

Vest. mash., #3, p. 72-75, Mr 1956

AID P - 4322

Card 2/2 Pub. 128 - 22/26

of professional, industrial and scientific workers in
these new territories.

Institution : None

Submitted : No date

Российский фонд культуры

32911/8
767.002
.PS

Puti Povysheniya Produktivnosti Truda Na Shakhtakh Kuzbassa
(Methods of Increasing the Productivity of Labor in the Kuzbas Mines, by)
V. E. Popov I K. M. Zvyagintseva. Moskva, Ugletekhnizdat, 1956.
69 P, Diagrams., Graphs, Tables (Nauchno-Proizvodstvennaya Literatura
Po Voprosam Ekonomiki)

MLA

POPOV, V.E.

Main problems in the development of the West Siberian major economic geography region. Izv. AN SSSR. Ser. geog. no.6:29-37 H-D '60.
(MIRA 13:10)

1. Ekonomicheskaya laboratoriya Kemerovskogo sovnarkhoza.
(Siberia, Western--Economic policy)

POPOV, Vladimir Dmitriyevich; BONDARENKO, O., red.; BEZP'YATOV, R., tekhn.red.

[Heat calculation of massecuite vacuum apparatuses; physical fundamentals and methods] Teplovyi rozrakhunok utfel'nykh vakuun-aporativ; izychni osnovy i metodyka. Kyiv, Derzh. vyd-vo tekhn.lit-ry, 1958. 326 p. (MIRA 12:8)
(Sugar industry--Equipment and supplies)
(Evaporating appliances)

POPOV, V.D.; TROYNO, V.P.

Structure and rheological properties of sugar masscutes. Izv. :
vys.ucheb.zav.; pishch.tekh. no.6:67-73 '58. (MIRA 12:5)

1. Kiyevskiy tekhnologicheskij institut pishchevoy promyshlennosti, Kafedra spetsoborudovaniya.
(Sugar manufacture)

25(0)

PHASE I BOOK EXPLOITATION

SOV/2096

Popov, Vladimir Dmitriyevich

Teplovyy rozrakhunok utfel'nykh vakuum-aparativ; fizychni osnovy i metodyka. (Heat Calculation of Masecuite Vacuum Pans; Physical Fundamentals and Methods) Kiyev, Derzhstekhvydav, 1958. 326 p. 1,000 copies printed.

Ed.: O. Bondarenko; Tech. Ed.: R. Bez'yatov.

PURPOSE: This book is intended for engineers and technicians in the sugar industry, designers of sugar plants and masecuite vacuum pans, and students of food-industry vtuzes.

COVERAGE: The author describes results of numerous plant and laboratory experiments dealing with heat transfer and crystallization processes during the boiling of masecuite. On the basis of these results he develops a new method of heat calculations for vacuum pans. The experimental results are presented in the form of em-

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Heat Calculation of Masecuite (Cont.)

SOV/2096

pirical equations and nomograms. The basic process of masecuite boiling and the physical properties of the sirup and masecuite are presented. The book includes results of the author's work carried out during the period of 1947-1956. The author thanks scientific personnel of the KTIKhP and TsINTs Institutes, and personnel of Ukrogolov sukr, Kyivsk'ky drizhdzhovyy zavod (Kiyev Yeast Plant), Odes'ky rafinadny zavod (Odessa Sugar Refinery), Lokhvits'ky tsukrovyy zavod imeni Stalina (Lokhvitsy Sugar Mill imeni Stalin), Gnivans'ky tsukrovyy zavod (Gnivan' Sugar Mill), and the Yagotynsk'ky tsukrovyy zavod (Yagotin Sugar Mill) for their assistance. There are 222 references: 184 Soviet, 11 German, 23 English, 2 Czech, and 2 Polish.

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Heat Calculation of Masseccite (Cont.)

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Card 5/6

POPOV, V.E., inzh.

Kuznetsk Basin is the principal fuel base for ferrous metallurgy in Siberia and the Urals. Izv. vys. ucheb. zav.; gor. zhur. no.8: 50-52 '61. (MIRA 15:5)

1. Kemerovskiy gornyy institut. Rekomendovana kafedroy ekonomiki i organizatsii proizvodstva Kemerovskogo gornogo instituta.

(Kuznetsk Basin--Coke)

POPOV, Vitaliy Erastovich; SHAPIRO, Izrail' Solomonovich; BARGIN, I.P.,
otv.red. [deceased]; PIROGOV, A.I., red.izd-va; ASTAF'YEVA,
G.A., tekhn.red.

[Ferrous metallurgy in Siberia] Chernaia metallurgii Sibiri.
Moskva, Izd-vo Akad.nauk SSSR, 1960. 117 p.

(Siberia--Iron industry)

(MIRA 13:11)

POPOV, V.F., kand.ekon.nauk

Siberia is the third most important link in the third
metallurgical supply center of the U.S.S.R. Izv.vys.uchob.
zav.; chern.met. 2 no.7:139-144 J1 '59. (MIRA 13:2)

1. Kemerovskiy gornyy institut.
(Siberia--Metallurgical plants)

AID P - 4845

Subject : USSR/Engineering
Card 1/2 Pub. 103 - 5/26
Authors : Metelkin, I. V., V. E. Popov, et. al.
Title : Machining of various materials with help of ultrasonic vibrations.
Periodical : Stan. 1 instr., 2, 16-19, F 1956
Abstract : The authors present the principles and the use of ultrasonic oscillation in the processing of various materials. They describe the magnetostrictive emitter, which was built for drilling hard metals like titanium, hardened steels, synthetic precious stones, glass and similar materials. They illustrate the construction, operation, attachments and the abrasives and ingredients utilized in ultrasonic drilling and finishing of hard surfaces. They suggest this method to improve such hazardous and tedious work as engraving, polishing precious stones, etc. Five photos, 2 drawings, 3 graphs and 1 table.

ZVIAGINTSEVA, K.M.; ZENKOV, S.N.; KOZHEVIN, V.G.; POPOV, V.E.; SENDERZON, E.M.:
Prinimali uchastiye: KOKORIN, P.I., prof.; KULIBABA, A.N., dotsent;
LINDENAU, H.I.; ZHURAVLEV, A.M.; STOLBOV, M.V.; CHETYRKIN, M.I.,
otv.red.; KOROVENKOVA, Z.A., tekhn.red.

[Kuznetsk Coal Basin; a statistical handbook] Kuznetskii ugol'nyi
bassein; statisticheskii spravochnik. Moskva, Ugletekhizdat, 1959.
390 p. (MIRA 12:8)

1. Kemerovo. Gornyy institut. 2. Sotrudniki kafedry ekonomiki
Kemerovskogo gornogo instituta (for Zvyagintseva, Popov, Kokorin,
Kulibaba). 3. Kombinat Kuzbassugol' (for Zenkov, Lindenau,
Zhuravlev, Stolbov). 4. Kemerovskiy sovnarkhoz (for Kozhevin).
5. Sibirskoye otdeleniye AN SSSR (for Senderzon).
(Kuznetsk Basin--Coal mines and mining--Statistics)

POPOV, V. **В.**

"Quaternary Deposits of the Katun River Valley in the Central Altay."
Cand Geol-Min Sci, Tomsk State U imeni V. V. Kuybyshev, Tomsk, 1954. (ИЛ, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

POPOV, V. E.

POPOV, V.E.; IL'ICHEV, A.I.

Remarks on the problem of training graduate students in geography
and especially economic geography. Izv.Vses.geog.ob-va 86 no.4:
351-353 J1-Ag '54. (MLRA 7:9)
(Geography--Study and teaching)

POPOV, V.B.; FEITEL'MAN, N.G., redaktor; ANDREYEV, G.G., tekhnicheskii
redaktor

[Experience in reducing the cost of coal in Kuznetsk Basin mines]
Opyt bor'by za snizhenie sebestoimosti uglia na shakhtakh Kuzbassa.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po ugol'noi promysh., 1955.
60 p. (MLRA 9:1)

(Kuznetsk Basin--Coal mines)

POPOV, V. F., Cand Tech Sci -- (diss) "Research into the automatic devices for lubricating on narrow-gauge steam locomotives." /Moscow/, 1960. 16 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Forestry Engineering Inst); 200 copies; price not given; (KL, 25-60, 134)

BALAYEV, D.N.; BEZUKLADOV, V.F.; DERUVYANKO, Yu.G.; IOFFE, A.F.; ISAKOV, I.S.;
MATYES, H.V.; MOISEYEV, A.A.; MEGANOV, V.I.; NOVOZHILOV, V.V.;
PAVLENKO, G.Ye.; PERSHIN, V.I.; POPOV, V.P.; RETIVOV, V.S.

Seventy-fifth birthday of Academician IULIAN Aleksandrovich
Shimanskii. Sudostroenie 24 no.12:66-67 D '58.
(MIRA 12:2)

(Shimanskii, IULIAN Aleksandrovich, 1883-)

KRAVCHENKO, Aleksandr Yakovlevich; POPOV, V.F., prof., doktor
tekhn. nauk, retsenzent; TISHKOVETS, I.V., nauchm.red.;
NIKITINA, R.D., red.

[Mounting propeller shaft and main engine bearings] Non-
tazh opor grebnogo vala i glavnykh dvigatelei. Leningrad,
"Sudostroenie," 1964. 106 p. (MIRA 17:4)

POPOV, V.F.

Organising students' work in the seven-year agricultural schools.
Politekh.obuch. no.2:94 F '59. (MIRA 12:3)

1. Zaveduyushchiy Toguchinskim raypedkabinatom Novosibirskoy obl.
(Manual training)

POPOV, Vladimir Fedorovich; SAGARDA, A.A., dotsent, retsenzent; AZAROV,
A.S., dotsent, nauchnyy red.; APTEKMAN, M.A., red.; KONFOROVICH,
A.I., tekhn.red.

[Technological processes in marine engineering] Obshchaia
tekhnologiya sudovogo mashinostroeniia. Leningrad, Gos.so-
iuznoe izd-vo sudostroit.promyshl., 1959. 306 p. (MIRA 13:3)
(Marine engineering)

M-0

POPOV, V. F.

USSR/Cultivated Plants - Fruits. Berries.
Abs Jour : Ref Zhur - Biol., No 20, 1958, 91817

Author : Popov, V.F.
Inst :
Title : Pears in the Southern Dnestr River Region.

Orig Pub : Sadovodstvo, Vinogradarstvo i Vinodeliye Moldavii, 1957, No 2, 25-28.

Abstract : In order to efficiently distribute pear trees in the Southern Dnestr River region (Moldavian SSR) the morphological peculiarities (direction, degree of branching; length, weight, density) of the roots and the above-the-ground part of the following pear varieties were studied: Bere Ardanpon, Kure, Kaiffer Seedling, Limonka and Ilyinka all of which grow in a wild state and under different soil conditions. It was established that the strongest fibrous skeletal roots and the above-the-ground part of the pear tree are encountered in the bottom land clayey,

POPOV, V. F.

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USSR/Cultivated Plants - Fruits. Berries.

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91817

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Pears in the Southern Dnestr River Region.

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USSR/Cultivated Plants - Fruits. Berries.

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Abs Jour : Ref Zhur - Biol., No 20, 1958, 91817

and non-bog heavy clayey soils with interlayers of sandy loam. The ratio of the crown radius to the root radius fluctuates in the cross-section of varieties and soils from 0.3 to 0.6. The ratio of the long skeletal part of the crown to the skeletal part of the roots fluctuates from 1.2 to 3.2 and the ratio of the tree height to the depth of the roots in the soil from 2.8 to 3.9. -- P.Kh. Kislin.

Card 2/2

POPOV, V. F. Cand. Agr Sci -- ~~(diss)~~ ^{Notes} (diss) "Certain Problems of ~~the~~
~~Culture of Pear~~ in the Southern Dnester Region of Moldavia
in Connection With the Reconstruction of Old Systemless Orchards."
Kishinev, 1957. 16 pp 24 cm. (Min of Agriculture USSR, Kishinev
Agricultural Inst im M. V. Frunze), 100 copies (KL, 26-57, 110)

- 90 -

18

CA

MOLYBDENUM CATALYST FOR THE HYDROGENATION OF HEAVY HYDROCARBONS. V. F. POPOV AND S. B. ANISIMOV. Russ. 42,062, Oct. 31, 1937. Addn. to Russ. 42,062 (C.A. 11, 7200²). Sol. salts of molybdic acid (e. g., NH₄ para-molybdate) are treated according to Russ. 42,062.

ADD-51A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS

COMMON VARIANTS INDEX

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

COMMON ELEMENTS

COMMON VARIANTS INDEX

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

GORBACHV, T.F.; KOZHEVIN, V.G.; KARPENKO, Z.G.; MOLCHANOV, I.I.; POPOV, V.E.;
SOKOLOV, V.D.; SHEIKOV, A.A., otvetstvennyy red.; RATNIKOVA, A.P.,
red.izd-va; BERLOV, A.P., tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Kuznetsk Coal Basin] Kuznetskii ugol'nyi bassein. Ugletekhizdat,
1957. 199 p. (MIRA 11:2)
(Kuznetsk Basin--Coal mines and mining)

POLOV, V. F.

Podgotovka inzhenera-proizvodstvennika k zashchite kandidatskoi dissertatsii
/ Preparation of the production engineer for the defense of his
candidate's dissertation/. Moskva, Sudprmgiz, 1953. 28 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 12 March 1954.

APR 1, 1974

Proletarskiy Kray, 1974; published in the
dlya obshchestva, 1974; 1974; 1974; 1974; 1974;
1974; 1974; 1974; 1974; 1974; 1974;
includes bibliography.

Technical details: 1974; 1974; 1974; 1974;
technical details: 1974; 1974; 1974; 1974.

1974; 1974; 1974.

1974; 1974; 1974; 1974; 1974; 1974;
1974; 1974; 1974; 1974; 1974; 1974.

POPOV, Vladimir Fedorovich, inzhener

[Marine pipe fitting; a manual for brigades and mechanics]
Izgotovlenie i montazh sudovykh sistem i truboprovodov; posobie
dlia brigadirov i masterov. Moskva, Glav. red. lit-ry po sudo-
dytorniui, 1946. 203 p. (MLRA 9:9)
(Marine pipe fitting)

ПОПОВ, ВЛАДИМИР ФЕДОРОВИЧ

Производство и монтаж судовых турбодвигательных установок. Доп в качестве учебника для кораблестроит. вузов. Ленинград. Гос. изд-во судостроит. лит-ры, 1949. 183 p. illus.

Production and installation of marine turboengine plants.

DLC: VM731.P6

SO: Manufacturing and Mechanical Engineering in the Soviet Union. Library of Congress, 1953.

ACCESSION NR: AP4040545

8/0064/64/000/006/0442/0445

AUTHOR: Popov, V. F.; Goncharenko, G. K.

TITLE: Investigation of ultrasonic atomizers of liquids and melts

SOURCE: Khimicheskaya promy'shlennost', no. 6, 1964, 442-445

TOPIC TAGS: ultrasonic atomizer, particle size, particle distribution, drop size measurement, distribution curve, distance of flight, calculation, mathematical determination, ultrasonic amplitude, ultrasonic frequency

ABSTRACT: This study is directed to the determination of particle size and particle distribution in the spray of ultrasonic atomizers. For the determination, this area of the jet spray was divided into concentric rings and a series of adjacent cuvettes was arranged across the diameter of the jet to collect the liquid so that 2 cuvettes represent each annular area. The density of the jet ρ in each ring can be determined from the volume of liquid collected. The drop size was determined directly by microscopic measurement of samples collected on slides coated with paraffin and then with a vaseline-transformer oil mixture in which the drops remained spherical, suspended and non-coalesced. The mean diameter of the

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ACCESSION NR: AP4040545

drops in each annular zone gave the fineness of atomization in that zone. The particle size was determined from these values by the formula:

$$\bar{d}_{v,s} = \frac{\sum \bar{d}_p^3 \frac{\psi_p / \rho}{d_{kp}^2}}{\sum \bar{d}_p^2 \frac{\psi_p / \rho}{d_{kp}^2}} \quad \bar{d}_{v,p} = \left(\frac{\sum d_{kp}^3 n_{kp}}{\sum n_{kp}} \right)^{1/3} \quad (1)$$

where \bar{d}_{kp} is the mean cubic diameter of drops in the corresponding annular zone and f_p is the area of the ring. The mean volume-surface diameter of the drops was determined by the empirical formula:

$$\bar{d}_{v,s} = \frac{0,252}{A} \sqrt[3]{\frac{3Q\eta}{\pi D_p^2 f^3 g \cos \alpha}} \quad (2)$$

where Q is amount of liquid consumed, A is the amplitude of the vibration of the working surface of the nozzle, f is the frequency of the vibration, η = dynamic viscosity of the atomized liquid, σ = surface tension at liquid-gas interface,

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D = external diameter of the working section of the atomizer nozzle, ρ_l = liquid density, g = accelerated force of gravity and α = angle between surface of nozzle and the vertical. From this relationship it is seen the required amount of atomization can be obtained by changing the acoustical parameters A and f . Volume distribution curves can be drawn from the equation:

$$\frac{dG_i}{dy} = \frac{\beta}{\sqrt{\pi}} \exp(-\beta^2 y^2)$$

where G = volume portion of drops with diameter less than d_i , $y = \ln \frac{ad_i}{d_m - d_i}$ distribution function, a = distribution parameter, d_m = maximum dimension of drops in spray, S = coefficient characterizing uniformity of dispersion. The distance of flight of droplets of a determined diameter was approximated from the equation:

$$S = \frac{L \pi^d}{r} \left(\sqrt{Re} - \sqrt{6} \operatorname{arctg} \frac{\sqrt{Re}}{\sqrt{6}} \right)$$

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where ρ_r = density of the gaseous media, $Re = \frac{ud}{\nu}$, u = starting rate of flight of drops and ν = kinematic viscosity of the gaseous media. Calculated and experimentally determined values were in good agreement as shown in fig. 1. Orig. art. has: 4 figures and 5 equations.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP, GP

NO REF SOV: 005

OTHER: 001

Card 4/4

1001-V. V. 1

BARIT, G.Yu.; DOROSHENKO. P.A.; ZELENKO. T.W.; POPOV, V.F., professor,
doktor tekhnicheskikh nauk; ROKHLIN, A.G.; POMORSKIY. A.N., inzhener,
retsensent; KAYDALOV, L.A., inzhener, retsensent; GLAZOV, G.A., inzhener,
retsensent.

[Technology of machine construction on ships] Tekhnologiya sudovego
mashinostroeniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.
i sudostroit. lit-ry. Pt. 1. 1954. 455 p., Pt.2. 1954. 303 p.
(Marine engines) (Steam boilers, Marine) (MLRA 7:7)

ZVEREV, A.G.; POPOV, V.F.; FADEYEV, I.I.; BABUSHKIN, V.I.; BERLOVICH, I.L.;
BOCHKO, A.M.; BURLACHENKO, S.Ye.; GARBUZOV, V.F.; DMITRICHEV, P.Ya.;
DUNDUKOV, G.F.; ZLOBIN, I.D.; KOROVUSHKIN, A.K.; KORSHUNOV, A.I.;
KUZIN, M.G.; KUTUZOV, G.A.; LYSKOVICH, A.A.; MASHPAKOV, A.M.;
MIKHAYEV, V.Ye.; NIKEL'BERG, P.M.; POSKONOV, A.A.; ROMANOV, G.V.;
SOSIN, I.F.; SOSNOVSKIY, V.V.; POVOLOTSKIY, M.M.; URYUPIN, P.A.;
KHARIONOVSKIY, A.I.; CHULKOV, N.S.; SHESHERO, N.A.; SHITOV, A.P.;
SHUVALOV, A.M.; YANBUKHTIN, K.Kh.

Arsenii Mikhailovich Safronov; obituary. Fin.SSSR 18 no.11:95
N '57. (MIRA 10:12)

(Safronov, Arsenii Mikhailovich, 1903-1957)

POPOV, Vladimir Fedorovich, prof.; MARKOV, inzh., retsenzent.; KUDRYAVTSEV, inzh.,
retsenzent.; IVANOV, zavodskiy spetsialist.; VASILENKO, zavodskiy
spetsialist.; KHARCHENKO, zavodskiy spetsialist.; BROSHETIN, zavodskiy
spetsialist.; KOSACH, zavodskiy spetsialist.; ZVORYKIN, zavodskiy
spetsialist.; SUSLENNIKOV, zavodskiy spetsialist.; KUDRYABTSEV,
F.A., otv. red.; ALEKSEYEVA, M.N., red.; SHISHKOV, L.M., tekhn. red.

[Marine fitter] Sudovoi slesar'-montazhnik. Izd. 2., dop. i perer.
Leningrad, Gos., soluznoe izd-vo sudostroit. promyshl., 1958. 161 p.
(MIRA 11:12)

(Marine engineering)

POPOV, V.F., inzh.

Building up worn ship parts by electric metal spraying. Proizv.-tekhn.
sbor. no.3:67-76 '59. (MIRA 13:10)

1. Zavod imeni 40-y godovshchiny Oktyabrya.
(Ships--Maintenance and repair) (Metal spraying)

POPOV, Vladimir Fedorovich; STRUKOV, E., red.; KLIMOVA, T., tekhn.
red.

[Disturbers of the dead calm] Vozmutiteli spokoistviia. Mo-
skva, Gos.izd-vo polit.lit-ry, 1961. 30 p. (MIRA 15:1)
(Labor and laboring classes)

POPOV, V.F.

Measures of the Leningrad Province Economic Council for improving
the quality and introducing new goods for recreational and cul-
tural purposes and for households. Biul.tekh.-ekon. inform.
no.3:76-77 '61. (KIRA 14:3)
(Leningrad Province--Industrial management)

POPOV, V.F.

Ultrasonic atomizer for fluids and salts. Khim. prom. [Psk] no. 1:
39-40 Ja-Mr '65. (MIRA 18:4)

POPCOV, V.F.; GOMCHARENKO, G.K.

Testing of ultrasonic atomizers for liquids and solids. *Tr. Vsesoyuzn. nauch. issled. inst. khim. prom. no.6:442-445* Je '64. (MIRA 12:7)

POPCV, V.F.; GONCHARENKO, G.K.

Development and testing of ultrasonic atomizers of liquids and melts.
Izv.vys.ucheb.zav.; khim. i khim.tekh. 8 no.2:331-337 '65.
(MIRA 18:8)

L. Khar'kovskiy politekhnicheskii institut imeni Lenina, kafedra
"Protsessy i apparaty khimicheskikh proizvodstv".

POPOV, V.F.

Protective mask of a virologist. Vop. virus. 10 no.4:493
Iz-ig '65. (MIRA 18:8)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR,
Moskva.

POPOV, V.F.

Evaluation of the quality of atomization obtained in ultrasonic
dispersion of liquids and melts. Khim. prom. 40 no. 12:892-901
D '64. (MIRA 18:2)

L 59285-65 EWT(1)/EWT(m)/EPF(c)/ENG(s)-2/ENG(v)/EPR/EPA(w)-2/I Pe-S/Pr-4/Ps-4/
Pw-4 RHH/uu

ACCESSION NR: AP5015575

UR/0153/65/008/002/0331/0337

AUTHOR: Popov, V. F., Goncharenko, G. K.

TITLE: Development and study of ultrasonic atomizers of liquids and melts

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 8, no. 2, 1965, 331-337

TOPIC TAGS: atomizer, ultrasonic vibration, spray nozzle 23

ABSTRACT: Basic types of ultrasonic atomizing nozzles and their applications are described, and dimensional analysis is used to determine the main parameters involved in the process of ultrasonic atomization of a film of liquid. Experiments showed that atomization forms a polydisperse system of droplets; the boundaries of this system range from 9 to 300 μ . In most cases, the droplets are spherical, and their average diameter was used in the calculations. From energy considerations and experimental data, the following functional relationship was derived:

$$\bar{d} = \varphi(b, f, A, \rho, \sigma)$$

(1)

where \bar{d} is the average diameter of the droplet, m; f is the frequency of the ultrasonic vibrations, 1/sec; A is the amplitude of the vibrations, m; and σ is the surface tension.

Card 1/2

44
43
B

L 53285-65

ACCESSION NR: AP5015575

n/m. A combination of the experimental data and dimensional analysis led to the following formulation of the above equation:

$$\frac{\bar{d}}{t} = C \left(\frac{c}{\rho \cdot f \cdot \lambda^2} \right)^{\frac{1}{3}} \quad (2)$$

where C is a coefficient. The latter equation was used to process about 80 experiments, most of which were carried out with water. Use of dimensional analysis made it possible to establish a more accurate relationship between the acoustic parameters, thickness of the dispersed film, and physical properties of liquids and melts than was heretofore possible by using the acoustical theory of wave formation. Orig. art. has: 4 figures and 6 formulas.

ASSOCIATION: Kafedra protsessy i apparaty khimicheskikh proizvodstv, Khar'kovskiy politekhnicheskii institut im. V.I. Lenina (Department of Industrial Chemical Processes and Equipment, Khar'kov Polytechnic Institute)

SUBMITTED: 31Jan64

ENCL: 00

SUB CODE: GP, IE

NO REF SOV: 005

OTHER: 007

Card 2/2 *Mc*

POPOV, V.F.

Glucosaminidase: For liquids and melts. Biol. tekhn.-ekon.
inform. Gen. nauch.-issl. nauch. i tekhn. inform. 17 no.9:
21 3 1961 (MIRA 18:1)

POPOV, Vladimir Fedorevich; SEMVOENKO, D.D., inzh., rezensent;
TISHKOVETS, I.V., inzh., rezensent; NIKITINA, A.L.,
red. ; MARKOV, A.P., redakt. red.

[Mounting of marine power plants] Montazh sudovykh silo-
vykh ustanovok. Leningrad, Sudostroenie, 1962. 246 p.
(MIRA 18:1)

L 11775-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b) ESD(gs) MJW/JD/MLK

ACCESSION NR: AT4048718

S/0000/64/000/000/0222/0225

AUTHOR: Savitskiy, Ye. M. (Professor, Doctor of chemical sciences), Popov, V. F.,
Keys, N. V.

TITLE: The effect of rare earth metals on the structure and properties of construction
steels

SOURCE: Vsesoyuznoye soveshchaniye po splavam redkikh metallov, 1963. Voprosy*
teorii i primeneniya redkozemel'nykh metallov (Problems in the theory and use of rare-
earth metals); materialy* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 222-225

TOPIC TAGS: rare earth metal, steel, alloy steel, steel structure, steel mechanical
property, steel-sulfur content, steel grain, steel impurity, ferrocerium

ABSTRACT: The selection of steels for which addition of rare earth metals (REM)
would be most effective, the quantity of REM to be added and their mode of introduction
into the steel were studied in the following experimental, high-quality alloys prepared in
pilot plants prior to introduction into manufacture: 18KhNVA, 30KhGSA, 12Kh2N4A.
The first alloy had a tendency to form intercrystalline grooves causing "spiders" and
laminations in the quenched metal, while the last 2 had low impact strength. The work

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L 14775-65

ACCESSION NR: AT4048718

was done under manufacturing conditions. Ferrocerium at a 0.1-0.28% concentration was added to the liquid steel in the ladle or during filling of the molds. Small cubes cut from various parts of the ingots served for the tests. The results showed a decrease in sulfur content by 20-30%. The macrostructure of the ingot improved, with a decrease in grain size. The mechanical properties of cast steel improved much more than those of quenched steel. This favorable influence of REM was most pronounced in 18KhNVA whose strength, plasticity and impact toughness improved by 12, 15 and 4%, respectively. The addition had an unfavorable effect on macrostructural flow. REM apparently facilitate the purification of liquid steel but introduce the products of chemical reactions with the impurities as complex refractory oxysulfides which may serve as additional crystallization centers; however, due to their surface-active properties, they also impede the growth of dendrite crystals during primary crystallization. Orig. art. has: 1 table and 2 figures.

ASSOCIATION: None

SUBMITTED: 13Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

Card 2/2

L 16553-65 EWT(1)/EWT(m)/EWA(d)/T/EWP(t)/EWP(k)/EWP(b) Pf-4/Pi-4/Pe-4
AEDC(a)/SSD/AFWL/ASD(f)-2 MJW/JD S/0193/64/000/009/0021/0021

ACCESSION NR: AP4045703

AUTHOR: Popov, V. F.

TITLE: Ultrasonic atomizer of liquids and melts

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 9, 1964, 21

TOPIC TAGS: ultrasonic atomizer, spray, jet, liquid atomizer, melt atomizer, ultrasonic atomizer structure

ABSTRACT: The ultrasonic atomizer is shown in Fig. 1. A magnetostrictive converter 1 of the PMS-15 type with a concentrator serves as a motor. A hollow cylindrical velocity transformer 2 that passes into a thin-wall casing is fixed to the concentrator. The oscillation system is covered by a hood whose lower part contains the film producer. 3. The atomizer was tested at the laboratory of the Severodonetskiy filial NIIKhIMMASH (North Donetskiy Branch of NIIKhIMMASH) and under industrial conditions at the Rubezhanskiy Khimicheskiy kombinat (Rubezhanskiy Chemical Combine). The size of the droplets and the density can be controlled and directed in the desired direction by changing the frequency and amplitude of the

Card 1/3

L 16553-65
ACCESSION NR: AP4005703

2

oscillations. The diameter of the jet even at loads of more than 1 m³/hr does not exceed 1.5 m. The ultrasonic atomizer can operate in corrosive media, at high temperatures, and under pressure. The magnetostrictive converter is fed by an ultrasonic generator of 3 kva. The atomization of 1 m³ of liquid requires about 1 kw of electricity. The velocity transformer is made from titanium or 30KhGSA steel. The atomizer has the following characteristics: productivity, 0.05-2 m³/hr; maximum droplet size, about 300 microns; fluid pressure in the film producer, about 0.3 atm (gauge); operating frequency, 18-22 kilocycles; type of excitation generator, UZG-2.5; height, 480 mm; diameter, 200 mm; weight, 16 kg. The Tallinskiy mashinostroitel'nyy zavod "Tallinmash" (Tallin Machine-Building Plant "Tallinmash") will produce these ultrasonic atomizers in large quantities. Orig. art. has: 1 figure.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 01

SUB CODE: EE, GP

NO REF SOV: 000

OTHER: 000

Card 2/3

L 16553-65

ACCESSION NR: AP4045703

ENCLOSURE: 01

0

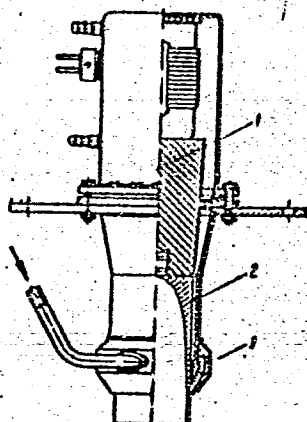


Fig. 1. Ultrasonic atomizer

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L 25289-65 EWT(L)/EWT(m)/EPP(c)/EPA(w)-2/T/EWP(k) PF-L/P1-L/Pr-L/Pab-10 RWH/
 WW

ACCESSION NR: AP5002285

S/0064/64/000/012/0898/0901

AUTHOR: Popov, V. F.

TITLE: Evaluation of the atomizing quality obtained in ultrasonic dispersion of fluids and melts

SOURCE: Khimicheskaya promyshlennost', no. 12, 1964, 898-901

TOPIC TAGS: ultrasonic atomizer, atomizer, dispersion statistics

ABSTRACT: Although the average diameter of a droplet¹ in an ultrasonically atomized fluid dispersion has been derived previously by V. F. Popov and G. K. Goncharenko (Khim. prom, No. 6, 442, 1964), the droplet size distribution must also be determined for practical calculations. A typical ultrasonic atomizer is shown in Fig. 1 on the Enclosure. The end of the bell-shaped vibrator (2) vibrates at critical bending and radial frequencies, as well as at higher harmonics, and disperses the fluid film formed by (3) in the radial direction. Since in practice it is difficult to determine experimentally the differential or even integral size distribution curve for each particular configuration, a semiempirical method for expressing the size distribution is presented. This method uses the formula $\frac{dG}{dy} = \frac{\beta}{\sqrt{\pi}} \exp(-\beta^2 y^2)$

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L 25289-65

ACCESSION NR: AP5002285

(where G - volume fraction of drops with diameter less than d ; y - distribution function; β - coefficient characterizing uniformity of distribution) to describe the distribution with a distribution function $y = \ln \frac{ad}{d_m - d}$ (where a - distribution parameter, d - drop diameter, d_m - maximum drop diameter). The constants β and a can be obtained by solving the equation with the help of the probability integral or by using the logarithmic probability coordinates as shown in Fig. 2 on the Enclosure, where $K = d/(d_m - d)$. Any drop size distribution in these coordinates will be a straight line, and the parameters are easily obtained. β is the slope of the line and varies from 0.8-1.2 in practical cases (higher β means more uniform dispersion). From this curve and the equations, parameters like maximum drop size or average drop size $\bar{d}_{3,2} = \frac{d_m}{1 + a\beta^{0.25}}$ can be established. Orig. art. has 4 figures and 6 formulas.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: IE

NO REF SOV: 006

OTHER: 001

Card 2/3

L. 25289-65

ACCESSION NR: AP5002285

ENCLOSURE: 01

0

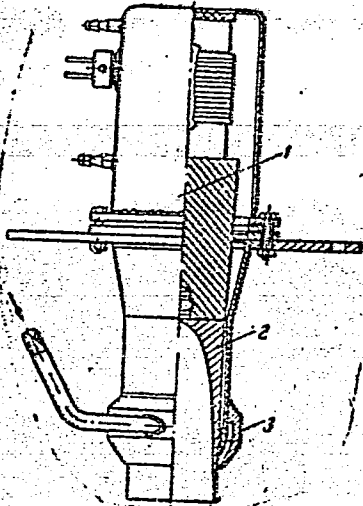


Fig. 1. Ultrasonic atomizer for fluids and melts. 1- concentrator, 2- speed converter, 3- film producer

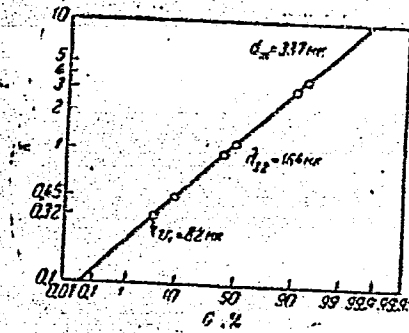


Fig. 2. Volume distribution curve in logarithmic probability coordinates

Card 3/3

L 15194-65 EWT(m)/EWA(d)/EWP(t)/EWP(b) ESD(g#) MJW/JD/JG/WB/MLK
ACCESSION NR: AT4048716 S/0000/64/000/000/0214/0217

AUTHOR: Savitskiy, Ye. M. (Professor, Doctor of chemical sciences), Popov, V. F.,^B
Keys, N. V., Lyubimov, V. N.

TITLE: The effect of rare earth metals and their oxides on the plasticity and anti-corrosive properties of stainless steels.¹⁸

SOURCE: Vsesoyuznoye soveshchaniye po splavam redkikh metallov, 1963. Voprosy* teorii i primeneniya redkozemel'ny*kh metallov (Problems in the theory and use of rare-earth metals); materialy* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 214-217

TOPIC TAGS: rare earth metal,²⁷ rare earth oxide, steel plasticity, steel corrosion resistance, steel macrostructure, steel mechanical property, austenite grain, grain boundary

ABSTRACT: Improvement of the stainless steels Kh18N12M2T¹⁸ and 1Kh18N9T¹⁸, whose ingots had been marred by surface blisters and eddies, was sought by the addition of 0.05-0.18% rare earth metals (REM) or 0.08-0.12% REM oxides (polyrite) under manufacturing conditions (described). The REM oxides were added into the ladle at temperatures of 1540-1570C; the metal remained in the ladle for 10-15 minutes before being poured. Test specimens were evaluated for macrostructure, the content of alpha phase,

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L 15194-65
ACCESSION NR: AT4048716

0
corrosion resistance and mechanical properties; plasticity was determined by the torsion test at high temperatures, the size of the austenite grains was determined microscopically. The additions were found to have a favorable effect on the technological properties of the 2 steels, resulting in an improved ingot surface due to better steel flowability, improved toughness, and disappearance of gross fissures at corners and planes of the bars, which reduced cleaning expenditure by 30-40%. Both the macrostructure and corrosion resistance improved, due to purification at the grain boundaries. Strength and plasticity increased while the anisotropy of the mechanical properties decreased. In the torsion tests at 1200C, the number of rotations required for breaking increased from 10 to 24 and from 13 to 23, respectively. The addition of REM oxides rather than the pure metal or a metal mixture affords considerable savings in the modifier cost. The austenite grain was smaller in the Kh18N12M2T steel after oxide addition. The optimal additions found under these experimental conditions are given. Orig. art. has: 1 table and 1 figure.

ASSOCIATION: None

SUBMITTED: 13Jun64

NO REF SOV: 008

ENCL: 00

OTHER: 001

SUB CODE: MM

Card 2/2

POPILOV, L.Ya.; ALEKSEYEV, A.V., kand.tekhn. nauk, retsenzent;
ZAYTSEVA, L.F., kand.tekhn.nauk, retsenzent; POPOV, V.F.,
inzh., retsenzent; ALENKOV, A.B., inzh., red.; DEHINA,
I.A., red.izd-va; KAPLANSKIY, Ye.F., tekhn. red.

[Manual on electric and ultrasonic methods of processing
materials] Spravochnik po elektricheskim i ul'trazvukovym
metodam obrabotki materialov. Moskva, Mashgiz, 1963. 478 p.
(MIRA 17:3)

SAVITSKIY, Ye.M.; KEYS, N.V.; POPOV, V.F.; LYUBIMOV, V.H.; ZHUKOV, D.G.

Properties of Kh18N12M2t stainless steel containing rare-earth
metal oxides. Metalloved. i term. obr. met. no.8:33-38 Ag '63.
(MIRA 16:10)

1. Institut metallurgii im. Baykova i Chelyabinskiy
metallurgicheskiy zavod.

POPOV, V.F.; SAVITSKIY, Ye.M.

Chemical heterogeneity of structural and stainless steels treated
with rare-earth metals. Metalloved. i term. obr. met. no.8;
59-61 Ag '63. (MIRA 16:10)

1. Institut metallurgii im. Baykova.

L 14957-63

EMP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

ACCESSION NR: AP3004790

8/0129/63/000/008/0059/0061

59
58

AUTHOR: Popov, V. F.; Savitskiy, Ye. M.

TITLE: Chemical inhomogeneity of structural and stainless steels treated with rare-earth metals 77

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 8, 1963, 59-61

TOPIC TAGS: Kh18N12M2T stainless steel, AISI 316T steel, low-alloy steel, 30KhGSA steel, 18KhNVA steel, cerium addition, chemical inhomogeneity, segregation, sulfur segregation, cerium effect

ABSTRACT: The effect of the addition of 0.10—0.28% ferrocerium to Kh18N12M2T stainless steel [AISI 316T] and the low-alloy structural steels 30KhGSA (0.28—0.35% C, 0.80—1.10% Mn, 0.90—1.20% Si, 0.80—1.10% Cr) and 18KhNVA (0.14—0.21% C, 0.25—0.55% Mn, 0.17—0.37% Si, 1.35—1.65% Cr, 4.00—4.50% Ni) on their chemical inhomogeneity in the as-cast and rolled conditions has been investigated. In all steels tested the addition of 0.04—0.08% Ce lowered the sulfur content to 0.008—0.009%, compared with 0.01—0.012% in steels without Ce. In individual macrovolumes of ingots and rolled billets the sulfur content decreased by as much

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L 14957-63

ACCESSION NR: AP3004790

50%. Analysis of specimens cut from the various portions of ingots showed that addition of 0.1% Ce had no marked effect on the segregation of sulfur in carbon Kh18N12M2T. In 30KhGSA and 18KhNVA ingots, Ce promoted the segregation of sulfur in proportion to the amount added, but had no effect on the segregation of carbon and phosphorus. In rolled billets of the 30KhGSA and 18KhNVA steels, sulfur and cerium distribution followed a pattern similar to that in ingots, and their segregation increased with increasing cerium content. Orig. art. has: 3 figures.

ASSOCIATION: Institut Metallurgii im. Baykova (Institute of Metallurgy)

SUBMITTED: 00

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 000

Card 2/2

SOROKIN, P.I.; POZDNYSEV, V.M.; POPOV, V.F.; BALINSKIY, V.R.; LESNIKOVICH, S.S.

Casting magnesium iron crankshafts. Lit. proizv. no.5:8-9 My '62.
(MIRA 16:3)

(Crankshafts and crankshafts)

(Iron founding)

POPOV, Vladimir Fedorovich; TISHKOVETS, I.V., inzh., retsenzent;
KUDRYAVTSEV, F.A., nauchnyy red.; KOROVENKO, Yu.N.,
tekhn. red.

[Shipfitter] Sudovoi slesar'-montazhnik. Izd.3., dop. i perer.
Leningrad, Sudpromgiz, 1962. 206 sp. (MIRA 16:5)
(Shipfitting)

POPOV, Vladimir Fedorovich; DROKHANOVA, Ye.N., red.; POPOV, N.D.,
tekhn. red.

[Joy of difficult roads] Schast'ie trudnykh dorog. Moskva,
Sovetskaia Rossiia, 1963. 154 p. (MIRA 16:5)
(Iron and steel workers)
(Privalov, Mikhail Moiseevich, 1913-)

L 14956-63

ENP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

8/0129/63/000/008/0033/0038

63
61

ACCESSION NR: AP3004786

AUTHOR: Savitskiy, Ye. M.; Keys, N. V.; Popov, V. F.; Lyubimov, V. N.; Zhukov, D. G.

TITLE: Properties of Kh18N12M2T stainless steel containing oxides of rare-earth metals

SOURCE: Metallovedeniye 1 termicheskaya obrabotka metallov, no. 8, 1963, 33-38

TOPIC TAGS: Kh18N12M2T stainless steel, AISI 316T steel, rare-earth metal oxide addition, optimum amount, steel tensile strength, room-temperature ductility, hot ductility, formability microstructure

ABSTRACT: The effect of 0.08 and 0.12% additions of rare-earth metal (REM) oxides on properties of Kh18N12M2T [AISI 316T] stainless steel has been investigated in three production-scale heats. The oxides were put in a 40-ton preheated ladle 5-8 min before tapping the furnace and casting the steel into 4.5-ton ingots. Test specimens were cut from the top, middle, and bottom sections of the ingots. Ductility characteristics of rolled metal were measured both along and across the direction of rolling. Steel ingots with REM oxides were found to have a

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L 14956-63

ACCESSION NR: AP3004786

dense flawless surface requiring only slight surface conditioning and a fine dense macrostructure without traces of segregation. Rolled blooms also had no surface defects. The amount of ferrite in REM-oxide-treated steel was 50 to 75% smaller than in untreated steel, and its distribution along the ingot height was more uniform. Addition of REM oxides improved steel formability and resistance to intercrystalline corrosion and increased the yield by about 0.5%. An addition of 0.08% REM oxides increased the room-temperature tensile strength by 11.5% and the yield strength by 15.4%; no further improvement was observed when the REM oxide content was raised to 0.12%. While the hot ductility of the steel without REM oxides gradually improved as the test temperature increased to 1000 and 1200C, it increased by 1.5-2 times with an addition of 0.08% of REM oxides. In hot ductility torsion tests, steel specimens with 0.08% REM oxides withstood 18 and 28 turns at 1000 and 1200C, respectively, while specimens of untreated steel failed after 8-10 and 12-15 turns. The REM-oxide-treated steel also had a finer austenite grain, lower anisotropy of the mechanical properties, and higher ductility, particularly across the direction of rolling. In general, addition of REM oxides is especially effective in casting large ingots and shaped castings. Orig. art. has: 5 tables.

ASSOCIATION: Inst. of Metallurgy Chelyabinsk Metallurgical Plant

Card 2/32

SAVITSKIY, Ye.M.; KEYS, N.V.; POPOV, V.F.; LYUBIMOV, V.N.; ZHUKOV, D.G.;
MALINOVSKAYA, T.I.

Effect of rare-earth metals on the properties of stainless steel.
Izv. AN SSSR. Otd. tekhn. nauk. Met. i gor. delo no. 1:133-137 Ja-F '63.
(MIRA 16:3)

(Steel, Stainless—Metallurgy)

(Rare earth metals)

POPOV, V. F., "

"The beneficial effect of Ce in melting Kh18Ni12M2T [AISI 316T] stainless steel"

report presented at the Conf. on New Trends in the Study and Applications of Rare Earth Metals, Moscow, 18-20 Mar 63

LYSENKO, N.I.; POPOV, V.F.

The Berriasian of the northern edge of the Baidar
Depression in the Crimea. Dokl. AN SSSR 147 no.1:188-190
N '62. (MIRA 15:11)

1. Institut mineral'nykh resursov AN UkrSSR. Predstavleno
akademikom N.M. Strakhovym.
(Baidar Valley--Geology, Stratigraphic)

POPOV, V.F.

Use of specific gamma globulin for prophylactic and therapeutic purposes in a focus of tick-borne encephalitis. Vop.virus 7
no.4:53-55 JI-Ag '62. (MIRA 15:8)

1. Institut epidemiologii i mikrobiologii imeni N.F.Gamalei AMN
SSSR, Moskva. (GAMMA GLOBULIN) (KIROV PROVINCE--ENCEPHALITIS)

ROZANOV, Nikolay Petrovich; POPOV, V.F., doktor tekhn. nauk, prof.,
retsenzent; KERSTEN, M.N., nauchnyy red.; SMIRNOV, Yu.I., red.;
TSAL, R.K., tekhn. red.

[Technology of manufacturing small propellers] Tekhnologiya izgo-
tovleniia grebnykh vintov malykh razmerov. Leningrad, Sudpromgiz,
1962. 167 p. (MIRA 15:6)
(Propellers) (Marine engineering)

ALIKINA, N.A.; POPOV, V.F.; FADEYEV, A.N.; NAZAROVSKIY, B.N., red.;
SUKMANOVA, K.G., tekhn. red.

[Communists of Perm Province in the effort to carry out the
decisions of the 21st Congress of CPSU] Kommunisty Permskoi
oblasti v bor'be za vypolnenie reshenii XXI s"ezda KPSS; sbornik
dokumentov i materialov. Perm', Permskoe knizhnoe izd-vo, 1961.
261 p. (MIRA 15:7)

1. Kommunisticheskaya partiya Sovetskogo Soyuza. Permskii oblastnoy
komitet. Partiyyny arkhiv.

(Perm Province--Economic conditions)

(Perm Province--Communist education)

L 21834-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/EWP(v)/EWP(t)/EWP(l) IJP(c) JD/JG
ACC NR: AP6004276 SOURCE CODE: UR/0407/65/000/002/0003/0014

AUTHOR: Ostroverkhov, N. T. (Moscow); Popov, V. K. (Moscow)

58
8

ORG: none

TITLE: Electron-beam machining of materials ✓

SOURCE: Elektronnaya obrabotka materialov, no. 2, 1965, 3-14

TOPIC TAGS: electron beam machining, conducting material, semiconductor material, insulating material, electron optics

ABSTRACT: The physical phenomena involved in electron-beam machining (hole piercing) are described, and principal formulas used in calculating the process are given. The development of a Soviet electron-beam machining outfit (see figure below) is reported. The outfit comprises two units: electron gun 1 and two-lens magnetic focusing system 2. The electrons emitted by tungsten 100- μ diameter cathode 3 are accelerated (100 kv, up to 5 ma) in the cathode-anode space. The beam is formed by the cathode, control electrode 4 and anode 5. The accelerated and focused electrons pass through an anode port and move with a constant velocity in the equipotential

Card 1/2

1. POPOV, V. G.
2. USSR (600)
4. Reindeer-Diseases
7. Head diseases of reindeer. Veterinariia 29 no. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

POPOV, V.G., kandidat sel'skokhozyzystvennykh nauk.

Etiology of "fall" necrobacillosis in reindeer. Veterinariia 33 no.9:
40-41 S '56. (MLA 9:10)

1. Ishme-Pecherskaya nauchno-issledovatel'skaya veterinarnaya opytaya
stantsiya.
(Reindeer--Diseases)

POPOV, V.G.
POPOV, V.G., tokar'

Thread cutting devices for lathes. Stroi. i dor. mashinostr. 3
no.2:33-35 F '58. (MIRA 11:2)

1. Khar'kovskiy zavod dorozhnykh mashin.
(Lathes--Attachments)
(Screw-threads)

ARKHANGORODSKIY, A.G., kand.tekhn.nauk; POPOV, V.G., aspirant

Stability of cylindrical shells reinforced with inclined
lateral stiffening ribs. Izv.vys.ucheb.zav.; mashinostr. no.6:
61-61 '59. (MIRA 13:5)

1. Nikolayevskiy korablestroitel'nyy institut.
(Elastic plates and shells)

ACCESSION NR: AP4019020

S/0062/64/000/002/0391/0392

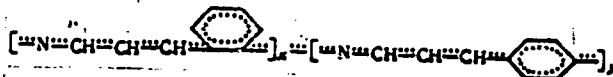
AUTHORS: Topchiyev, D.A.; Popov, V.G.; Kabanov, V.A.; Kargin, V.A.

TITLE: Polymerization of quinoline and autocatalysis forming macro-
molecules with conjugate system

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no.2, 1964, 391-392

TOPIC TAGS: quinoline polymerization, quinoline autocatalysis, quin-
oline, autocatalysis, autocatalytic reaction, quinoline zinc chloride
complex

ABSTRACT: Seeking autocatalytic reactions having general applications
the authors investigated the polymerization of the quinoline-zinc
chloride complex (Qu₁₂ZnCl₂) in the presence of catalytic quantities
of proton-containing substances (HPO₃, Qu₁·HCl) over the temperature
range of 250-370C. They obtained polymer products varying in color
from red to black (depending upon the conditions). They were poly-
quinolines with a structure of



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ACCESSION NR: AP4019020

Thus quinoline polymerization takes place with opening of the hetero-
cycle. Similar to the case of pyridine, the operation is autocataly-
tic, i.e., it is stimulated by "seeding" the mass with a sample of
already polymerized product. It is typical that the best results are
obtained with a "seed" prepared at the same temperature as that of
polymerization. The reaction is highly specific. Orig. art. has 1
figure, one formula, no tables.

ASSOCIATION: Institut neftekhimicheskogo sinteza im. A.V. Topchiyeva
(Institute of Petrochemical Synthesis)

SUBMITTED: 26Nov63 DATE ACQ: 27Mar64 ENCL: 00
SUB CODE: CH NR REF SOV: 002 OTHER: 000

Card 2/2

12722 10
POPOV, V.G.; SADOVSKAYA, G.V.

Myocardial infarctions in defects of the heart. Terap. arkh.
27 no.5:23-30 '55. (MLRA 8:12)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir.deystvitel'nyy chlen AMN SSSR prof. V.N.Vinogradov) I Moskovskogo ordena Lenina meditsinskogo instituta.

(MYOCARDIAL INFARCTION, complications,
cardiovasc.dis.)

(CARDIOVASCULAR DISEASES, complications,
myocardial infarct.)

USSR / Human and Animal Physiology. Blood Circulation. T
The Heart.

Abs Jour: Ref Zhur-Biol., No 22, 1958, 101873.

Author : Popov, V. G.; Gvatua, N. A.
Inst : Not given.
Title : Some Peculiarities of Clinico-Anatomic and Electrocardiographic Changes in Repeated Myocardial Infarctions.

Orig Pub: Terapevt. Arkhiv, 1957, 29, No 3, 51-58.

Abstract: Mortality of repeated myocardial infarction (I) or its complications composes 40.6% of total mortality from myocardial I. The clinical picture of the repeated I is varied; frequently a painless course, worn out forms, or a prolonged and recurrent course are observed. The pathomorphologic picture is characterized by microfocal involvements,

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*Faculty Therapy Clinic, I Moscow Med Inst
in secret*

TAREYEV, Ye.M., prof. (Moskva), otv.red.; MOLCHANOV, N.S., prof., red.; VOTCHAL, B.Ye., prof., red.; BONDAR', Z.A., doktor med. nauk, red.; POPOV, V.G., dotsent, red.; HEVRAIEV, G.A., dotsent, red.; KARPOVA, G.D., red.; GOTOVTSEV, P.I., red.; BEL'CHIKOVA, Yu.S., tekhn.red.

[Proceedings of the 14th All-Union Congress of Therapists in Moscow, 1956] Trudy XIV Vsesoiuznogo s"ezda terapevtov. Pod obshchei red. E.M.Tareeva. Moskva, Gos.izd-vo med.lit-ry, 1958. 735 p. (MIRA 13:5)

1. Vsesoyuznyy s"yezd terapevtov. 14th, Moscow, 1956. 2. Deystvitel'nyy chlen AMN SSSR (for Tareev). 3. Chlen-korrespondent AMN SSSR (for Molchanov).

(THERAPEUTICS--CONGRESSES)

VINOGRADOV, V.N.; POPOV, V.G.; SMETNEV, A.S.

Clinical picture of collapse in myocardial infarction. Terap.
arkh. 33 no.10:3-11 '61. (MIRA 15:1)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvitel'-
nyy chlen AMN SSSR prof. V.N. Vinogradov) I Moskovskogo ordena
Lenina meditsinskogo instituta imeni I.M. Sechenova.
(HEART—INFARCTION) (SHOCK)

SHVEDOV, A. F.; POPOV, V. G., dotsent; SMETNEV, A. S.; BELKIN, V. S.

Problems in the organization of specialized medical care for patients with myocardial infarct complicated by collapse under conditions of first aid in Moscow. Terap. arkh. 33 no.5:108-112 My '61.
(MIRA 14:12)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvite.'nyy chlen AMN SSSR prof. V. N. Vinogradov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I. M. Sechenova i stantsii skoroy pomoshchi Moskvyy (nach. A. F. Shvedov)

(HEART---INFARCTION) (SHOCK)
(MOSCOW---FIRST AID IN ILLNESS AND INJURY)

VINOGRADOV, V.N., prof.; POPOV, V.G., dotsent; SMETNEV, A.S., kand.med.nauk

Treatment of collapse in myocardial infarct. Terap.arkh. 34
no.3:11-19 '62. (MIRA 15:3)

1. Iz kafedry fakul'tetskoy terapii (zav. - deystvitel'nyy chlen
AMN SSSR prof. V.N. Vinogradov) I Moskovskogo meditsinskogo insti-
tuta imeni I.M. Sechenova.
(HEART—INFARCTION) (SHOCK)

POPOV, V.G., red.

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industrial'nykh konstruktsii. Rostov-na-Donu, 1963.
37 p. (MIRA 18:5)

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stroitel'stvu.

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Treatment and hospitalization of patients with myocardial infarct
complicated by collapse. Sov.med. 26 no.1:18-21 Ja '63.
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deystvitel'nyy chlen AMN SSSR prof. V.N.Vinogradov)
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Sechenova i Stantsii skoroy meditsinskoy pomoshchi Moskvy
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(HEART—INFARCTION) (SHOCK)

POPOV, V.G.; BELYAKOVA, T.I.

Prognosis in recurrent myocardial infarct. Ter. arkh. 35 no.7:
28-35 JI '63 (MIRA 17:1)

1. Iz kafedry fakul'tetskoy terapii (zav. - deystvitel'nyy
chlen AMN SSSR prof. V.N.Vinogradov) I Moskovskogo ordena
Lenina meditsinskogo instituta imeni I.M.Sechenova.

VINOGRADOV, V.N.; POPOV, V.G., SMETNEV, A.S.

Some problems in the pathogenesis, clinical aspects and treatment
of collapses in myocardial infarct. Kardiologiya 3 no.4:17-25
Jl-Ag'63 (MIRA 17:3)

1. Iz fakul'tetskoy terapevticheskoy kliniki I Moskovskogo
ordena Lenina meditsinskogo instituta imeni Sechenova.

POPOV, V.G., inzh.; SEMENOV, Yu.N., inzh.

Testing the performance of new stopping units with auger cutters-
loaders in the Moscow Basin. Ugol' 40 no.8:53-57 Ag '65.
(MIRA 18:8)

1. Podmoskovnyy nauchno-issledovatel'skiy i proyektno-
konstruktorskiy ugol'nyy institut.

L 25998-66 EWT(1) IJP(c)

ACC NR: AP6013523

SOURCE CODE: UR/0120/66/000/002/0182/0186

AUTHOR: Kamnev, A. B.; Leonas, V. B.; Popov, V. G.

ORG: Physics Department, MGU (Fizicheskiy fakul'tet MGU)

TITLE: A device for producing fast beams of atoms and molecules

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1966, 182-186

TOPIC TAGS: molecular beam, particle beam, magnetic analyzer, ion source, charge exchange, elastic scattering, particle interaction

ABSTRACT: A device is described for analyzing interatomic forces in the interaction energy range of approximately one electron-volt by measuring scattering of high-energy (10^2 - 10^3 ev) neutral beams through small angles. A block diagram of the experimental set is shown in the figure. Positive ions from source 1 are accelerated and directed into the magnetic analyzer chamber. An ion beam of fixed mass and energy is filtered out by magnetic analyzer 2 and sent to charge-exchange chamber 3. The beam is collimated and ions are eliminated by deflecting condenser 4. The neutral beam then passes into scattering chamber 5 and the change in intensity due to passage through the target is registered by detector 6. The proposed installation is based on elastic scattering of fast beams of neutral particles in a gas for determining the potentials of interatomic and intermolecular interaction. The individual components of the in-

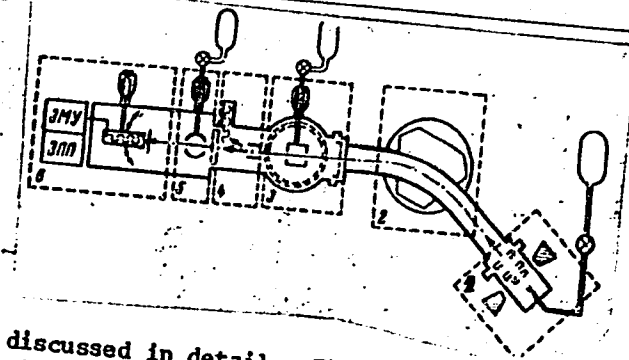
664
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UDC: 539.188.539.198

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ACC NR: AP6013523



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stallation are each discussed in detail. The device was used for studying elastic and inelastic scattering of neutral beams at interaction energies ranging from 0.1 to 100 ev. The proposed installation may also be used for studying scattering of metal and chemically unstable atoms. The authors are sincerely grateful to A. I. Shal'nikov for his interest in the work and useful advice and to L. P. Khavkin for consultation. Orig. art. has: 4 figures and 1 formula. [14]

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POPOV, V.G.

"Comments on M.Z. Neyman's Article 'The Effect of Nutrition on Electrocardiograms of Normal People and Those with Myocardial Infarct'," Terap. Arkhiv., 21, No. 3, 1949.

ZOLOTOVA-KOSTOMAROVA, M.I., professor; CHERNOGOROV, I.A., professor; ~~POPOV,~~
POPOV, V.G.; KURSHAKOV, N.A., professor.

Clinico-anatomical parallels in myocardial infarction. Terap.arkh. 25 no.
2:86-87 Mr-Apr '53. (MLRA 6:5)
(Heart--Infarction)