 '64. (MIRA 17:10)

25.2000

80017

S/121/60/000/04/02/008

AUTHORS: Proskuryakov, Yu.G., Bezzubenko, N.K., Verkhoturov, V.Ya.

TITLE: High-Speed Gear Hobbing With Hard-Alloy Fitted Hobs

PERIODICAL: Stanki i Instrument, 1960, No 4, pp 18 - 22

TEXT: In order to carry out investigations of high-speed finishing worm hobbing, assembling hobs (three varieties) with inserted blades, fitted with hard-alloy plates, were designed and manufactured. The first type of hob design with a module of 9 mm is shown in Figure 1. The authors give a description of the hob construction, the body of which is made of 45Kh grade steel, heat-treated up to a hardness of RC 30 - 45. Figure 2 shows the hob bits, fitted with the T5K10 grade hard alloy. The durability tests of the hobs, fitted with hard-alloy bits, and carried out in co-operation with the Chelyabinsk Polytechnic Institute and the Chelyabinsk Tractor Plant had an aim to determine the optimum of hard-alloy blades and to investigate the character of their wear under various operating conditions. The hard-alloy grades T15K6 and T5K10 were tested by machining the reducer gear, made of 12KhNZA grade steel, and the skew-teeth flywheel rim, made of 40Kh grade steel, both of the S-100 tractor. The tests showed that the bits made of T15K6 grade alloy are easily

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High-Speed Gear Hobbing With Hard-Alloy Fitted Hobs

destroyed by the chipping-off of large specks. Therefore, all further tests were made with the T5K10 grade alloy. Tests carried out with bits without chamfer at the front surface did not show any positive results. An investigation of the wear of blades showed that wear is both of a molecular and of mechanical character, i.e. that in most cases macro-particles are breaking off at the beginning and then, after some time, micro-particles are chipping off. Experimental graphs and functions were plotted in order to determine the optimum rear angles. The tests established that the durability of hobs is mainly limited by wear of the rear surfaces. Figure 3 shows an experimentally obtained graph of the ratio: cutter durability/cutting speed. Based on the tests, a cutting speed within the range of 140 - 160 m/min is recommended. The tests to determine the effects of feed on the cutter durability were carried out at a cutting speed of 142 m/min with feeds of 0.75, 1.0, 2.0 and 2.5 mm/rev. Figure 4 shows the function of hard-alloy hobs plotted against the feed (in logarithmic coordinates). By way of analytical treatment it is possible to obtain from the graphs the following empirical formulae for the rating of durability: for a feed of s = 1 ÷ 2 mm/rev - $T = \frac{275}{s^{0.33}}$ min.;

High-Speed Gear Hobbing With Hard-Alloy Fitted Hobs

for a feed of $s > 2$ mm/rev - $T = \frac{2900}{s^{3.75}}$ min. From these functions follows that small feeds (up to 1.5 mm/rev) are not to be recommended. The treatment of the test data made it possible to develop the general function for the determination of cutting speed during high-speed gear milling in the form of

$$v = \frac{9.500}{T^{0.74} s^{0.33}} \text{ m/min.}$$

This formula is correct for a feed range of $s = 1 \div 2$ mm/rev for an assumed dulling criterion of the blades at the rear surface of $h_d = 0.5$ mm, if the T5K10 grade hard alloy is being used for the machining of material with a strength limit of $\sigma_B = 75$ kg/mm^2. For other machining conditions the authors state the correction factors. If the feed is higher than 2 mm/rev the cutting speed formula is:

$$v = \frac{100\,000}{T^{0.74} s^{3.75}} \text{ m/min,}$$

although a higher feed than 2.0 mm/rev is not advisable. Figure 5 shows the distribution of wear over the teeth and that 21 blades took part in the

High-Speed Gear Hobbing With Hard-Alloy Fitted Hobs

machining of parts by the ChPI-1 cutter. In order to elucidate the possibility of obtaining the necessary machining precision another two varieties of hobs were designed. Figure 6 shows the type ChPI-2, the construction of which is described by the authors in detail. The basic geometric parameters of both the types ChPI-2 and ChPI-1 and their manufacturing allowances are the same. The setting control of the blades is effected by checking the wobble along the blade tip with the aid of an indicator. The double-cut hard-alloy milling cutter FS-3 (third variety) is designated for the machining of gears with a module of 4,25 mm. Figure 7 shows this type of cutter of which a detailed description is given. The accuracy of machined gears was checked by measuring the deviation of the intercenter distance when being turned by one tooth and one revolution. It was found that, within the durability limits of the cutter, the deviations of the intercenter distance remained practically constant. The surface finish of the machined part was checked by every fifth tooth and, as it is shown in Figure 8, it was found that the surface of the machined teeth gradually deteriorates as the wear of the cutter increases, and, at a given moment, the surface quality becomes more or less stable. The authors draw the following

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S/121/60/000/04/02/008

High-Speed Gear Hobbing With Hard-Alloy Fitted Hobs

conclusions from their investigations: 1) High-speed finishing milling of cylindrical gears by assembling hobs equipped with hard-alloy bits is very efficient, and machining time could be reduced by 3.5 times while machining the flywheel rim of the S-100 tractor, and twice when machining the reducer gear of the same tractor. 2) Assembling hobs fitted with hard-alloy bits ensure a third class accuracy for gear hobbing on serial machine tools. 3) A surface finish of the fifth or sixth class can be obtained. 4) With high-speed finishing gear hobbing it is expedient to use the T5K10 grade hard alloy. The optimum angle of the hard-alloy blades at the front surface is 0°, that of the chamfer = 5°. 5) High-speed gear hobbing can be effected with the aid of machine tools of present serial design without considerable modernization. If new high-efficiency hobbing machines are designed, the authors recommend an increased driving power (by 40 - 50%), increased spindle rotation speed, rigidity and vibration resistance of the whole unit. The ENIMS together with the "Komsomolets" Plant developed the new 5312 and 5314 models of gear cutting machines which are not yet industrially approved. 6) Production costs of hobs are still too high and should be reduced by corresponding organization of the manufacturing process. Four graphs, 4 diagrams, 2 Soviet and 2 English references.

Card 5/5

ROMANOV, L.M.; VERKHOTUROVA, A.P.; KISSIN, Yu.V.; RAKOVA, G.V.

Polymerization of 1,5-heptadiene on complex catalysts. Vysokom. soed. 5 no.5:719-723 My '63. (MIRA 17:3)

1. Institut khimicheskoy fiziki AN SSSR.

L 13553-63 EWP(j)/EPF(c)/EWT(m)/BDS ASD Po-4/Pr-4 RM/WW

ACCESSION NR: [illegible]

SOURCE: Vysokomolekulyarnyye soyedineniya v. 5, no. 5, 1963, 719-723

TOPIC TAGS: copolymerization, complex catalysts, infrared spectra

ABSTRACT: The difficulties in obtaining rubbers suitable for vulcanization by means [illegible] polymer in a n-heptane solution at 70 to 80C. The obtained poly-hepta-1,5-diene had a rubberlike texture, a molecular weight of 1250 and a 25-30% of double bonds, as determined by Hanus' method. The product was also subjected to infrared spectroscopy in the 2000-7000 cm sup -1 range, and the number of double bonds per one CH sub 2 group was determined. Ozonization provided additional clues. It is concluded that the internal double bond is capable of participating in the polymerization initiated by Ziegler-Natta catalysts, a fact established by Natta while the present investigation was still in the experimental stage. The formation of five-membered

Card 1/2

L 13553-63
ACCESSION NR: AP3000700

rings in the polymer is stressed. Thanks are given to G. Ye Zaykov for assistance

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, Academy of Sciences SSSR)

SUBMITTED: 12Nov61 DATE ACQ: 17Jun63 ENCL: 00

SUB CODE: GC NO REF SOV: 002 OTHER: 007

Card 2/2

BABCHENKO, N.N.; SAMOYLENKO, E.I.; VERKHOTUROVA, F.I.; AFANAS'YEVA, L.I.; NADEZHDINSKAYA, N.G.; PODSEVALOV, V.N., kand. tekhn. nauk; PASHCHINSKAYA, G., red. izd-va; YEFIMENKO, A., tekhn. red.

[Technological instructions on the production of canned fish by the enterprises of the Kaliningrad Economic Council]Sbornik tekhnologicheskikh instruktsii po vyrabotke rybnykh konservov predpriiatiiami Kaliningradskogo sovnarkhoza. Kaliningrad, Kaliningradskoe knizhnoe izd-vo, 1962. 239 p. (MIRA 15:12)

1. Kaliningrad. Baltiyskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. 2. Baltiyskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii, Tekhnologicheskaya laboratoriya, Kaliningrad (for Babchenko, Samoylenko, Verkhoturova, Podsevalov).
(Canning and preserving) (Kaliningrad Province--Fish, Canned)

L 08240-67
ACC NR: AT6028900 SOURCE CODE: UR/0000/66/000/000/0202/0211

AUTHOR: Tal'ko-Grintsevich, P. P.; Klimkovich, V. I.; Verkhoturova, L. Ya. 56

ORG: none

TITLE: Methods of testing small ferrite samples at a constant current

SOURCE: Vsesoyuznoye soveshchaniye po ferritam. 4th, Minsk. Fizicheskiye i fiziko-khimicheskiye svoystva ferritov (Physical and physicochemical properties of ferrites); doklady soveshchaniya. Minsk, Nauka i tekhnika, 1966, 202-211

TOPIC TAGS: ferrite, magnetic property, magnetization, hysteresis loop, temperature dependence, heat resistant material, Curie point, statistical analysis

ABSTRACT: Small ferrite samples of the "oxifer" group were tested for magnetic and thermomagnetic properties on a specially designed apparatus consisting of a photoelectric fluxmeter, a unit for regulating the magnetization current, and an x-y recorder. Equations were given for deriving the magnetic hysteresis characteristics from geometrical and structural parameters. The deviation of hysteresis loops from an ideally rectangular shape is related to the Gaussian probability parameters x_1 and x_2. From a commutation curve, the dependence of the permeability on the magnetic field (H) was obtained. The maximum permeability occurred at $\frac{1}{2}H_c \leq H \leq 2H_c$, where H_c is the coercive force. Limiting hysteresis curves were presented for fields which were 7-9 times

Card 1/2

L 08900-67

ACC NR: AT6028988

greater than H_c. Heat resisting ferrites were tested in a TS-15 thermostat, after placing the samples in a copper cylinder filled with transformer oil. The temperature dependence of $1/H\ dH/dT$, $1/B\ dB/dT$, and $1/\alpha\ d\alpha/dT$ was given; where $\alpha = B_r/B_m$ and B_r is the residual inductance, and B_m is the maximum inductance. On the average, H_c changed 0.1 %/deg. Curie point determinations of high accuracy were made with the photoelectric fluxmeter. The Curie points of heat resistant and ordinary ferrites were identical. A statistical analysis was done on experimental values of H_c and B_m obtained from a column containing 50 small samples. The deviation of B_m and H_c from the arithmetic mean did not exceed 5%. Orig. art. has: 7 figures, 2 tables, 9 formulas.

SUB CODE: 09,11/ SUBM DATE: 22Dec65/ ORIG REF: 005/ OTH REF: 001

Card 2/2

VERKHOV, G., agronom.

On Kuvshinov's suggestion. Muk.elev.prom. 20 no.3:31-32 Mr '54. (MLRA 7:7)

1. Vsesoyuznoye ob"yedineniye Zagotzerno.
(Corn(Maize)--Diseases and pests) (Kuvshinov, a.)

VERKHOVASKII, I.

New concepts on the delamination of material in a hydraulic pulsator jig. p. 165.

PRZEGLAD GORNICZY. Katowice, Poland, Vol. 5, no. 4, Apr. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 9, September, 1959. Uncl.

VERKHOVETS, A.L.

Some aspects of the manufacture of refined sugar. Sakh.prom.35 no.3: 32-33 Mr '61. (MIRA 14:3)
(Sugar manufacture)

VERKHOVETS, A.L.

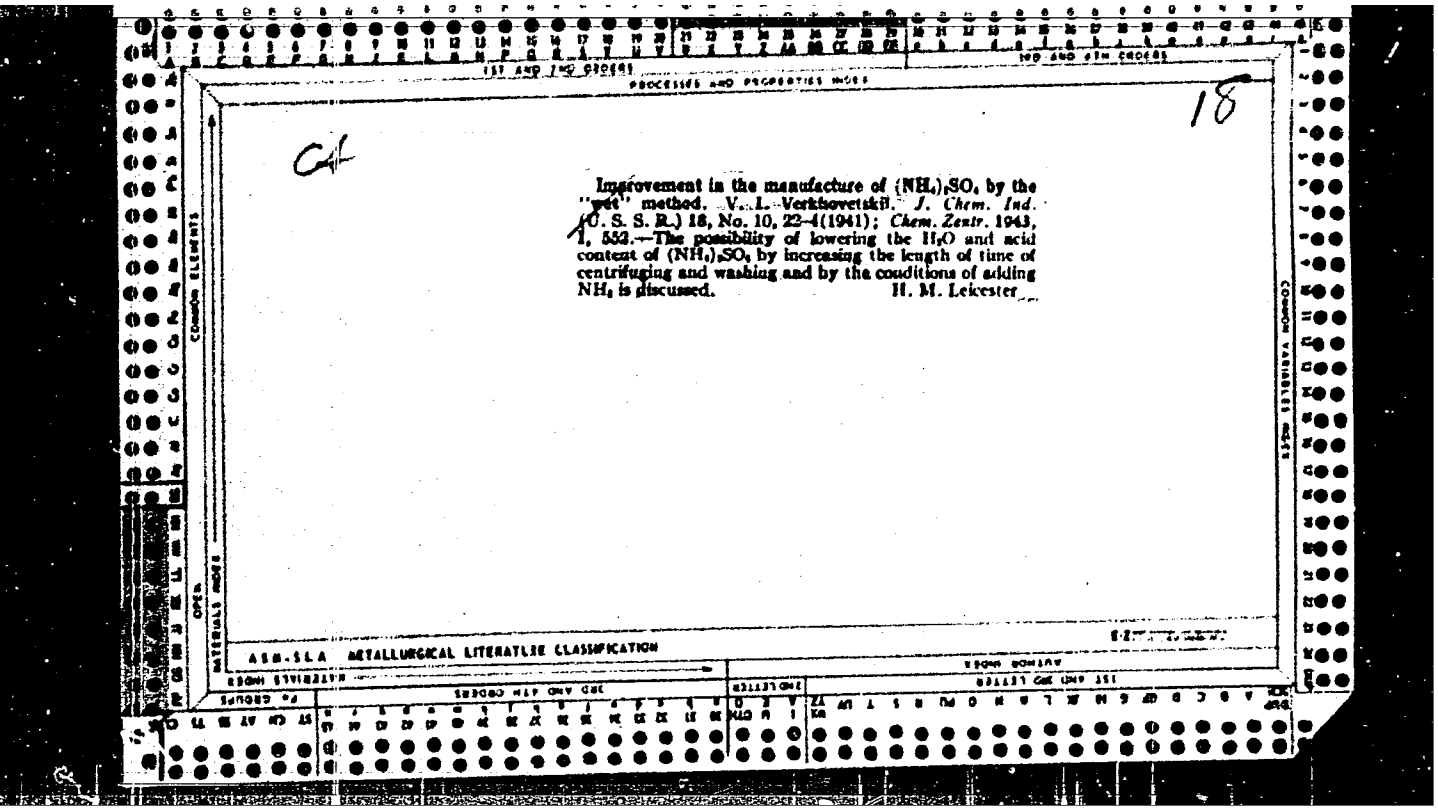
VERKHOVETS, A.L.

Increase quality control of refined sugar. Sakh.prom.31 no.9:65 S '57. (MIRA 10:12)

1. Khutor-Mikhaylovskiy rafinadnyy zavod.
(Sugar industry)

TRUBACHEV, L.I.; ANTIPIN, L.N.; VAZHENIN, S.F.; KRYMOV, A.F.; VERKHOVETS, V.T.

Adjusting the electrolyte of an aluminum bath with a liquid melt. TSvet. met. 38 no.8:58-60 Ag '65. (MCRA 18:9)



Improvement in the manufacture of $(NH_4)_2SO_4$ by the "wet" method. V. L. Verkhovetskiĭ. *J. Chem. Ind.* (U. S. S. R.) 18, No. 10, 22–4(1941); *Chem. Zentr.* 1943, I, 552.—The possibility of lowering the H_2O and acid content of $(NH_4)_2SO_4$ by increasing the length of time of centrifuging and washing and by the conditions of adding NH_3 is discussed. H. M. Leicester

SOV/19-58-6-163/685

AUTHOR: Ulanovskaya, T.L.Ya., and Verkhovin, A.A.

TITLE: A Method of Measuring the Delay Time of Delay Lines (Sposob izmereniya vremeni zaderzhki liniy zaderzhki)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 6, p 39 (USSR)

ABSTRACT: Class 21a^4, 71. Nr 113565 (557156 of 8 Sep 1956). Submitted to the Committee for Inventions and Discoveries at the Ministers Council of USSR. A method of measuring the delay time of delay lines, making it possible to take measurements over a wide range and with greater accuracy, consisting of determination of the time delay by the change of the frequency of natural oscillations in an amplifier encompassed by feedback when introduced into the feedback circuit of the delay line being measured.

Card 1/1

SAMOYLOV, Vladimir Fedorovich; KRIVOSHEYEV,M.I., redaktor; VERKHOVINA, T.M., redaktor; SOKOLOVA,R.Ya., tekhnicheskiy redaktor

[Statistical characteristics of television signals and requirements for capacity channels] Statisticheskie svoistva televizionnogo signala i trebovaniia k propusknoi sposobnosti kanala. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1955. 39 p. (Television) (MLRA 9:3)

CHERENKOVA, Yelena Lazarevna; KUZ'MIN, V.A., redaktor; VERKHOVINA, T.M., redaktor; LEDNEVA, M.V., tekhnicheskiy redaktor.

[Distortion of telegraph signals in short wave transmission] Iskazhenilia telegrafnykh signalov pri peredache na korotkikh volnakh. Moskva, Ges.izd-vo lit-ry po voprosam sviazi i radio, 1955. 43 p. (MLRA 9:5)

(Telegraph, Wireless)

DOLUKHANOV, Mark Pavlovich; VASIL'YEV,A.M., redaktor; VERKHOVINA,T.M., redaktor; LEDNEVA,N.V., tekhnicheskiy redaktor

[Introduction to the theory of transmitting information through electric communication channels] Vvedenie v teoriiu peredachi informatsii po elektricheskim kanalam sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1955. 125 p. (MLRA 9:3)
(Telecommunication)

VERKHOVINA, T. M.

KUZ'MIN,V.A., redaktor; VERKHOVINA,T.M., redaktor; SOKOLOVA,R.Ya., tekhnicheskiy redaktor

[Communications engineering; controlled quartz-crystal oscillators and exciters for frequency radiotelegraphy; a manual] Tekhnika sviazi; upravliaemye kvartsevye generatory i vozbuditeli dlia chastotnogo radiotelegrafirovaniia, informatsionnyi sbornik. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1955. 230 p. (MLRA 9:2)

1. Russia (1923- U.S.S.R.) Ministerstvo svyazi. Tekhnicheskoye upravleniye.
(Telegraph, Wireless)

ROZENFEL'D, Yefim Isaakovich; LOKSHIN, A.M., otvetstvennyy redaktor; VERKHOVINA, T.M., redaktor; VEYNTRAUB, A.B., tekhnicheskiy redaktor

[Filtration of harmonics in shortwave transmitters] Fil'tratsiia garmonik korotkovolnovykh peredatchikov. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1956. 42 p. (MLRA 9:11)
(Radio filters)

YUDIN, Anatoliy Ivanovich; YEVLANOV, S.N., nauchnyy redaktor; VERKHOVINA, T.M., redaktor; LEDNEVA, N.V., tekhnicheskiy redaktor

[Impulse methods of modulation in multiple signal telephone systems] Impul'snye metody moduliatsii pro mnogokratnom telefonirovanii. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1956. 54 p. (Telephony) (MLRA 9:8)

VERKHOVININA, L.D., aspirantka; SHALOV, I.I., prof., rukovoditel' raboty

Using the shrinkage properties of polypropylene fibers in the manufacture of warp-knit goods. Tekst. prom. 25 no.9:53-57 S '65. (MIRA 18:10)

1. Moskovskiy tekstil'nyy institut.

VERKHOVININA, L.D., aspirant; TSITOVICH, K.G.; KATSENELENBOGEN, A.M.

Use of polypropylene yarn in the knit goods industry. Tekst.prom. 23 no.11:69-74 N '63. (MIRA 17:1)

1. Moskovskiy tekstil'nyy institut (for Verkhovinina). 2. Glavnyy inzh. Ivanteyevskoy fabriki imeni Dzerzhinskogo (for Tsitovich). 3. Zamestitel' nachal'nika nauchno-issledovatel'skoy laboratorii Ivanteyevskoy fabriki imeni Dzerzhinskogo (for Katsenelenbogen).

VERKHOVINSKIY, R.B. (selo Barabash, Primorskiy kray); MASLOVETS, I.I. (selo Barabash, Primorskiy kray)

Marginal markers for crowns. Stomatologiia 40 no.1:103 Ja-F '61. (MIRA 14:5)

(DENTAL INSTRUMENTS AND APPARATUS)

S/081/62/000/001/015/067
B156/B101

AUTHORS: Verkhovod, B. N., Kozhbanova, M. O., Dedeshko, M. P., Vyatchennikova, N. V.

TITLE: Spectrochemical determination of certain rare earths using the ДФС-3 (DFS-3) spectrograph

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 143, abstract 1D67 (Tr. In-ta geol. nauk KazSSR, v. 4, 1961, 136-138)

TEXT: Rare earth elements (REE) are separated by chemical methods from the corresponding minerals, solutions of which are so treated as to produce the REE in the form of oxalates (the chemical treatment technique is not described). The REE mixture is first diluted in 10-50 times the amount of carbon powder, and then in twice the amount of a powder containing 0.2% Sc as an internal standard. Standards are made from REE oxides on a $CaCO_3$ base. The powders are placed in a hole 4 mm in diameter and 4 mm deep in the lower carbon electrode (the wall thickness remaining is 0.5 mm); the

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Spectrochemical determination of ...

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upper electrode is conical in shape. The spectra are excited in an a.c. arc discharge at 10-12 a. The analysis gap is 3 mm and the exposure time 5 min. The spectra are photographed using a DFS-3 diffraction spectrograph in the 3000-3500 Å region (it has a 0.02 mm slot). The following elements are determined at concentrations between 0.003 and 3.0%: Y, La, Ce, Nd, Sm, Gd, Tb, Dy, Ho, Er, Yb, Lu. Possible superpositions of lines are indicated: [Abstracter's note: Complete translation.]

Card 2/2

LAVRUSHIN, V.F.; VERKHOVOD, N.N.

Synthesis of certain derivatives of the chalcone series and its vinyl analogs. Zhur. org. khim. 1 no.7:1220-1222 Jl '65.
(MIRA 18:11)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.

VERKHOVOD, N.N.

20-2-32/62

AUTHOR LAVRUSHIN, V.F., VERKHOVOD, N.N.

TITLE The Halochromism of Phenyl- and Cyclohexyl- Carbinols. (Galokhromiya fenil- i tsiklogeksilkarbinolov - Russian)

PERIODICAL Doklady Akad.Nauk SSSR, 1957, Vol 115, Nr 2, pp 312 - 314 (U.S.S.R.)

ABSTRACT In a study of the phenomenon of the haolochromism of carbinols of various structure the authors found that acid solutions of these compounds give two types of absorption spectra.Those containing phenyl radicals are characterized by complex absorption curves.These curves contain three and more absorption bands respectively.The curves of tertiary cyclohexanols and aliphatic alcohols possess only one band with a broad curvature in the near visible spectrum.In this connection it was interesting to study the absorption spectra of acid solutions of aromatic carbinols in accordance with the replacement of benzene rings in their molecules by cyclohexane rings.For this purpose the authors made a comparative study of the absorption spectra of triphenyl-,cyclohexyldiphenyl-, dicyclohexylphenyl-, tricyclohexyl-, methyldicyclohexyl- and dicyclohexyl-carbinol.Thdabsorption curves and absorption bands are described and the differences among individual substances in this respect are given.A study of the spectra of phenyl- and cyclohexyl-carbinol in concentrated sulfuric acid showed that triphenylcyrbinol,cyclohexyldiphenylcarbinol and dicyclohexylphenylcyrbinol possesss a complex spectrum of one and the same type. Their curves differ in the number of absorption bands. For sulphuric acid solutions of tricyclohexyl-,methyldicyclohexyl- and dicyclohexylcarbinol absorption spectra of another type were obtained.They are

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characterized by simpler curves with one single absorption band.The development of color on interaction of all carbinols studied here with concentrated sulfuric acid and a decolorization on dilution of the acid solution with water indicate that a typical phenomenon of halochromism has to be dealt with here.This was well investigated in the case of triphenylcarbinol andrepresents a reaction of acid-base interaction.Since other phenyl-and cyclohexylcarbinols behave toward sulfuric acid in the same manner as triphenylcarbinol, it may be assumed that their interaction with this acid takes place in an analogous manner.The different number of bands on the absorption curves of carbinols containing phenylradicals depends on the number of these radicals.This was already observed by the authors in a study of the halochromism of aromatic carbinols.In the case of carbinols without phenyl radicals the absorption curves almost coincide in form and position with one another and with the curves of tertiary coclohexanes and aliphatic alcohols.This furnishes,according to the authors,an additional confirmation of the fact that the curves of all these compounds belong to the carbon ion ---C^+,since the radicals connected with it do not absorb ultraviolet light. (2 ill., 3 Sl.references).

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Card 2/2

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LAVRUSHIN, V.F.; VERKHOVOD, N.N.

Halochromism of phenyl- and cyclohexylcarbinols. Dokl.AN SSSR 115 no.2:312-314 Jl '57. (MIRA 10:12)

1.Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo. Predstavleno akademikom A.N. Nesmeyanovym.
(Alcohols)

VERKHOVOD, N.N.

LAVRUSHIN, V.F.; VERKHOVOD, N.N.

Spectra and halochromism. Part 2:Halochromism of tertiary alicyclic and aliphatic alcohols. Zhur. ob. khim. 26 no.10:2704-2710 O '56. (MIRA 11:3)

1. Khar'kovskiy Gosudarstvennyy universitet.
(Alcohols) (Spectrum analysis)

LITVINENKO, L.M.; GREKOV, A.P.; VERKHOVOD, N.N.; DZYUBA, V.P.

Synthesis of certain halide containing amino- and nitro derivatives of bivinyl. Zhur.ob.khim. 26 no.9:2524-2531 S '56. (MLRA 9:11)

1. Khar'kovskiy gosudarstvennyy universitet.
(Butadiene)