NOVIKOV, N.Ye., aspirant.

Use of "hot" presses in the drier part of papermaking and paperboard-making machines. Bum.prom. 32 no.4:13-14 Ap '57. (MLRA 10:7)

1. Leningradskiy tekhnologicheskiy institut im. V.M. Molotova.
(Papermaking machinery)

NOVIKOV, N.Ye., kand.tekhn.nauk

Table rolls of the papermaking machine. Trudy LTITSBP no.8: 135-139 '61. (MIRA 16:9)
(Papermaking machinery)

NOVIKOV, N.Ye., kand.tekhn.nauk

Investigating the performance of press felts. Trudy LTITSBP no.11: 212-217 '62. (MIRA 16:10)

NOVIKOV, N.ye.

Pneumatic conveying in woodpulp and paper industries. Trudy LTITSBP no.14:124-128 '64. (MIRA 18:5)

NOVIKOV, Nikolay Yevgen'yevich; LEVTOV, Moisey Vul'fovich; BRODOTSKIY, A.I., red.

[Mechanization in the finishing shops and warehouses of finished products of woodpulp industry enterprises] Mekhanizatsiia v otdelochnykh tsekhakh i skladakh gotovoi produktsii tselliulozno-bumazhnykh predpriiatii. Moskva, Lesnaia promyshlennost', 1965. 236 p. (MIRA 18:7)

NOVIKOV, O. [Novykov, O.]

Mine of the future. Nauka i zhyttia 12 no.1:26-28 Ja '63.
(MIRA 16:3)

1. Direktor Donetskogo Gosudarstvennogo instituta proyektirovaniya shakht.
(Donets Basin—Coal mines and mining)

MAKSIMADZHI, A.I., kandidat tekhnicheskikh nauk; NOVIKOV, O.A., inzhener; SOKOLOV, L.G., inzhener.

Technical and economic effectiveness in the use of low-alloy steels for the construction of dry cargo freighters.
Sudostroenie 22 no.10:27-30 O '56. (MLRA 10:2)

(Ships, Iron and steel)
(Freighters)

MAKSIMADZHI, A., starshiy nauchnyy sotrudnik; NOVIKOV, O., mladshiy nauchnyy sotrudnik; SOKOLOV, L., mladshiy nauchnyy sotrudnik

Additional allowances for wear and corrosion in designing low-alloy steel hulls for transport ships. Mor.flot 19 no.3:12-16 Mr '59. (MIRA 12:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut morskogo flota.
(Hulls (Naval architecture))

ZAMAKHOVSKAYA, Aleksandra Grigor'yevna. Prinimal uchastiye NOVIKOV, O.A., inzh. ALEKSANDROV, L.A., red.; SARAYEV, B.A., tekhn.red.

[Fixed assets of the merchant marine] Osnovnye fondy morskogo transportnogo flota. Moskva, Izd-vo "Morskoi transport," 1960. 157 p. (MIRA 13:9)

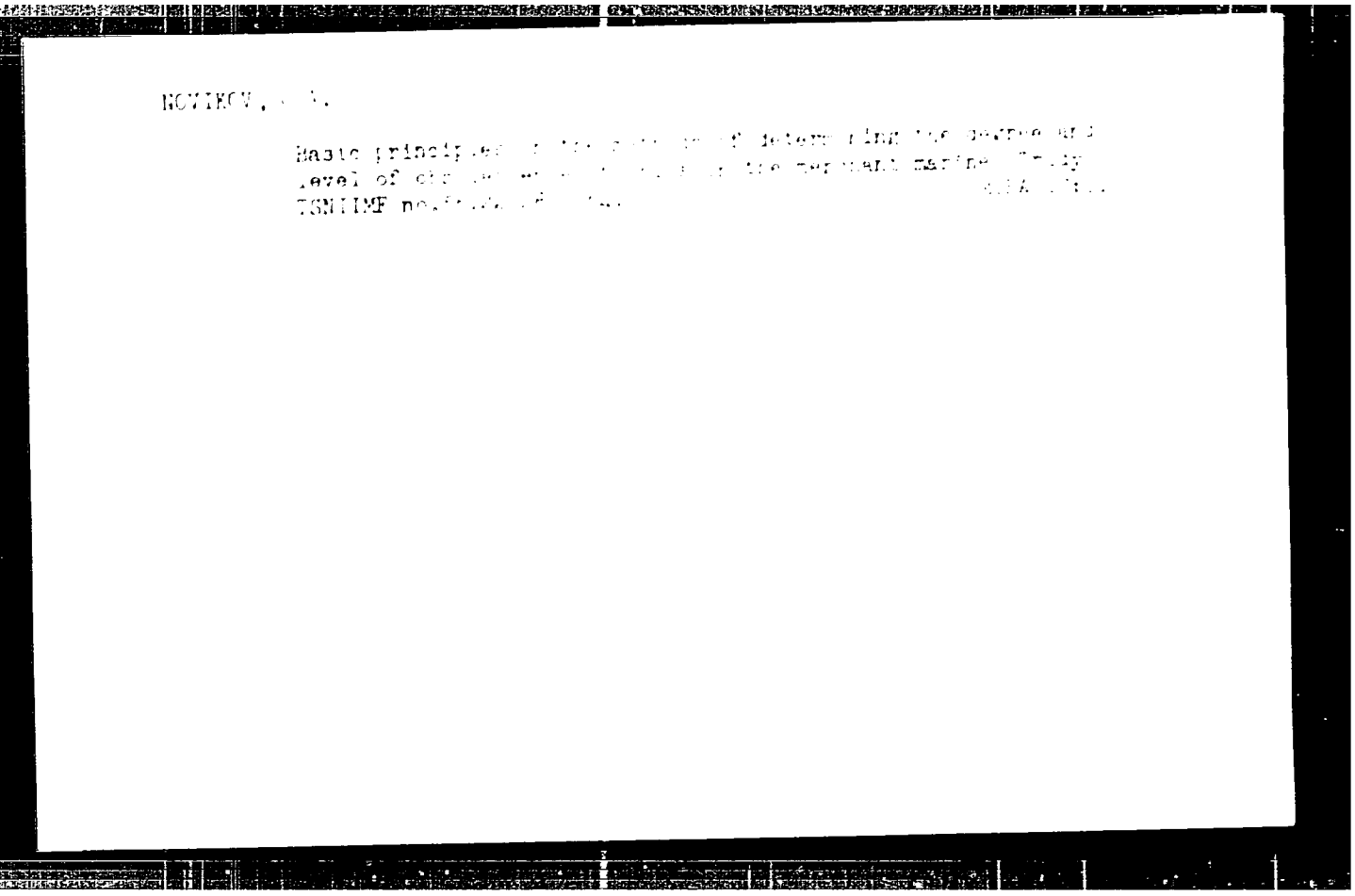
(Merchant ships)

NOVIKOV, O.A.

Methods of determining ship amortization periods. Trudy TSNIIMF no.29:3-15 '60. (MIRA 15:11)
(Ships) (Amortization)

ZAMAKHOVSKAYA, A.G., kand.ekonomicheskikh nauk; NOVIKOV, O.A.

Results of revaluating cargo and harbor service fleets of the merchant marine. Trudy TSNIIMF 7 no.37:70-80 '61. (MIRA 15:3)
(Merchant marine)



NOTICE, [illegible].

Basic principles [illegible] determine [illegible]
level of [illegible] the [illegible]
TSNIIMF [illegible]

NOVIKOV, O.A.

Determining the economic efficiency of modernizing merchant ships. Trudy TSNIIMF no.43:30-38 '62. (MIRA 16:2)
(Merchant ships--Cost of operation)

TURETSKIY, Lev Solomonovich; NOVIKOV, Oleg Aleksandrovich;
VUL'FSON, M.S., red.; KSENOFONTOVA, Ye.F., red. izd-va;
TIKHONOVA, Ye.A., tekhn. red.

[Amortization of capital assets of the merchant marine]
Amortizatsiia osnovnykh fondov morskogo transporta. Moskva,
Izd-vo "Morskoi transport," 1963. 123 p. (MIRA 16:7)
(Merchant marine--Finance)

NOVIKOV, O.A.

Methods of determining and the order of applying new standards for amortization deductions on merchant transport and auxiliary service ships. Trudy TSNIIMF no.48:3-24 '63.
(MIRA 16:8)

NOVIKOV, O.A., kand. ekon. nauk; [illegible], A.A., kand. ekon. nauk

Main methodological principles in working out scientifically based prospective plans for the development of the material and technical foundations of marine transportation. [illegible] [illegible] no.[illegible]:[illegible]-[illegible] '6[illegible]. (MIRA [illegible])

L 42277-65 EPR/EWP(k)/EWP(z)/EWT(d)/EWT(m)/EWP(h)/EWP(b)/T/EWA(d)/EWP(l)/EWP(w)/
EWP(v)/EWP(t) Pf-4 MJW/JD
AM5009838 BOOK EXPLOITATION S/ 44 33 B+1

Maksimadzhi, Aleksandr Isaakovich; Novikov, Oleg Aleksandrovich; Sokolov, Lev Georgiyevich

Low-alloy steel in shipbuilding (Nizkolegirovannaya stal' v sudostroyenii) Leningrad, Izd-vo "Sudostroyeniye", 1964. 299 p. illus., biblio., tables. 1900 copies printed. Reviewers: Candidate of Technical Sciences Ya. I. Korotkin, Engineer G. S. Chuvikovskiy; Editor: E. I. Lisok; Technical editor: Yu. N. Korovenko; Proofreaders: A. F. Andrianova, M. P. Dusheva

TOPIC TAGS: fatigue life, high strength steel, low alloy steel, ship hull

PURPOSE AND COVERAGE: This book was intended for staff members at scientific-research organizations and design bureaus within the shipbuilding industry; it may be useful also to students at shipbuilding vuzes and faculties. The technical and economic feasibility of using steels with elevated strength in marine shipbuilding is investigated, particularly factors affecting the utilization of these steels, questions of setting standards for the strength and durability of

//

of their strength characteristics. Great attention is directed to the weight variation of the hull and of the individual hull elements with the application of steels with different mechanical properties, and to the establishment of a methodology for evaluating the economic feasibility of using high-strength steels for the hulls of transports. The authors have incorporated the results of their research in the period from 1956 to 1963 at the TSNIIMF under the direction of A. I. Nakeimadzhi, and express their gratitude to their colleagues at TSNIIMF I. Ya. Barsik, O. A. Berezhnykh, G. V. Markozov, V. M. Molchanov, I. T. Chevashevskaya, and A. M. Shipkovaya. Others whose assistance is acknowledged gratefully are Ya. I. Korotkin, G. S. Chuvikovskiy, and G. V. Boytsov.

TABLE OF CONTENTS:

Foreword -- 3
Ch. 1. The practice of applying steels of elevated strength in transport shipbuilding -- 5
Ch. 2. Factors affecting the feasibility of applying low-alloy steels -- 19
Ch. 3. Setting standards for the strength of the hulls of transports -- 47

L 42277-65
AM5009838

Ch. 4. Setting standards for the fatigue durability of ship hulls - - 101
Ch. 5. Selection of type of steel for the basic longitudinal braces of a hull - - 140

Ch. 6. Effect of the strength characteristics of hull material on the basic technical-operational characteristics of ships - - 169
Ch. 7. Methodology of determining the economic feasibility of applying steels of elevated strength - - 227
Ch. 8. Economic feasibility of applying steel of elevated strength - - 252
Appendix - - 275
Literature - - 295

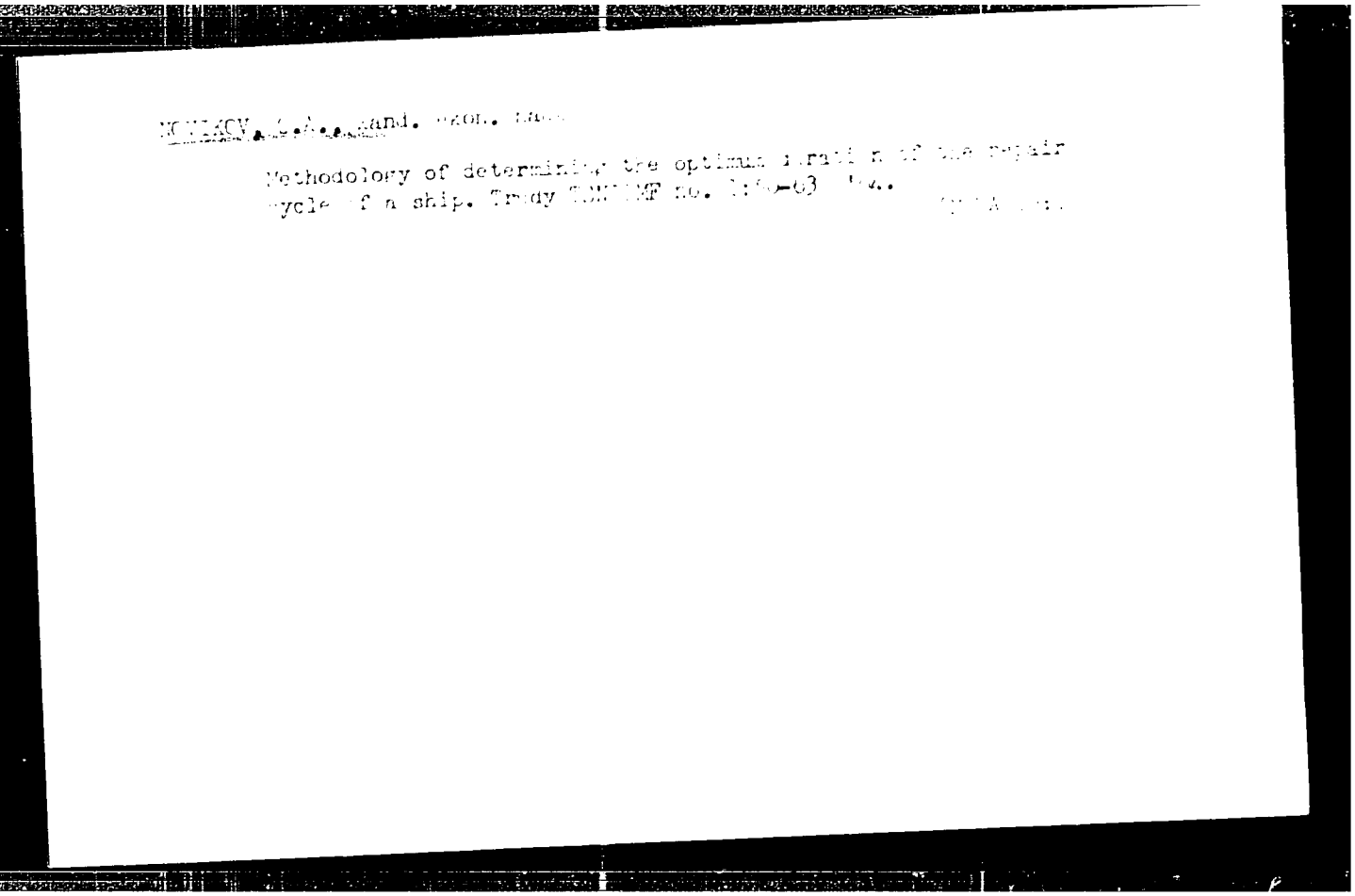
SUB CODE: ME, MM SUBMITTED: 25Jul64 NR REF SOV:064

OTHER:034

Card 3/3

KOVIKOV, O.A., mayor; VISKOV, O.V.

Influence of control on the capacity of a queuing system with rejections. Mor. sbor. 47 no.9:33-37 S '64. (MIRA 18:7)



Methodology of determining the optimum [illegible] of the repair cycle of a ship. Trudy [illegible] no. [illegible]-63 [illegible].

L 07395-67
ACC NR: AP6018900 (N) SOURCE CODE: UR/0375/66/000/002/0034/0039

AUTHOR: Novikov, O. A. (Candidate of technical sciences; Major)

ORG: none

TITLE: Analytical method of estimating the effectiveness of uncontrolled systems

SOURCE: Morskoy sbornik, no. 2, 1966, 34-39

TOPIC TAGS: queueing theory, random process, military science, fire control equipment

ABSTRACT: The solution of many problems, such as warding off an aerial attack and a torpedo-boat attack, is associated with determining the most efficient method of controlling fire power, with an estimate of the effectiveness of various systems when centralized control is disrupted or with independent action of the firing facilities. In this case it is assumed that each target that appears is fired upon by all three firing facilities since their commanders do not know about the action of each other and that each target is in the zone of action of the firing facilities for only a limited time. Such systems are mass servicing systems with a limited expectation time, which the author takes into account when developing his analytical method of estimating their throughput. It is assumed that a Poisson flow of orders is fed into a system consisting of n identical instruments in unit time. The handling time of each order by the instrument is a random quantity distributed by the exponential law. Control of the operation of the instruments is organized so that the arriving order

Card 1/2

L 07395-67
ACC NR: AP6018900

is handled by all free instruments if there are any at a given moment. If all instruments are occupied then the order "stands" in line, the waiting time in which is limited to a certain period, after which the order will leave the line unhandled. The waiting time will be considered a random quantity distributed by the exponential law. In this system the process of the change of its states is Markovian as a consequence of the assumption of the Poisson character of the flow of events. On the basis of this, equations are compiled which characterize the probability of the states of the system. The proposed analytical method yielded completely acceptable results which makes it possible to use this method when solving many very important applied military problems. Orig. art. has: 10 formulas, 2 tables, and 1 figure.

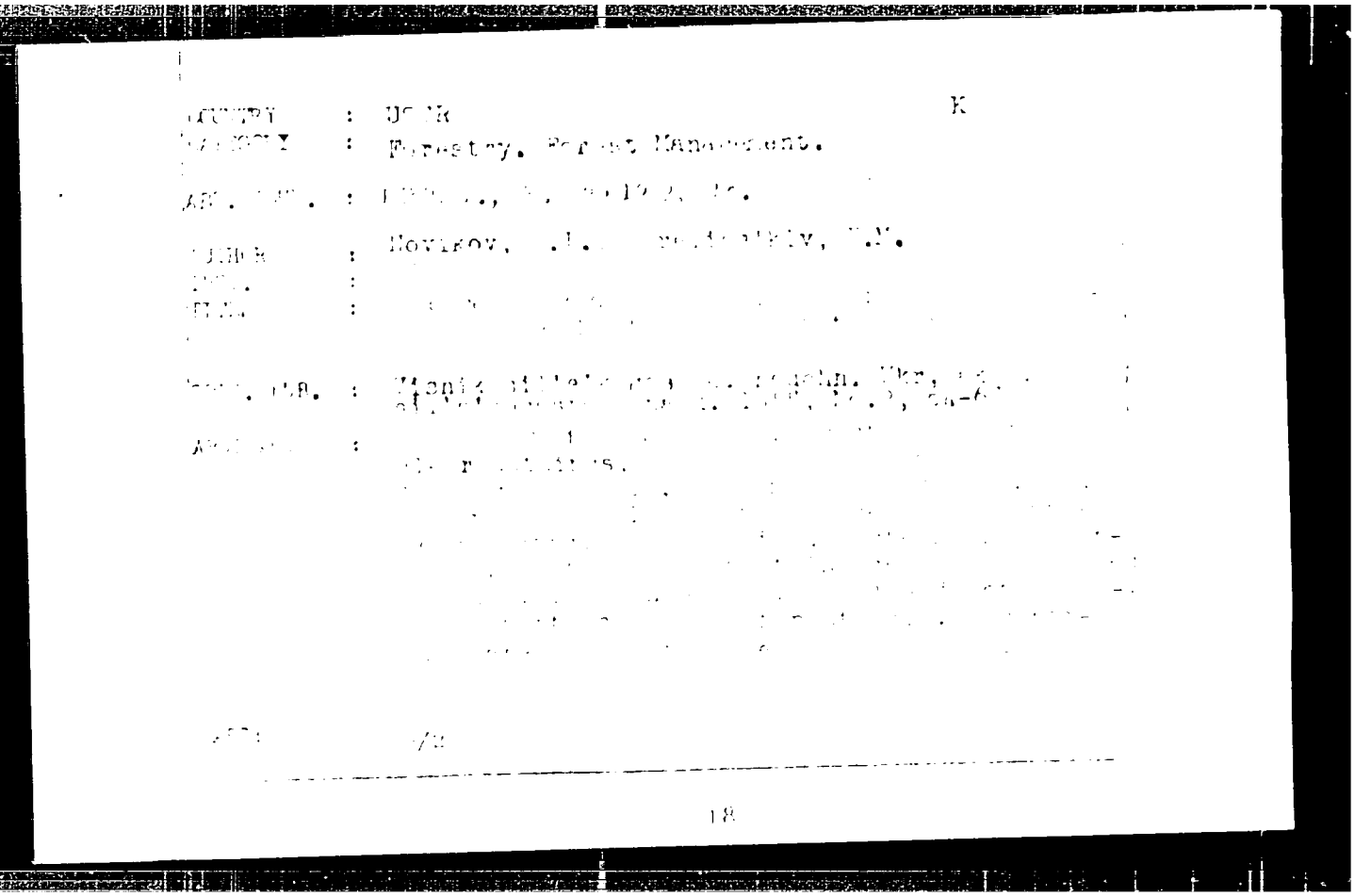
SUB CODE: 12,19/ SUBM DATE: none

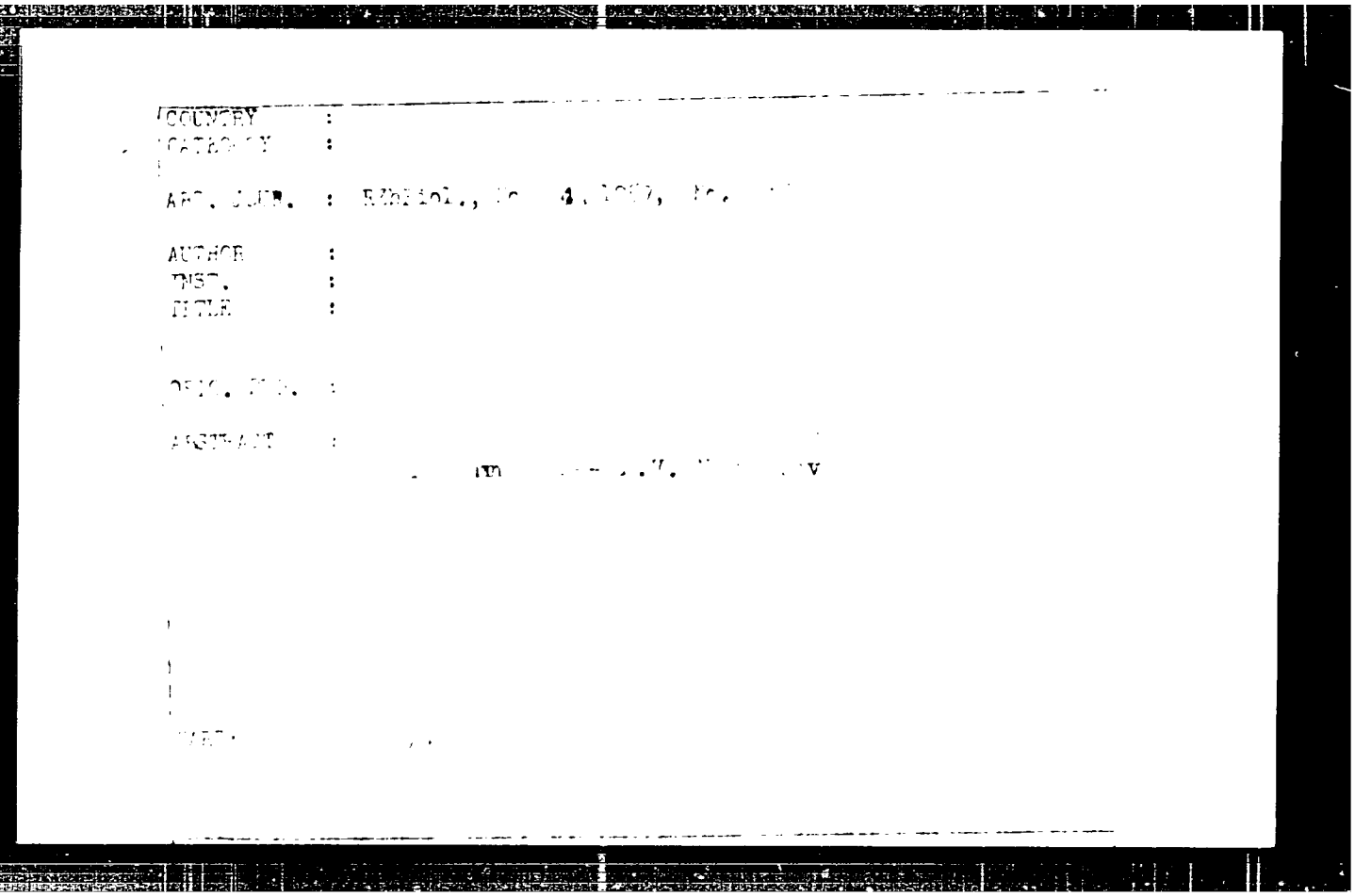
Card 2/2

KHROKOVA, TS.S., inzhener; NOVIKOV, O.F., inzhener.

Welding of tube ends to end plates using the MOTR-54 machine.
Svar.proizv.no.12:17-19 D '55. (MLRA 9:2)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov.
(Pipe--Welding)





COUNTRY :
CATEGORY :

AUTHOR :
INST. :
TITLE :

SOURCE :

ABSTRACT :

NOVIKOV, O. F., and NOVITSKIY, I. F.

"Concerning the use of new Techniques in Scientific Research and Scientific Production by Laboratories of the Institute." Proceedings of Inst. Epidem and Microbiol im. Gamaleya 1954-56.

Personnel Identified as Participants in Sessions of the Scientific Council Held by the Institute During 1954. Inst. Epidem and Microbiol im. Gamaleya AMS USSR

SO: Sum 1186. 11 Jan 57.

KHARLAMOVA, K.N., kand.tekhn.nauk; MORKHOV, M.I., kand.tekhn.nauk; NOVIKOV, O.P., inzh.; KORYAGINA, V.V., inzh.

Purification of nickel and copper plating electrolytes by the separation method. Khim.mash. no.2:23-26 Mr '62. (MIRA 15:2)

(Nickel plating) (Copper plating) (Electrolytes)

KUZIN, V.A.; NOVIKOV, O.P.

New methods for ourifying suspensions in the manufacture of sugar.
Sakh. prom. 32 no. 7:33 Jy '58. (MIRA 11:8)
(Sugar manufacture)

KUTSEV, S.S.; KUZIN, V.A.; NOVIKOV, O.P.; BORISOGLEBSKIY, B.N.

Comparative test data of industrial and pilot plant purification of diffusion juice. Sakh.prom. 33 no.7:76 Jl '59.
(MIRA 12:11)

(Sugar manufacture)

ZUYKOV, V.Ya.; IVANOV, A.M.; KRISTALL, Z.B.; MAKSIMOVA, N.K.; NOVIKOV, O.P.; POTKOV, G.A.; KAIKUNOV, A.Ye., red.; SELEKHOV, P.M., red.; SHUVALOVA, N.S., red.; ZORINA, G.V., red.; VINOGRADOV, Ye.A., tekhn. red.

[Liquid separators for the food industry; handbook-catalog]Separatory zhidkostnye dlia pishchevoi promyshlennosti; katalog-spravochnik. Moskva, 1962. 86 p. (MIRA 15:10)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii mashinostroyeniya. 2. Vsesoyuznyy nauchno-issledovatel'skiy i eksperimental'no-konstruktorskiy institut produvol'stvennogo mashinostroyeniya (for Zuykov, Ivanov, Kristall, Maksimova, Novikov, Potkov).

(Separators (Machines))

ALEKSANDROVA, T.A.; NOVIKOV, O.V.; PILOYAN, G.A.; GEVORKYAN, Kh.D.; BABYSHEV, I.V.

Forsterite refractories from Shorzha dunites. Ogneupory 28 no.11:493-494 '63. (MIRA 16:12)

1. Vsesoyuznyy institut ogneuporov (for Aleksandrova, Novikov).
2. Sevanskaya geologorazvedochnaya partiya (for Piloyan, Gevorkyan, Babyshev).

L 11531-66 EWT(d)/EWT(m)/EPF(n)-2/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)
ACC NR: AP6005278 LJP(c) JD/WW/HW/JO/DJ SOURCE CODE: UR/0413/66/000/001/0017/0017

INVENTOR: Moskalenko, N. D.; Novikov, O. K.; Pavlov, V. V.; Caribov, G. S.; Makhnovskiy, V. S.; Zhizhina, T. S.; Rakhinskiy, G. N.; Shur, I. A.

ORG: none

TITLE: Continuous mill for rolling aluminum strips from liquid metal. Class 7, No. 177395

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 7

TOPIC TAGS: aluminum, aluminum strip, aluminum strip rolling, continuous rolling, rolling mill, liquid metal rolling

ABSTRACT: This Author Certificate introduces a continuous mill for rolling aluminum strips from liquid metal. The mill comprises a continuous casting machine with a mold formed by a metal belt and a wheel, a raw strip guiding stand, a planetary mill and a finishing stand. In order to synchronize the casting and rolling rates, the

Card 1/2 UDC: [669.716:621.746.27] 621.771.237.064

L 14531-66

ACC NR: AP6005278

continuous casting machine is driven by the lower roll of the guiding stand by means of a metal belt (see Fig. 1). Orig. art. has: 1 figure. [WW]

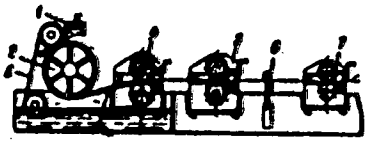


Fig. 1. Continuous mill

1 - Ladle for molten aluminum; 2 - mold wheel; 3 - metal belt; 4 - guiding stand; 5 - planetary stand; 6 - loop former; 7 - finishing stand.

SUB CODE: 11, 13/ SUBM DATE: 06May63/ ATD PRESS: 4198

Card 2/2

NOVIKOV, O. Ya.

"Investigation of the Extinguishing of Arcs in Switches." Cand Tech Sci, Leningrad Polytechnic Inst imeni M. I. Kalinin, Min Higher Education USSR, Leningrad, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: SUM No. 556, 24 Jun 55

SOV 144-58-1-4/17

9(3)
AUTHORS: Motovi[illegible] Y. Y., Docent, Candidate of Technical Sciences, and N[illegible]y, S. Ya., Candidate of Technical Sciences

TITLE: A Device for Measuring the Phase Characteristics of Differential Phase Protectors (Ustroystvo dlya snyatiya fazovykh kharakteristik differentsial'no-faznykh rele)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Energetika, 1958, Nr [illegible], pp [illegible] (USSR)

ABSTRACT: For [illegible] and adjusting output relays and also for determining the biasing angle of differential-phase protecting devices, the phase characteristic is determined which is a dependence of the output relay current and the angle of shift between the current vectors and the line ends, as shown by figure 1. Thereby it is desirable to imitate the input circuits of the protective relay in such a way that the system of phase characteristics of the differential-phase protectors may be produced independently

Card 1/3

S V 143-[illegible]

A Device for Meas[illegible] Differential-Phase Protectors

for [illegible] F r this reason, the authors designed a device for [illegible] the phase characteristic of [illegible] on the principle of [illegible] relay RP-4, as shown by the circuit [illegible] of the polarized relay [illegible] volts from the power [illegible] receives the same volt[illegible] Terminals [illegible] while terminals [illegible] are connected to [illegible] of the transformer in the phase-comparing [illegible] The authors explain the function of this device, which may be used not only for obtaining the phase characteristic of differential-phase protectors, but also for setting the cutout relay [illegible] given blocking angle. The aforementioned operations may be performed prior to installing the

Card 2/[illegible]

SOV 14[illegible]-[illegible]-[illegible]-4/[illegible]

A Device for Measuring the Phase Characteristics of Differential-Phase Protectors

protection devices. The device may be used in laboratories of power distribution systems and educational establishments. There are 2 diagrams and 1 graph.

ASSOCIATION: Kuybyshevskiy industrial'nyy institut imeni V.V. Kuybysheva (Kuybyshev Industrial Institute imeni V.V. Kuybyshev)

PRESENTED: Kafedra elektrostantsiy (Chair of Electric Power Plants)

SUBMITTED: November 17, 19[illegible]

Card [illegible]

2.(1)

[illegible]

TITLE: [illegible]

ORIGINAL: [illegible]

ABSTRACT: [illegible]

AFFILIATION: Kuybyshevskiy [illegible]
(Kuybyshev [illegible]

[illegible]

NOVIKOV, Oleg Yakovlevich, kand. tekhn.nauk; MIKHEYEV, N.I., red.; DURASOVA, V.M., tekhn. red.

[Improvement of high-voltages switches and their drive mechanisms] Modernizatsiia vysokovol'tnykh vykliuchatelei i privodov k nim. Kuybyshev, Kuibyshevskoe knizhnoe izd-vo, 1962. 76 p. (MIRA 16:3)

(Electric switchgear) (Electric cutouts)

DONSKOY, A.V.; ZHERDEV, I.T.; ZOTOV, V.P.; MURATOV, S.M.; NOVIKOV, O.Ya.; OKOROKOV, N.V.; PATON, B.Ye.; SISOYAN, G.A.; SVENCHANSKIY, A.D.

Stepan Ivanovich Tel'nyi; obituary. Elektrichestvo no.1:93 Ja '63. (MIRA 16:2)

(Tel'nyi, Stepan Ivanovich, 1890-1962)

NOVIKOV, P. A., Cand Tech Sci -- (diss) "Basic parameters, frictional forces, and resistance to the motion of bladed loop tree trimmer." Moscow, 1960. 18 pp; with charts; (Ministry of Higher and Secondary Specialist Education RSFSR, Leningrad Order of Lenin Forestry Engineering Academy im S. M. Kirov); 200 copies; free; (KL,26-60, 137)

NOVIKOV, P.A.

Friction in the work of the knife blades of a loop-type limbing saw. Nauch. trudy LTA no.96:113-118 '61. (MIRA 17:3)

GRIGOR'YEVA, A.S., kand.tekhn.nauk; NOVIKOV, P.A., inzh.

Harvesting machinery for the Virgin Territory. Zemledelie 24 no.6:58-64 Je '62. (MIRA 15:11)

1. Vsesoyuznyy institut mekhanizatsii sel'skogo khozyaystva (for Grigor'yeva). 2. TSelinnaya mashinoispytatel'naya stantsiya (for Novikov).

(Virgin Territory—Harvesting machinery)

NOVIKOV, P.A., inzh.; SOVA, Ye.R., inzh.

Device for measuring swelling ground pressure. Shakht. stroi. (MIRA 11:1)
no.12:21-22 D '57.
(Soil mechanics)
(Pressure gauges)

'07/118-58-2-9/19

AUTHORS: Volchok, V.I , Novikov, F.A., Engineers

TITLE: Support Mounters for the Installation of Prefabricated Reinforced Concrete Supports in Horizontal Mining Workings (Kreposkladchiki dlya vozvedeniya sbornoy zhelezobetonnoy krepi v gorizontal'nykh gornykh vyrabotkakh)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr , pp 25-27 (USSR)

ABSTRACT: Different types of support mounters for mechanizing the installation of prefabricated reinforced concrete supports in horizontal mining workings were devised by the Vsesoyuznyy nauchno-issledovatel skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (the All-Union Scientific-Research Institute of Organization and Mechanization of Mine Building - VNIIOMshS). These mounters will cut down labor costs and mechanize the installation of girders and "USP" slabs used as supports in mine galleries. There are adjustable, rolling, suspended, bicycle-type (velosipednyy) and gantry-type mounters. The adjustable type is designed mainly for the mechanized lifting and installing of girders in one track

Card 1/3

Support Mounters for the Installation of Prefabricated Reinforced Concrete Supports in Horizontal Mining Workings

galleries. It consists of a metallic frame supported by two metallic props, each equipped with a winch. The girder is lifted by the two winches and guided into place. These erectors were tested in the "Krasnopol'ye-Glubokaya" and "Belorechenskaya" mines (the Voroshilovgrad Oblast') and found satisfactory for the simplicity of its construction and its efficiency. The more complicated rolling mounter is designed for the erection of supporting walls and girders, but as it obstructs the passage of trolleys, it is recommended for use in mine chambers. It was tested at the Saranskaya Mine Nr 120 of the Karaganda basin. The suspended mounters, constructed at the Novocherkasskiy zavod imeni Nikol'skogo (the Novocherkassk Plant imeni Nikol'skiy) and tested at the "Cherkasskaya-Severnaya" Nr 1 Mine (Voroshilovgrad Oblast'), is designed to install wall supports and girders in one-track galleries without obstructing the passage of trolleys. The bicycle-type (velosipednyy) mounter, tested at the "Vetka-Glubokaya" Mine, is also designed for one-track galleries.

 The portal support erector, tested at the same mine, is de-

Support Mounters for the Installation of Prefabricated Reinforced Concrete Supports in Horizontal Mining Workings

signed for two-track galleries and can install larger types of reinforced concrete slabs. Detailed descriptions of all these types are given. No final decision on the serial production of any of these types has yet been reached. There are 5 photos.

1. Mining engineering 2. Underground structures 3. Reinforced concrete--Applications

Card 2/2

L 41007-66 EWT(1),T IJP(c) AT/DS

ACC NR: AP6018729 SOURCE CODE: UR/0057/66/036/006/1040/1048

AUTHOR: Zolototrubov,I.M.; Kiselev,V.A.; Kovikov, Yu.M.; Ryzhov, N.M.; Tolok, V. T.

ORG: none

TITLE: A coaxial plasma gun in a longitudinal magnetic field

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1040-1048

TOPIC TAGS: plasma gun, hydrogen plasma, contamination, longitudinal magnetic field,

ABSTRACT: In an effort to improve the purity and the uniformity with regard to velocity, density, and total number of particles of the plasma bursts from a coaxial plasma gun, the authors investigated the influence of a longitudinal magnetic field on the performance of the gun. It was anticipated that the rotation of the plasma within the gun, due to the Lorentz force on the radial current in the longitudinal magnetic field, would improve the azimuthal uniformity of the current sheet. The diameters of the inner and outer stainless steel electrodes of the 70 cm long coaxial gun were 3 and 7 cm, respectively. The gas (0.1 cm^3 of hydrogen) was admitted through six openings in the inner electrode near its center, and the gun was fired by the 20 kV discharge of a 12 microfarad capacitor. The plasma gun was located in the uniform portion of the field of a 1.4 m long solenoid. The magnetic field rose to its maximum strength of up to 8 kOe in 28 millisec and subsequently decayed exponentially with a time constant of 72 millisec. The processes taking place within the plasma gun

Card 1/2 UDC: 53[illegible].9

L 41007-66

ACC NR: AP6018729

were investigated with the aid of a magnetic probe and by recording the discharge current, and the plasmas ejected from the gun were investigated with an external magnetic probe, a spectrograph, a photomultiplier, a monochrometer with the aid of which the intensities of different spectrum lines were displayed on an oscillograph, and a thermal probe. The rather involved processes that took place within the gun are discussed at some length. The rotation of the plasma gave rise to a magnetic trap within which a considerable portion of the gas was confined. Two plasma bursts were usually produced, but under some conditions it was possible to obtain only one burst containing some 2×10^{16} particles at a density of 2.4×10^{13} cm^{-3} and moving with a velocity of 3×10^{7} cm/sec. The purity of the plasma bursts increased with increasing longitudinal magnetic field strength; at a magnetic field strength of 6.4 kOe there were no lines due to electrode materials in the spectrum, and the lines due to carbon, oxygen, and nitrogen were considerably weaker than in the spectra of plasmas produced without the magnetic field. It is concluded that with the aid of a longitudinal magnetic field one can obtain from a coaxial plasma gun pure high energy plasmas free of slow and contaminated tails, but at the cost of inefficient use of the energy stored in the capacitor bank. The authors thank O.M.Shvets, and Ya.F.Volkov for discussions and criticism. Orig. art. has: 3 formulas and 7 figures.

SUB CODE: 20/ SUBM DATE: 26Apr65/ ORIG. REF: 004/ OTH REF: 002

Card 2/2 hs

[illegible], P. A.

"Effect of rate of motion of the body on the heat- and mass-transfer in a vacuum."

Report presented at the 1st All-Union Conference on Heat- and Mass-transfer, Minsk, USSR, 5-9 June 1961

27551
S/170/61/004/010/005/019
B103/B125

17 4410

AUTHOR: Novikov, P. A.

TITLE: The sublimation of bodies moving in a vacuum

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 4, no. 10, 1961, 36 - 39

TEXT: Heat and mass transfer was investigated experimentally on naphthalene balls. Experimental apparatus: A small table is mounted to the axle of an electromotor in a vacuum chamber. A 10 mm thick naphthalene ball is suspended on a spring balance which is attached to the table. When the motor rotates the table, the centrifugal force of the naphthalene ball will expand the spring balance. Owing to sublimation, the expansion of the balance will more and more decrease during the experiment. On the basis of the decrease in expansion and of the initial and final weights of the ball one may draw conclusions on the quantity of sublimate, on the sublimation rate, and, consequently, on the coefficients of heat and mass transfer. Data: Pressure in the vacuum chamber 0.07 - 760 mm Hg, temperature -20°C, velocity of the naphthalene balls up to 50 m/sec, maximum number of revolutions per second: 45. The measured values are rendered

Card 1/3

AID Nr. 990-10 14 June

EFFECT OF BODY VELOCITY ON HEAT AND MASS TRANSFER IN VACUUM (USSR)

Novikov, P. A. IN: Teplo- i massoperenos, tom II: Teplo- i massoperenos pri fazovykh i khimicheskikh prevrashcheniyakh (Heat and mass transfer, v.2: Heat and mass transfer during phase and chemical transformations). Minsk, Izd-vo AN BSSR, 1962. 215-221. S/862/62/002/000/023/029

The mechanism of heat and mass transfer in the pressure and velocity ranges from 742 to 0.07 mm Hg and from 1 to 50 m/sec, respectively, has been investigated experimentally by using a specially designed installation and a test body consisting of naphthalene deposited on a textolite sphere 10 mm in diameter. The ambient temperature and the temperature of the test-chamber walls were maintained constant at 20°C. Measurements were made of the total pressure in the test chamber, sublimation intensity, temperature of the evaporating surface, partial vapor pressure on the body surface, partial vapor pressure in the ambient medium, and body velocity. The results indicate that at body velocities up to 10 m/sec a considerable increase in sublimation intensity takes

Card 1/2

EFFECT OF BODY VELOCITY [Cont'd] S/862/62/002/000/023/029

place. However, a further increase in velocity has little effect on sublimation. Under forced convection the maximum sublimation occurs at a pressure of $p \sim 1$ mm Hg. At $p < 1$ mm Hg the sublimation intensity decreases, and at $p = 0.09$ mm Hg it becomes independent of the velocity. In the pressure range from 40 to 0.1 mm Hg the process of heat and mass transfer in the boundary layer takes place as a result of molecular and turbulent diffusion. The following conclusions are reached. 1) The boundary layer on a sublimating body represents a principal diffusion resistance to heat and mass transfer. 2) In a moving sublimating body the thickness of the boundary layer decreases, and at a certain velocity it becomes turbulent, which results in an increase of evaporation intensity. 3) Sublimation represents a gradual process with unequal probability for transformation of particles to vapor. Molecules are combined and leave the crystals only at definite surface points. This is indicated by the riddle surface of a test body. 4) Under conditions of intense evaporation the mass transfer occurring in sublimation has a profound effect on hydrodynamic conditions in a vacuum and affects heat-transfer intensity. The study was made at the Institute of Power Engineering, Belorussian Academy of Sciences. [AS]

B164/B102

AUTHORS: Smol'skiy, B. M., Novikov, F. A.

TITLE: Mechanism of heat and mass transfer with sublimation of substances in a rarefied medium

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 11, 1962, 41 - 47

TEXT: In a previous paper F. A. Novikov, IFZh, no. 10, 1961) a study was made of heat and mass transfer in the sublimation of naphthalene under static conditions (1.0 mm Hg up to atmospheric pressure) and with either free or forced convection. The data resulting from these studies are analyzed in detail. Four different transfer mechanisms are distinguished as functions of pressure: 1) in the range of atmospheric pressure down to 40 mm Hg the sublimation intensity is weak, the substance is transferred by molecular diffusion and convection. The experimental results for free convection can be well described by $Nu = 0.375\ Gr^{0.35}$ and $Nu' = 1.5\ Gr^{0.36}$; for the case of forced convection $Nu = 2.7 \cdot 10^{-3} ReGu^{0.17} + 0.1\ Gu^{-0.59}$ and $Nu'_{hard} = 1.56 \cdot 10^{-1} ReGu^{0.57} + 1.4 \cdot 10^{-1} Gu^{-0.73}$. (2) Between 40 and 0.1 mm Hg

Mechanism of heat and mass ...

the sublimation intensity rapidly increases as pressure decreases. At $p = 1$ mm Hg it attains a maximum. Heat and mass transfer are characterized by a special type of mass exchange, the hydrodynamics of which depends on the pressure and the rate at which the state of aggregation of the substance changes. With free convection $Re' = AGu^n(\Delta p/p)^m \exp(-K p/p)$, with forced convection $Re' = BGu^{n_1}(\Delta p/p)^{m_1} w^{c_1} \exp(-K_1 p/p)$. (4) In the pressure range between .1 and 1.27 mm Hg the transfer is characterized by molecular-viscous conditions where the discrete structure of the substance becomes manifest. In a layer of the solid substance whose thickness corresponds to the mean free path, the mass is exclusively transferred by molecular processes. With Knudsen numbers of $Kn \geq 0.64$ the gas velocity has no effect on the intensity of heat and mass transfer. For free convection $Nu = 1.66 \cdot 10^{-4} Gu^{-1.5} Kn^{-0.5}$ and $Nu' = 5.61 \cdot 10^{-2} Gu^{-1.09} Kn^{-1}$. A flow of earth variety of heat and mass transfer is a process of free molecular flow in which the motion of the molecules toward a solid substance is not disturbed by collisions with molecules emitted from the surface of the solid. There are 2 figures.

Card 2/3

Mechanism of heat and mass ... B/170,62,005/011/002/006
B104/B102

ASSOCIATION: Energeticheskiy institut AN BSSR, g. Minsk (Power Engineering Institute AS BSSR, Minsk)

SUBMITTED: April 10, 1961

Card 3/3

S/170/62/005/012/007/008
B104/B186

AUTHOR: Novikov, P. A.

TITLE: Effect of the radiation component on heat transfer in vacuum sublimation

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 12, 1962, 80 - 83

TEXT: It is sought to examine how the radiation component in the general heat balance affects heat and mass transfer in the sublimation of a spherical naphthalene body at different pressures of the surrounding medium. Radiant heat increases monotonically as pressure decreases, while the total heat flux changes in a complicated way. Under the given experimental conditions the radiant heat flux was 30 - 50 % of the total heat flux.

$$q_л = \sigma(T_{ст}^4 - T_{п.м}^4) = \sigma[(T_{п.м} + \Delta T)^4 - T_{п.м}^4] =$$

$$= \sigma\Delta T(4T_{п.м}^3 + 6T_{п.м}^2\Delta T + 4T_{п.м}\Delta T^2 + \Delta T^3).$$

is valid for vacuum sublimation with small differences between the temperature $T_{ст}$ of the vacuum wall and the temperature $T_{п.м}$ of the surface of the material to be sublimed. $\Delta T = T_{ст} - T_{п.м}$. It follows that with

Effect of the radiation component ...

small ΔT the radiant heat can be described in the form $q_л = \alpha_л \Delta T$. At pressures between 760 and 0.1 mm Hg, $\alpha_л$ remains almost unchanged (~2), at pressures below 0.1 mm Hg the $\alpha_л$ is smaller by 7 %. The experiments showed that, in vacuum, sublimation heat transfer is scarcely influenced at all by the radiation component. There is 1 table.

ASSOCIATION: Energeticheskiy institut AN BSSR, g. Minsk (Power Engineering Institute AS BSSR, Minsk)

SUBMITTED: June 21, 1962

Card 2/2

L 8837-66 EWT(d)/EWT(l)/EWP(e)/EWP(m)/EPF(n)-2/ETC(m)/EWA(l) WW(c) WW/RM

ACC NR: AT5027197 UR/0000/65/000/000/0118/0122

44,55 44,55 66 81+1

AUTHOR: Novikov, P. A.; Smol'skiy, B. M. (Professor)

44,55

ORG: Institute of Heat and Mass Transfer, AN BSSR, Minsk (Institut teplo- i massoobmena AN BSSR)

TITLE: Investigation of the distribution of the temperature field between parallel walls during sublimation under vacuum conditions

SOURCE: AN BSSR. Institut teplo- i massoobmena. Teplo- i massoobmen tel s okruzhayushchey gazovoy sredoy (Heat and mass exchange of bodies with the surrounding gaseous medium). Minsk, Nauka i Tekhnika, 1965, 118-122

21,44,55 21,44,55

TOPIC TAGS: heat transfer, temperature distribution, sublimation

ABSTRACT: The temperature field was investigated for three cases of heat and mass transfer: 1) horizontal arrangement of plates (upper position of the heating plate); 2) horizontal arrangement of the plates (lower position of the heating plate); and 3) vertical arrangement of the plates. A figure, based on experimental data, shows the distribution of the temperature between parallel plates for "pure" heat transfer, at total pressures of the surrounding medium

Card 1/3

L 8837-66

ACC NR: AT5027197 O

from 30.6 to 533 newtons/m^2. The distance from the heating surface, y, was 0.02 meters between plates. When the surface temperature of the heating plate was 320°K, the thickness of the thermal boundary layer was 0.015 meters. With an increase in the temperature of the heating surface to 337°K, $sigma_t$ increased to approximately 0.017 meters. With a further increase in temperature up to 360 and 373°K, the thickness of the thermal boundary layer bridges over the distance between the plates, and exceeds a value of 0.02 meters. Thus, in the given pressure interval, the thickness of the thermal boundary layer is a function only of the temperature of the heating surface. Another figure, also based on experimental data, shows the temperature distribution between parallel plates when a phase transformation (sublimation) is taking place on the surface of one of the plates. The subliming material was ice (H_2O). The total pressure of the surrounding medium was 30.6 newtons/m^2. The subliming plate was at a distance of 0.02 meters from the heating plate. The temperature of the heating surface was varied from 315 to 363°K. Analysis of the curves shows that with sublimation of a substance under vacuum conditions, the curves for the temperature change between the objects being investigated obeys a more complicated relationship than in the case of "pure" heat transfer. Orig. art. has: 3 figures.

Card 2/3

L 8837-66

ACC NR: AT5027197

SUB CODE: ME, GO, TD/ SUBM DATE: 02Jul65/ ORIG REF: 000

OTH REF: 000

QC

Card 3/3

L 12115-66 EWT(l)/EWP(e)/EWP(m)/ETC(F)/EPF(n)-2/EWG(m)/ETC(m)/EWA(l) WW/GS/RM

ACC NR: AT6001767 SOURCE CODE: UR/0000/65/000/000/0099/0104

66
63
B+1

AUTHOR: Novikov, P. A.

ORG: None

TITLE: Effect of the rate of vibration of a body on heat and mass transfer during sublimation under vacuum conditions

SOURCE: AN BSSR. Institut teplo- i massoobmena. Voprosy nestatsionarnogo perenosa tepla i massy (Problems of nonstationary heat and mass transfer). Minsk, Nauka i tekhnika, 1965, 99-104

TOPIC TAGS: heat transfer, mass transfer, vacuum sublimation, vibration effect

ABSTRACT: The investigations were made over a wide range of frequencies from 20 to 150 cycles, with a vibration amplitude from 1 to 18 mm, and at a total pressure of the surrounding medium from atmospheric to 0.1 mm Hg. The temperature of the surrounding medium was held constant at a level of 18°C. The vacuum chamber was a cylindrical vessel 420 mm in diameter, equipped with covers and an observation window. The vibrating body was a naphthalene sphere with a diameter of 14 mm. The heat transfer rate between the subliming body and the surrounding medium was

Card 1/2

L 12115-66

ACC NR: AT6001767

3

determined by the sublimation rate from the body under investigation. The sample was fixed in the vacuum chamber on the thin shaft of an electromagnetic vibrator. The temperature changes in the subliming material were determined with a special alcohol thermometer. The amount of sublimed material was determined from the weight difference of the body before and after the experiment. Results are shown in two figures. The first shows the sublimation rate as a function of the mean square vibration rate of the body, at different pressures of the surrounding medium. The second shows the coefficient of convective heat transfer as a function of the vibration rate of the body, at different pressures of the surrounding medium. The experimental results indicate that the effect of vibration of the body on the sublimation rate and on the rate of convective heat transfer is significant only with high amplitude vibrations. A particularly appreciable effect is noted in the case when the amplitude of the vibrations exceeds the characteristic dimension of the subliming body. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 02Sep65/ ORIG REF: 002/ OTH REF: 001

Card 2/2

(N) L 12116-66 EWT(1)/EWP(e)/EWP(m)/ETC(F)/EPF(n)-2/EWG(m)/ETC(m)/EWA(1)
ACC NR: AT6001768 KW/GS/RM SOURCE CODE: UR/0000/65/000/000/0105/0111

AUTHOR: Novikov, P. A.; Smol'skiy, B. M.

ORG: None

TITLE: The mechanism of heat and mass transfer with vibration of a subliming body under conditions of free convection in a rarefied gaseous medium

SOURCE: AN BSSR. Institut teplo- i massoobmena. Voprosy nestetsionarnogo perenosa tepla i massy (Problems of nonstationary heat and mass transfer). Minsk, Nauka i tekhnika, 1965, 105-111

TOPIC TAGS: heat transfer, mass transfer, convective heat transfer, vibration effect

ABSTRACT: The experiments described in the article were carried out under steady state conditions with free convection. The total pressure of the surrounding medium was varied within wide limits, from 745 to 0.1 mm Hg. A figure shows the dependence of the heat transfer rate on the vibration rate of the subliming body for different pressures of the surrounding medium. The figure represents a plot of the Nusselt number (Nu) against the vibrational Reynolds number (Re_v). At total pressures

Card 1/3

of the surrounding medium from atmospheric to 50 mm Hg, the sections of the Nu f(Re_v) curves for values of Re_v above the critical value lie parallel to each other. This means that, in this pressure interval at small sublimation rates, mass transfer does not exert any considerable effect on transfer of matter in the boundary layer. With a decrease in the total pressure below 50 mm Hg, the angle of the slope of the curves to the abscissa decreases, approaching zero at a pressure of 0.1 mm Hg. At this pressure of the surrounding medium, the heat transfer rate no longer depends on the rate of vibration of the body. At values of the vibrational Reynolds number below the critical, the Nusselt number practically does not depend on the Reynolds number. With an increase in the vibrational Reynolds number above the critical value, the heat transfer rate increases sharply. With a decrease in the average rate of vibration of the body below the critical value, the heat transfer rate approaches that for conditions of free convection. The results also indicate that the rate of heat and mass transfer processes accompanied by vibration depends also on the direction of the vibrations with respect to the direction of movement of the gas. If the vibrating surface is perpendicular to the direction of movement of the gas, the boundary layer may be destroyed, which leads to an increase in heat and mass transfer rates. If the direction of the vibration coincides with the direction of the movement of the gas flow, the boundary layer may not be

L 12116-66

ACC NR: AT6001768

destroyed but merely reduced in thickness; in this case such a strong increase in the heat and mass transfer rates will not follow. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 02Sep65/ ORIG REF: 000/ OTH REF: 001

Card 3/3

L 40878-66 EWT(1)/EWP(e)/EWT(m)/EWP(j) RM/IJP(c)

ACC NR: AT6021844 SOURCE CODE: UR/0000/65/000/000/0220/0228

AUTHOR: Novikov, P. A. (Candidate of technical sciences)

ORG: Institute of Heat and Mass Transfer AN BSSR, Minsk (Institut teplo- i massoobmena AN BSSR)

TITLE: Characteristics of heat and mass transfer with sublimation in a rarefied gaseous medium

SOURCE: Teplo- i massoperenos. t. III: Teplo- i massoperenos pri fazovykh prevrashcheniyakh (Heat and mass transfer. v. 3: Heat and mass transfer in phase transformations). Minsk, Nauka i tekhnika, 1965, 220-228

TOPIC TAGS: convective heat transfer, mass transfer, heat of sublimation

ABSTRACT: Experiments aimed at clarifying the effect of gravitational forces on heat and mass transfer were carried out in vacuum in a specially built unit. The vacuum chamber was a cylinder with a diameter of 420 mm and a height of 350 mm. The test samples were plates 23 x 23 mm made of the subliming material, which was either naphthalene or ice (H_2O). The surface of the plates made of the

Card 1/2

ACC NR: AT6021844

subliming material was placed parallel to the heating surface, which was in the form of a plate 100 x 100 mm. The surface temperature of the plate heater was maintained constant with an electric current, and the pressure in the vacuum chamber was maintained constant with a vacuum pump. The rate of sublimation was determined by the loss in weight of the sample after a fixed period of time. The experimental data are shown in the form of curves giving the dependence of the sublimation rate on the temperature difference between the parallel plates, and the temperature distribution between the plates. The amount of heat expended in heating the subliming sample, with a change in the total pressure, was determined by the formula:

$$Q = Gc_p \frac{\Delta T}{\Delta \tau} = Gc_p \frac{\Delta T}{\Delta p} \frac{\Delta p}{\Delta \tau}, \qquad (2)$$

where Δ T is the change in the temperature of the material, corresponding to t change in the total pressure Δ p for a period of time $\Delta\tau$. Orig. art. has: 3 formulas and 4 figures.

SUB CODE: 20/ SUBM DATE: 09Dec65/ ORIG REF: 002

Card 2/2 mcp

NOVIKOV, I. A.

"Some peculiarities [illegible]

report submitted for [illegible] Deputy Minister, Ministry [illegible]

Institute of Heat & Mass Transfer, [illegible].

NOVIKOV, I. A.

Novikov, I. A. "Academician S. [illegible] Krasheninnikov as the first investigator of Kamchatka's [illegible]," [illegible] istorii yestestvoznaniya (Akad. nauk SSSR), Vol. III, [illegible], [illegible]

SO: [illegible] 1, [illegible] December [illegible] 3, (Letopis [illegible] Statey, [illegible])

NOVIKOV, P.A.

Fight against Weismannism, Morganism, and Mendelism in Russian zoology.
Trudy Inst.ist.est. 5:93-144 '53. (MLRA 6:7)
(Zoology)

NOVIKOV, P.A.

Development of the zoological section of the St. Petersburg Kunstkammer. Trudy Inst. ist. est. i tekh. 14:302-352 '57.
(Leningrad—Zological museums) (MIRA 11:4)

NOVIKOV, P.A.

Faunistic and zoogeographical research in Russia during the first half of the 19th century. Trudy Inst. ist. est. i tekh. [illegible] (MIRA [illegible]
294-304 '61.
(Zoological research)

NOVIKOV, P.A.

Zoological studies of A.Chamisso and J.Fr.Eschscholtz during O. von Kotzebue's voyage around the world on the "Rurik" (1815-1818). Trudy Inst.ist.est.i tekh.40:248-282 '62. (MIRA 15:9)
(Kotzebue, Otto Von, 1787-1846)(Eschscholtz, Johann Friedrich,1793-1831)
(Chamisso, Adelbert von, 1781-1838) (Zoological research)

NOVIKOV, Pavel Aleksandrovich, prof.; NAUMOV, Sergey Pavlovich, prof.; PETROVSKAYA, L.P., red.

[Zoology] Zoologiia. Moskva, Vysshaia shkola, 1965. 458 p. (MIRA 18:7)

BARELKO, Ye. V., KARTASHEVA, L. I., NOVIKOV, P. D. and PROSKURNIN, M. A.

"Oxidation of Water Solutions of Peroxides Under the Influence of Ionizing Radiation"

Trudy Transactions of the First Conference on Radioaction Chemistry. Moscow, Izd-vo AN SSSR, 1958 330 pp
Conference 25-30 March 1957 Moscow

YEGOROV, Ye.V.; NOVIKOV, P.D.; RAZGON, D.R.; TSETLIN, B.L.

Radiation-induced chemical synthesis of new ion exchange sorbents of organomineral nature. Dokl. AN SSSR 146 no.6:1360-1362 O '62. (MIRA 15:10)

1. Institut khimicheskoy fiziki AN SSSR i Institut elementoorganicheskikh soyedineniy AN SSSR. Predstavlenko akademikom M.I. Kabachnikom.
(Sorbents) (Ion exchange)

L 1930-66 EWT(m)/EPF(c)/ETC/EPF(n)-2/T [illegible] WW/RM
ACCESSION NR: AT5022584 UR/3136/64/000/787/0001/0014

AUTHOR: Chernorotov, Ye. S.; Potekhin, N. V.; Novikov, P. D.

TITLE: Purification and preparation of water in nuclear reactors

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-787, 1964. Vodoochistka i vodopodgotovka na yadernykh reaktorakh. Report no. 3, 1-14

TOPIC TAGS: water cooled nuclear reactor, water moderated reactor, water purification, ion exchange resin

ABSTRACT: The report describes the experience with the use of an H^+-cation prefilter for purifying water of the primary loop of a physical and technical research reactor (RFT reactor) and of the reactor of the "Lenin" atomic icebreaker. The method of increasing the efficiency of mixed ion-exchange layers in purifying the water of first loops by using such prefilters or layers of cation exchanger in the hydrogenated form is discussed. If the pH of the water is about 7, the cation exchanger is used in the H form. In the presence of higher pH values, the cation exchanger is used in the salt form. However, in this case it is preferable to use separate (not mixed) layers with the cation exchanger in the corresponding salt form and the anion exchanger in the hydroxyl form. Orig. art. has: 2 figures.

Card 1/2

L 1930-65
ACCESSION NR: AP5022584

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: NP,GC

NO REF SOV: 001 OTHER: 003

Card 2/2

L 2899-66 EWT(m)/EPF(c)/ETC/EPF(n)-2/EWG(m)/EWP(j)/T/EWA(h)/EWA(l) DS/GG/RM

ACCESSION NR: AT5022120 UR/3136/64/000/788/0001/0034

AUTHOR: Novikov, P. D.

TITLE: On the radiation stability of ion-exchange resins. Communication 2. Radiation damage of certain polymerizing anion-exchange resins

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-788, 1964. K voprosu o radiatsionnoy ustoychivosti i ionoobmennykh smol. Soobshcheniye II: O radiatsionnom povrezhdenii nekotorykh polimerizatsionnykh anionitov, 1-34

TOPIC TAGS: resin, anion exchange resin, radiation damage, polymer, ion exchange, reactor radiation, atomic energy

ABSTRACT: The work is an extension of the investigation of B. A. Alekseyev and P. D. Novikov (K voprosy o radiatsionnoy ustoychivosti nekotorykh ionoobmennykh smol. Soobshcheniye na I-y Mezhdunarodnoy konferentsii po khimii vody yadernykh reaktorov. Drezden, GDR, Aprel' 1962 g). The loss of ion-exchange capacity in the strongly basic anion-exchange resins AB-21, AB-19, and AB-27, resulting from irradiation with reactor radiation, was determined. The resins studied are shown in Fig. 1 on the Enclosure, and the thermal neutron flux in the active zone is 4 x 10^{12} neutrons/cm^2sec. The experimental procedure followed that reported in the

Card 1/3

L 2899-66

ACCESSION NR: AT5022120 9

above reference, and its results are shown graphically. From these results it is concluded that the radiation stability of the anion-exchange resins studied is in the order AB-21 > AB-19 > AB-17 ≥ AB-27 (the anion exchanger AB-17 was studied in the reference cited). Substitution of styrene by acenaphthylene increased the stability of the C-N bond. Exchanging the $-N(CH_3)_3$ group for $-N(CH_2)_2CH_2CH_2OH$ group had no effect on the radiation stability of the resin. The deterioration of ion-exchange properties of resins after their exposure to reactor radiation is attributed to the following causes: deamination, dealkylation, formation of water-soluble compounds, deactivation of active ion-exchange groups, decrease of basicity leading to a retardation of the ion-exchange process, decrease in the swelling ability, decrease in the surface area caused by the absorption of radiolysis products. The author thanks A. B. Pashkov for the ion-exchange resin specimens. Orig. art. has: 9 tables, 7 graphs and 12 equations.

ASSOCIATION: Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii SSSR (State Committee for the Uses of Atomic Energy SSSR); Institut atomnoy energii im. I. V. Kurchatova (Institute for Atomic Energy)

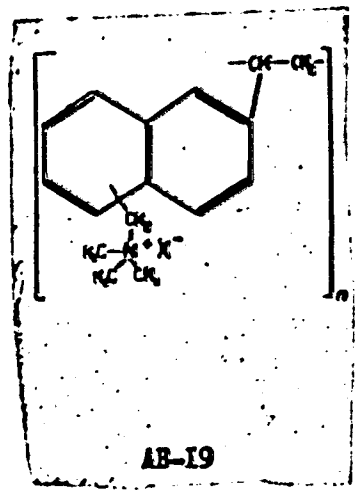
SUBMITTED: 00 ENCL: 01 SUB CODE: NP, OC

NO REF SOV: 007 OTHER: 010

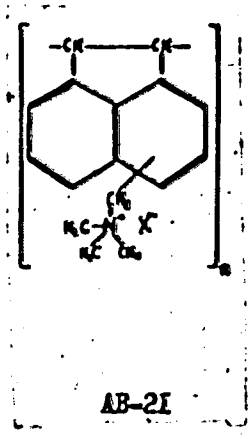
Card 2/3

L 2899-66
ACCESSION NR: AT5022120

ENCLOSURE: 01

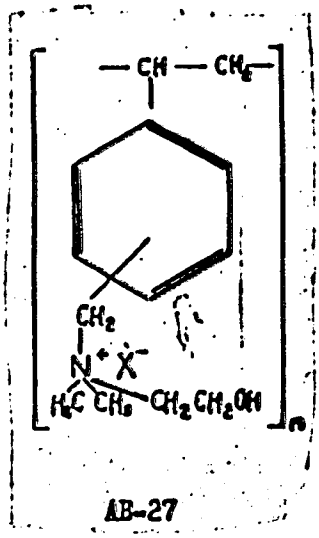


AB-19



AB-21

Fig. 1.



AB-27

Card 3/3

L 20050-65 EPF(c)/EPF(n)-2/EWT(m)/EPA(ob)-2/T Pr-4/Pu-4 AEDC(a)/AEDC(b)/AEDC(a)/SSD/SSD(a)/AFWL/ASD(p)-3/ESD(t)/ESD(ai) DM

ACCESSION NR: AP4049535 S/0089/64/017/005/0349/0359

AUTHORS: Afrikantov, I. I.; Mordvinov, N. M.; Novikov, P. D.; Pologikh, B. G.; Sledzyuk, A. K.; Khlopkin, N. S.; Tsarev, N. M.

TITLE: Operating experience with the atomic installation of the "Lenin" ice breaker 19

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 349-359

TOPIC TAGS: nuclear power system, reactor shutdown, reactor start up, nuclear propulsion

ABSTRACT: The icebreaker covered some 60,000 miles since its commissioning, of which 40,000 miles were in ice. The reactors operate at present with their second fuel charge. Each reactor delivered from its first charge 430--490 thousand MW-hr of thermal energy in more than 11,000 hours. The average yield was 13,000 MW-day/ton of uranium, with the maximum reaching 30,000. The reactors operated

Card 1/2

L 20052-65
ACCESSION NR: AR4039377

of compressors in the experimental engine 2DN-53 (65 hp at 1600 rpm). The design incorporates a RUTA type compressor and an Ebeshpekher gas turbine compressor. A nomogram was plotted for combined operation of the compressors at typical speeds, i.e. 1600 and 1000 rpm. Efficiency cumulates in parallel coupled compressors, while for tandem coupling it depends on the point at which the total resistance line intersects with the compressor curve. It is shown that the gas turbine compressor exerts significant resistance to the flow of air at low load levels and begins to operate efficiently only above engine loads which insure compressor speeds of 10,000 rpm. Up to 60% of the pressure generated by a gas turbine compressor is lost at high load levels to overcome the resistance offered by a drive actuated compressor. Air should be channeled to bypass the drive actuated compressor in the latter case. One illustration. P. Shelest.

SUB CODE: PR ENCL: 00

Card 2/2

MEDER, V.A., inzh.; NOVIKOV, P.F., inzh.; SKATYNSKIY, V.I., kand.tekhn.nauk

Manufacture and use of lime-clay-sand products. Biul. stroi. tekh. 15 no.6:12-15 Je '58. (MIRA 11:6)

1.Trest Liskhimpromstroy (for Meder, Novikov). 2.Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsii Akademii stroitel'stva i arkhitektury USSR.
(Building blocks) (Silicates)

NOVIKOV, P.; PETROV, I.

Reinforced structural [illegible] made of silicate clay. Stroi. mat. 3 no.11:8-10 N '57. (MIRA 10:12)

1.Upravlyayushchiy trestom "Likhimpromstroy" (for Novikov).
(Clay) (Silicates)

NOVIKOV, P.F.; MEDER, V.A.; SKATYNSKIY, V.I., kand.tekhn.nauk

Production and use of clay-silicate construction elements in large-panel construction. Stroi. mat. 6 no.10:3-5 O '60. (MIRA 13:10)

1. Nachal'nik kombinata Luganskkhimstroy; chlen-korrespondent Akademii stroitel'stva i arkhitektury USSR (for Novikov).
2. Glavnyy inzhener kombinata Luganskkhimstroy (for Meder).
(Sand-lime products)

MANAKIN, A.M., kand.tekhn.nauk; NOVIKOV, P.G. kand.tekhn.nauk [deceased]

Use of multipurpose structures with interchangeable parts in foundries. Konstr.i tekh.mash. no.1:116-120 '61. (MIRA 15:2)

(Structural frames)

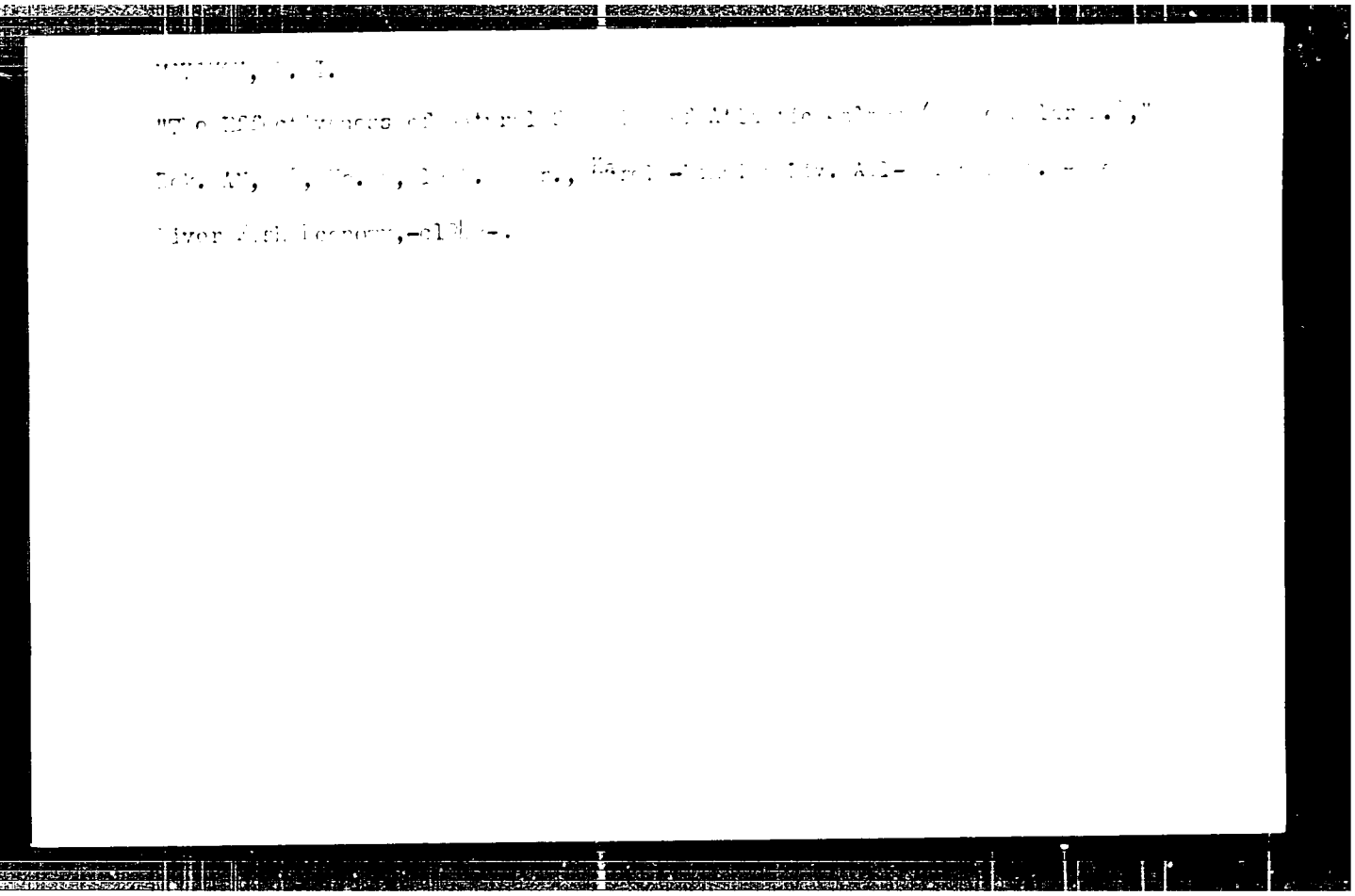
ZAYTSEV, Vladimir Semenovich; TIMOFEYEVSKIY, Aleksandr Antonovich; NOVIKOV, Petr Grigor'yevich; DAVYDOVA, Yu.F., red.; KUDRYAVTSEVA, O.V., tekhn. red.

[The second phase; the CPSU in the struggle for the building of socialism] Na vtorom etape; KPSS v bor'be za postroenie sotsializma. Moskva, Izd-vo "Znanie," 1963. 72 p. (Novoe v zhizni, nauke, tekhnike. I Seriia, no.15-16) (MIRA 16:11)
(Communist Party of the Soviet Union)
(Russia--Economic conditions)

NOVIKOV, P.I.

Expert evaluation of the dynamics of ethyl alcohol distribution within the organism in a medicolegal postmortem examination. Sud.-med. ekspert. 6 no.3:13-17 Jl-S'63. (MIRA 16:10)

1. Kafedra sudebnoy meditsiny (zav. - prof. V.M.Smol'yaninov) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(AUTOPSY) (ALCOHOL IN THE BODY)



1. NOVIKOV, P. I.

2. USSR (600)

3. Whitefish - White Sea

4. On the presence of whitefish from the B ltic Sea in the western part of the White Sea basin. Izv.Kar-Fin.fil.AN SSSR No. 1, 1951.

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

NOVIKOV, P.I.

Migration of the Kemi salmon (Salmo salar). Trudy Kar.fil. AN SSSR no.5:141-147 '56. (KLRA 10:7)

1. Karel'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta ozernogo i rechnogo rybnogo khozyaystva.
(Kemi River--Salmon) (Fishes--Migration)

ALTUKHOV, Konstantin Alekseyevich; MIKHAYLOVSKAYA, Aleksandra Aleksandrovna; MUKHOMEDIYAROV, Fettakh Bakirovich; NADEZHIN, Vasiliy Mikhaylovich; NOVIKOV, Petr Ignat'yevich; PALENICHKO, Zinaida Georgiyevna; PANKRASHOV, A.P., red.; SHEVCHENKO, L.V., tekhn.red.

[Fishes of the White Sea] Ryby Belogo moria. Petrozavodsk, Gos. izd-vo Karel'skoi ASSR, 1958. 161 p. (MIRA 12:2)
(White Sea--Fishes)

ALEKSANDROV, B.M., nauchnyy sotrudnik; ALEKSANDROVA, T.N., nauchnyy sotrudnik; BELYAYEVA, K.I., nauchnyy sotrudnik; GORBUNOVA, Z.A., nauchnyy sotrudnik; GORBUNOVA-PSHETSKVA, L.I., nauchnyy sotrudnik; GORBUNOVA, L.N., nauchnyy sotrudnik; GULYAYEVA, A.M., nauchnyy sotrudnik; DMITRENKO, Yu.S., nauchnyy sotrudnik; ZABOLOTSKIY, A.A., nauchnyy sotrudnik; MAKAROVA, Ye.F., nauchnyy sotrudnik; NOVIKOV, P.I., nauchnyy sotrudnik; POKROVSKIY, V.V., nauchnyy sotrudnik; SMIRNOV, A.F., nauchnyy sotrudnik; STEFANOVSKAYA, A.F., nauchnyy sotrudnik; URBAN, V.V., nauchnyy sotrudnik. Prinimali uchastiye: BALAGUROVA, M.V., nauchnyy sotrudnik; VEBER, D.G., nauchnyy sotrudnik; POTAPOVA, O.I., nauchnyy sotrudnik; SOKOLOVA, V.A., nauchnyy sotrudnik; FILIMONOVA, Z.I., nauchnyy sotrudnik; POPENKO, L.K., nauchnyy sotrudnik. ZYTSAR', N.A., red.; PRAVDIN, I.F., red.; PANKRASHOV, A.P., red.; SHEVCHENKO, L.V., tekhn.red.

[Lakes of Karelia; natural features, fishes, and fisheries] Ozera Karelii; priroda, ryby i rybnoe khoziaistvo; spravochnik. Petrozavodsk, Gos.izd-vo Karel'skoi ASSR, 1959. 618 p. (MIRA 13:8)

(Continued on next card)

ALEKSANDROV, B.M. --- (continued) Card 2.
1. Russia (1917- R.S.F.S.R.) Karel'skiy ekonomicheskiy administrativnyy rayon. Sovet narodnogo khozyaystva. 2. Karel'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta ozernogo i rechnogo rybnogo khozyaystva (for Aleksandrov, Aleksandrova, Belyayeva, Gorbunova, Gordeyeva-Pertseva, Gordeyeva, Gulyayeva, Dmitrenko, Zabolotskiy, Makarova, Novikov, Pokrovskiy, Smirnov, Stefanovskaya, Urban). 3. Karel'skiy filial AN SSSR (for Balagurova, Veber, Potapova, Sokolova, Filimonova, Popenko).
(Karelia--Lakes)

NOVIKOV, Petr Ignat'yevich, kand. biol. nauk,dots.; FILIMONOVA, D.S., red.

[Fishes in the bodies of water of Arkhangel Province and their commercial significance] Ryby vodoemov Arkhangel'skoi oblasti i ikh promyslovoe znachenie. Arkhangel'sk, Severo-Zapadnoe knizhnoe izd-vo, 1964. 141 p. (MIRA 18:7)

NOVIKOV, P.I.; SEMENKOV, P.L.; FRIDMAN, M.I.; KISELEV, V.Z., inzh., otvetstvennyy red.; LEZHNEVA, Ye.I., red. izd-va; EL'KIND, V.D., tekhn.red.

[ZIL-127 interurban motorbus; instructions for operation] Mezhdugorodnyi avtobus ZIL-127; instruktsiia po ekspluatatsii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 233 p. (MIRA 11:5)

1. Moskovskiy avtomobil'nyy zavod. 2. Yaroslavskiy avtozavod (for Novikov). 3. Nachal'nik byuro avtobusov Moskovskogo avtomobil'nogo zavoda imeni Likhacheva (for Kiselev)
(Motorbuses)

SOV/123-59-15-62211

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, p 436 (USSR

AUTHORS: Novikov, P.I., Reznikov, M.N.

TITLE. Modernized Engines of the Yaroslavl' Engine Plant

PERIODICAL: Yaroslavsk. prom-st' (Sovnarkhoz Yaroslavsk. ekon. adm. r-na , 1958, Nr 8, pp 28 - 30

ABSTRACT. The Yaroslavl' Engine Plant manufacturing two-cycle high-speed diesel engines of the YaAZ-204 and YaAZ-206 type has developed a number of measures for a fundamental modernization of diesel engines built in series. The average speed of four motorcars which, in comparison to similar cars with serial engines, possessed several modifications was during the guarantee tests increased by 2 - 25%, while the average fuel consumption was reduced by 3.5 - 18%.

Card 1/1