Investigation of creep in α-iron by a torsion method

S/659/62/009/000/010/030
I003/I203

mation and on previous treatment of the material should be taken into account, the authors of the article did not do this. M. L. Bernshtein pointed out that discrepancies between the results of this work and those of other Soviet authors. There are 3 figures.

Card 2/2

[redacted]

RYSTROV, L.N.; VOLKOV, G.V.; IVANOV, L.I.

Equipment for the deposition of radioactive layers by the evaporation method. Trudy Inst.met. no.10:209-214 '62. (MIRA 15:8)

(Radioisotopes—Industrial application)
(Vapor plating—Equipment and supplies)

BYSTROV, L.N. (Moskva); IVANOV, L.I.(Moskova); PROKOSHKIN, D.A.(Moskva); Prinimal uchastiye KARPOV, F.F., student

Creep of copper and copper-nickel alloys under torsion. Izv. AN SSSR. Otd.tekh.nauk. Met. i topl no.5:197-209 S-O '62. (MIRA 15:10)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut imeni Lenina (for Karpov).

(Creep of copper) (Torsion)

BYSTROV, L.N.; IVANOV, L.I.; SUROVA, E.A.

Investigating the creep of alpha-iron by the torsion method. Issl. po zahropr. splav. 9:72-81 '62. (MIRA 16:6)
(Creep of metals) (Iron--Testing)

BYSTROV, Lev Nikolayevich; DASHEVSKAYA, I.Ya., red.; LADONINA, L.V., tekhn. red.

[Automation of technological processes and flaw detection in metallurgy; survey of foreign engineering] Avtomatizatsiia tekhnologicheskikh protsessov i defektoskopiia v metallurgii; obzor zarubezhnoi tekhniki. Moskva, GOSINTI, 1962. 64 p. (Tema 13) (MIRA 17:4)

SUROVA,, E.A. (Moskva); BYSTROV, L.N. (Moskva); IVANOV, L.I. (Moskva)

Connection between the elasticity modulus and the creep rate in iron-aluminum alloys at high temperatures. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.4:130-134 Jl-Ag '63. (MIRA 16:10)

BYSTROV, L.N.; IVANOV, L.I.; PROKOSHKIN, D.A.

Investigating the diffusion of nickel in nickel-copper alloys. Issl. po zharoproch. splav. 10:44-46 '63. (MIRA 17:2)

KARYAKIN, Rudol'f Nikolayevich; RATNER, M.P., retsenzent; BYSTROV, K.N., kand. fiz.-matem. nauk, red.; VOROTNIKOVA, L.F., tekhn. red.

[A.C. traction networks] Tiagovye seti peremennogo toka. Moskva, Izd-vo "Transport," 1964. 185 p. (MIRA 17:4)

ACCESSION NR: AT4013926 S/2659/63/010/000/0044/0046

AUTHOR: By*strov, L.N.; Ivanov, L.I.; Prokoshkin, D.A.

TITLE: A study of nickel diffusion in nickel-copper alloys

SOURCE: AN SSSR. Institut metallurgii. Issledovaniya po zharoprochny*m splavam, v. 10, 1963, 44-46

TOPIC TAGS: nickel, nickel-copper alloy, diffusion coefficient, electrolytic nickel, nickel diffusion

ABSTRACT: A study has been made of the diffusion coefficient in pure electrolytic nickel and nickel-copper alloys. In laboratory scale experiments, three test specimens of alloys with 0.05, 1 and 10% copper, and one specimen of pure electrolytic nickel were used as strips 70 mm long, 8 mm wide and approximately 50 μ thick with solid copper plates, soldered at each end, serving as contacts. The radioactive isotope Ni^{63} was deposited in the middle section of the specimen by atomization in vacuum on one side only. The strips were heated many times to 1100-1300C by passing alternating current through pure helium. After every heating, radioactivity measurements were taken from each side of the strip. The results of the study showed that the diffusion coefficient was higher

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ACCESSION NR: AT4013926

for pure nickel and lower for its alloys (Ni-Cu). The energy of diffusion of Ni initially increases by a factor of 10-15 K. Cal./Mole when copper is added as shown in Fig. 1 of the Enclosure. Thus, this study confirmed the results of similar studies on Ni-Cu alloys by Kryukov and Zhukhovitskiy (Dokl. AN SSSR 90, no. 3, 1963), and by Reynolds et al. (Acta Met. 5 no. 1, 29, 1957). These studies were conducted with nickel-gold alloys, as the nearest system to Ni-Cu alloys. Orig. art. has: 2 figures, 1 formula and 1 table.

ASSOCIATION: Institut metallurgii AN SSSR (Metallurgical Institute AN SSSR)

SUBMITTED: 00 DATE ACQ: 27Feb64 ENCL: 01

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

Card 2/3

ACCESSION NR: AT4013926

ENCLOSURE: 01

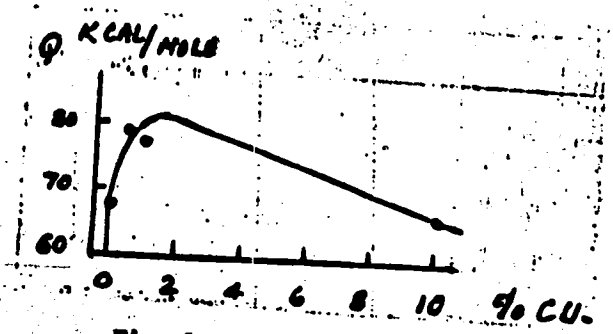

Fig. 1 Energy of activation of diffusion of nickel in nickel-copper alloys vs. copper content.

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ACCESSION NR: AP4042023 S/0020/64/157/001/0147/0149

AUTHOR: By*strov, L. N.; Ivanov, L. I.; Spitsy*n, V. I. (Academician)

TITLE: Effect of γ-irradiation on the rate of aging of beryllium copper

SOURCE: AN SSSR. Doklady*, v. 157, no. 1, 1964, 147-149

TOPIC TAGS: gamma irradiation, beryllium copper, beryllium copper aging, gamma irradiation effect

ABSTRACT: The effect of γ-irradiation on the aging of beryllium copper (2.5% Be) annealed at 800C and water quenched was investigated by measuring the electric resistance at -196C (to eliminate the influence of the phonon component) of a wire 2 mm in diameter. The initial electric resistance of the wire at -196C was about 10^{-2} ohms. One of the two specimens used was subjected to repeated irradiation from radioactive cobalt (dose ~ 490 r/sec); the electric resistance (of both specimens) was measured after each irradiation. The magnitude $\Delta(R_{irrad}/R_{non-irrad})$ served as the criterion of the irradi-

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ACCESSION NR: AP4042023

ation effect. After a total irradiation dose of 125.10^7 r was reached, both specimens were annealed at 120C for about 500 hr, with periodical measurements of resistance. The results of the experiments are presented in a graph (see Fig. 1 of the Enclosure). The behavior of the irradiated specimen is explained as follows: the γ-irradiation caused formation of numerous crystallization centers of a new phase, but their growth was retarded by low temperature (room temperature). At 120C, however, new crystals begin to grow from these centers, and the resistance of the irradiated specimen increases more rapidly than that of non-irradiated specimens. As soon as the crystallization centers are consumed, the aging rate of irradiated specimen begins to decrease, and the relative electric resistance also decreases somewhat. Orig. art. has: 1 figure.

ASSOCIATION: Institut metallurgii im. A. A. Baykova (Institute of Metallurgy)

SUBMITTED: 05Jul63 ATD PRESS: 3077 ENCL: 01

SUB CODE: MM, NP NO REF SOV: 002 OTHER: 002

Card 2/3

ACCESSION NR: AP4042023 ENCLOSURE: 01

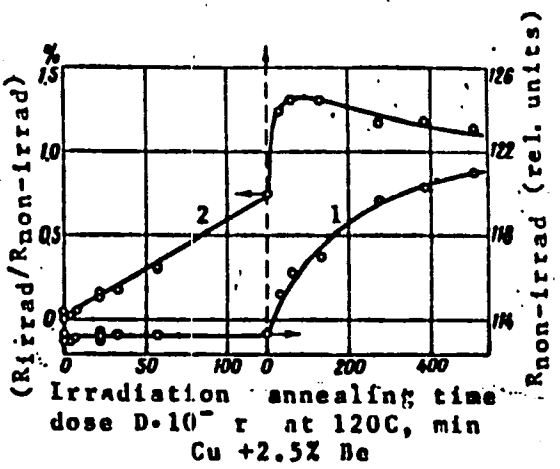

Fig. 1. Dependence of electrical resistance of non-irradiated specimen on annealing time (1) and dependence of electrical resistance of irradiated specimen on radiation dose and annealing time (2)

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L 23353-65 EWT(m)/EWP(t)/EWP(b)/EWP(l) Pad IJP(c) JD/HW/MLK
ACCESSION NR: AT4046822 S/0000/64/000/000/0088/0091

AUTHOR: By*strov, L.N.; Fedotov, S.G.

TITLE: Temperature dependence of the elastic constants of copper-nickel alloys

SOURCE: AN SSSR. Nauchny*y sovet po probleme zharoprochny*kh splavov. Issledovaniya staley i splavov (Studies on steels and alloys). Moscow, Izd-vo Nauka, 1964, 88-91

TOPIC TAGS: nickel alloy, copper alloy, elasticity modulus, shear modulus, Poisson bracket, torsional vibration, damped oscillation

ABSTRACT: The modulus of normal elasticity and the shear modulus of copper-nickel alloys containing 1, 10, 20 and 30% Ni were measured by a resonance method. The modulus values decrease with an increase in temperature; no abnormalities in the moduli were observed. Equations are given for the calculation of both the normal elasticity and the shear modulus. The temperature dependence of the elasticity modulus is shown in the coordinates $E - T^{3/2}$; since all the points lie on a straight line it is possible to extrapolate values for higher temperatures. The dependence of the Poisson bracket on the composition and temperature of the alloy was also analyzed. It was found that the Poisson bracket increases slightly with an increase in temperature and does not depend too strongly on the alloy composition (its change does not exceed ± 5%). It is

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L 23353-65
ACCESSION NR: AT4046822

therefore possible to use an average value of the Poisson bracket equal to 0.4 for the conversion of the normal elasticity and the shear modulus values. The dependence of the parameters E_0 and β on the alloy composition is discussed. Orig. art. has: 5 figures, 1 table and 6 formulas.

ASSOCIATION: none

SUBMITTED: 16Jun64 ENCL: 00 SUB CODE: MM

NO REF SOV: 002 OTHER: 001

Card 2/2

BYSTROV, L.N.; IVANOV, L.I.

Effect of γ-radiation on the rate of beryllium bronze aging. Dokl. AN SSSR 157 no.1:147-149 Jl '64 (MIRA 17:8)

1. Institut metallurgii im. A.A. Baykova. Predstavleno akademikom V.I.Spitsynym.

L 56080-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) Pf-4

ACCESSION NR: AP5013816 JD/HW UR/0126/65/019/005/0791/0792

539.292; 548.4

46
41
B

AUTHOR: Bystrov, L. N.; Ivanov, L. I.; Bannykh, O. A.

TITLE: Effect of electron irradiation on the mechanical properties of thermomechanically treated steel

18

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 5, 1965, 791-792

TOPIC TAGS: electron irradiation, medium alloy steel, thermomechanical treatment, crystal lattice, crystallochemical process, linear electron accelerator, yield point, hardening, irradiated steel

ABSTRACT: By contrast with irradiation by heavy particles (neutrons, protons, heavy ions), electron and gamma-irradiation of steels toughened by thermomechanical treatment leads to the formation of relatively elementary defects -- vacancies and dissociated atoms -- in the crystal lattice. Being highly mobile, these defects may accelerate various crystallochemical processes and alter the initial dislocation structure by, e.g., creating strongly dispersed obstacles. In this connection, the authors present the results of an experimental investigation of the effect of electron irradiation (5-Mev energy) on the mechanical

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ACCESSION NRL: AP5013816

properties of a medium-alloy chrome-manganese steel toughened by TMT (thermo-mechanical treatment). Principal alloy elements: 0.4% C, 6% Mn, 1% Cr. The TMT consisted in heating to 1050°C, cooling to 550°C and rolling at this temperature, followed by quenching in water. Following its TMT, the steel had an austenitic-martensitic structure. Its hardness was 49.5 Rockwell units. The irradiation of 2 mm thick specimens of the steel was performed by means of a linear accelerator in the air. 24 hours following the irradiation the specimens were subjected to tensile tests. The irradiation doses were: $8 \cdot 10^{14}$ and $6 \cdot 10^{14}$ electrons/cm^2. It was found that, unlike in the case of pure metals and many alloys, the electron irradiation of medium-alloy steel does not lead to hardening and a reduction in plasticity; on the contrary, it leads to a decrease in the yield strength $\sigma_{0.2}$ and an increase in the relative elongation at rupture δ. In addition, the plateau of yield points disappears during the tensile tests of the irradiated specimens. This anomalous variation in mechanical properties of the irradiated steel may be understood by considering that, following its TMT, the steel is in metastable state. The creation of defects during the irradiation accelerates the diffusion processes and thereby contributes to the steel's transition from metastable to equilibrium state. Thus, the effect of the irradiation, in this case, resembles the effect of low-temperature annealing. Orig. art. has:

L 56080-65

ACCESSION NR: AP5013816

1 figure, 1 table.

ASSOCIATION: Institut metallurgii im. A. A. Baykova (Institute of Metallurgy)

SUBMITTED: 30Apr64 ENCL: 00 SUB CODE: MM, NP

NO REF SOV: 002 OTHER: 001

Card 3/3

BYSTROV, M.

New machinery for cooperative societies. Prom.koop. 13 no.1:18-19 Ja '59. (MIRA 12:2)

1. Nachal'nik tekhnicheskogo upravleniya Rospromsoveta.
(Cooperative societies--Equipment and supplies)

BYSTROV, M.N.

Nature of the clinical course of cancer in young adults and children. Sovet. med. 16 no. 7:17-18 July 1952. (CLML 22:4)

1. Of the Department of Hospital Surgery (Head -- Prof. A. A. Ozherl'yev), Gor'kiy Medical Institute imeni S. M. Kirov (Director -- Docent P. V. Kravchenko).

BYSTROV, M.N.

VAYNGRIB, L.G.; BYSTROV, M.N. [redacted]

Liver abscess with Trichomonas intestinalis (Trichomonas hominis Davaine) Sov.med. 22 no.3:132-133 Mr '58. (MIRA 11:4)
(LIVER, abscess
in trichomoniasisi intestinalis (Rus))
(TRICHOMONIASIS, compl.
liver abscess in trichomoniasis intestinalis (Rus))

BYSTROV, M.N.

The range of Artemisia cina Berg. and problems in the conservation of its growth. Okhr. prir. i zapov. delo v SSSR no.5:67-78 '60. (MIRA 14:2)

1. Farmatsevticheskiy fakul'tet 1-go Moskovskogo ordena Lenina meditsinskogo instituta im. I.M.Sechenova.
(South Kazakhstan Province--Wormwood)
(Leninabad Province--Wormwood)

BYSTROV, M. V.; PARIZHER, S. YA.

Stomach - Diseases

Case of acute dilatation of the stomach, Sov. med., 16, No. 5, 1952.

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

17

L 56492-65
ACCESSION NR: AP5017800 UR/0286/65/000/011/0031/0031
631.859.12.002.2

AUTHOR: Karatayev, I. I.; Mel'nik, B. D.; Repenkova, T. G.; Sviridova, A. G.; Doktorov, N. I.; Nazarov, G. N. Raygorodskiy, I. M.; Vasil'yev, B. T.; Bystrov, M. V.; Babaryka, I. F.; Kuzyak, F. A.; Fel'dman, M. V.; Soverchenko, D. A.; Buslakova, L. P.; Toroptseva, N. P.; Lyubimov, S. V.; Ul'yanov, A. T.; Andrea, V. V.; Sobchuk, Yu. I.; Tsetlina, M. M.; Andreyev, V. V.; Kramer, G. L.

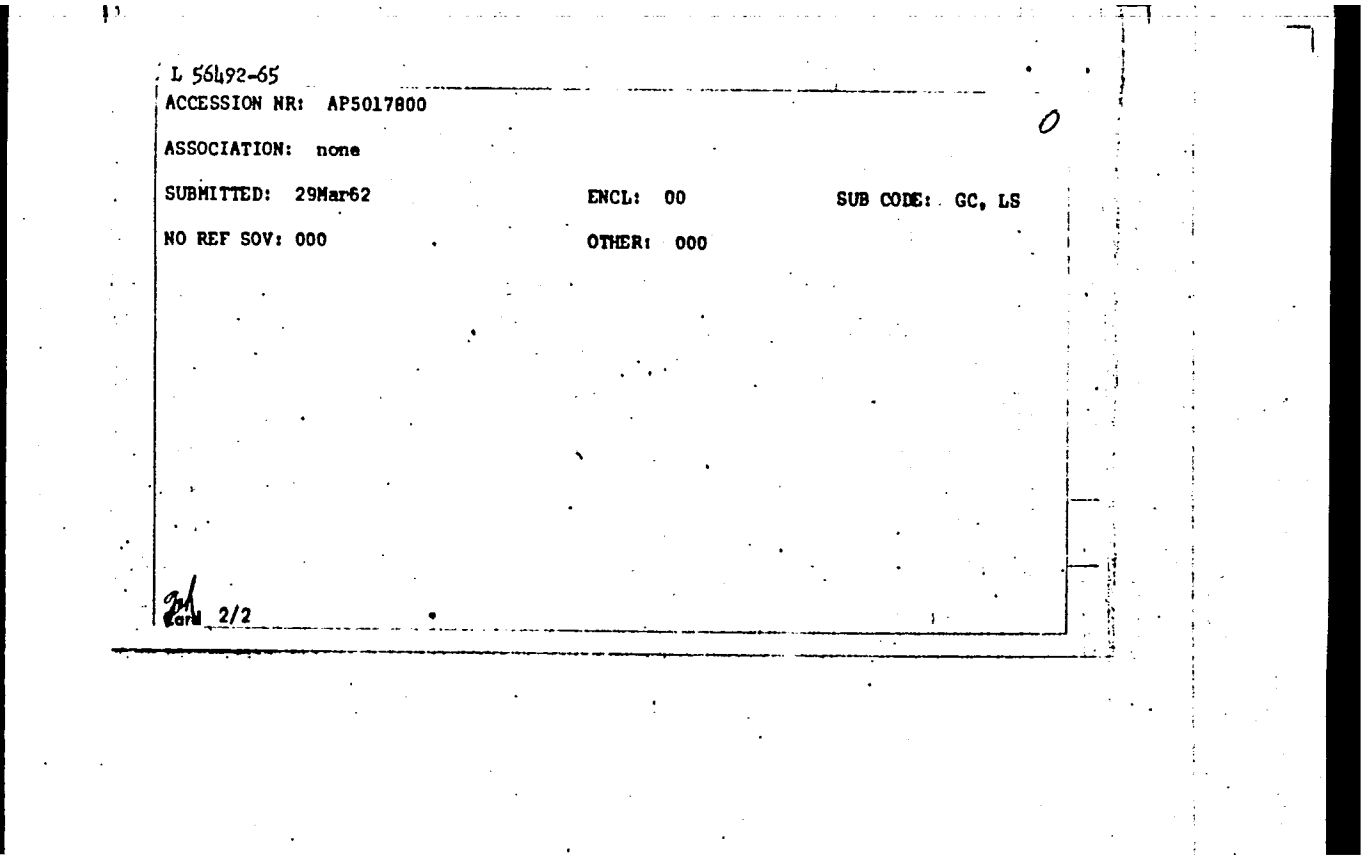
TITLE: A method for producing phosphoro-potassium fertilizers. Class 16, No. 171-409

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 31

TOPIC TAGS: fertilizer, phosphate, potassium

ABSTRACT: This Author's Certificate introduces a method for producing phosphoro-potassium fertilizers using cement dust (waste from cement production) as the potassium raw material. The process of adding potassium to the product is simplified and evaporation is prevented by using a 20% excess of an acid which directly neutralizes the cement dust for breaking down the phosphate raw material.

Card 1/2



L 56492-65
ACCESSION NR: AP5017800

ASSOCIATION: none

SUBMITTED: 29Mar62 ENCL: 00 SUB CODE: GC, LS

NO REF SOV: 000 OTHER: 000

Card 2/2

BYSTROV, N.

O približhennom reshenii uravneniy v chastnykh proizvodnykh s tremya nezavisimymi peremennymi. DAN, 3 (1934), 12-16.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.,
Markushevich, A.I.,
Rashevskiy, P.K.
Moscow-Leningrad, 1948

POTTER, Kh.I.; BYSTROV, N.F.

Investigating the form of the moon from photographs obtained close to the moment of the topocentric full moon. Astron.zhur. 38 no.5:946-953 S-O '61. (MIRA 14:9)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.
(Moon--Observations)

33427
S/033/62/039/001/011/013
E032/E514

3.2500 (1680, 1106, 1041, 1057)

AUTHOR: Bystrov, N.F.

TITLE: Automation of astrometric measurements on lunar photographs with the aid of a photoelectric device

PERIODICAL: Astronomicheskiy zhurnal, v.39, no.1, 1962, 146-150

TEXT: The aim of this work was to develop an automatic photoelectric device for measurements on lunar photographs and, in particular, for the determination of the coordinates of the centre of the moon. The device was developed at the Pulkovskaya observatoriya (Pulkovo Observatory). In order to speed up the measurements, to increase the accuracy and make the method amenable to automation, it was decided to measure the distances from the lunar limb not from a reference point but from the inner edge of a ring printed on a fine-grain plate. The departure of the inner edge of this ring from a perfect circle does not exceed 0.2-0.3 μ for a diameter of about 3 cm. The plate with the ring is placed in permanent contact with the photograph of the moon to be measured and the gap between the lunar disc and the inner edge of the ring is usually 0.2-0.5 mm.

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Fig.2 shows the optical system employed. Light from the source 1 is passed through the condenser 2, the iris diaphragm 3 and the lens 4 and uniformly illuminates the particular part of the photograph of the moon 5. The micro-objective 6 projects the image of the moon (X3 magnification) onto the plane 7 which contains two slits. The light is then passed through the Fabry lens 8 and is finally intercepted by the photomultiplier 9. Fig.3a shows the form of the slits and of the projected image in the plane 7. The system is so arranged that light reaches the photomultiplier alternately through the two slits in 7 and one of the slits (A) has twice the width of the other. The measurements are carried out as follows. To begin with the slit A is placed on the dark part of the image and the slit B on the bright background (Fig.3a). The light flux passing through A is smaller than that through B and the photomultiplier signal recorded on the screen of a CRO is as shown in Fig.3a'. The slits A and B are at a constant distance apart and are displaced togeth[illegible] During the measurements A moves with a constant velo[illegible], towards the limb of the moon and at rightangles to the

Card 1/4

radial direction. When the slit A passes through the edge of the moon (Fig.5б) the light flux passing through it is increased and at some time t_1 it becomes equal to that passed through the slit B. At this point the signal from the photomultiplier disappears and the oscillogram trace is as shown in Fig.5б'. Next, when the slit A enters the bright background, the light flux transmitted by it becomes greater than that transmitted by B (the width of A is greater than the width of B) and the signal is of the form shown in Fig.5в'. At a time t_2 the slit A intercepts the edge of the standard ring and the two light fluxes become equal again, and so on. The photomultiplier signal is fed into a special a.c. amplifier at whose output the signal is of the form shown in Fig.5. The output of this amplifier is fed into various electronic devices which in the end produce pulses whose number is proportional to the distance between the particular point on the edge of the lunar disc and the inner edge of the standard ring. Provision is made for the automatic displacement of the slits so that the entire periphery of the image may be examined in this way automatically. The time interval occupied by one cycle of

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operation (one point on the limb) is about 10 sec. The rms error of a single measurement is about ±0.5-1.0 u. Seventy distances can be measured in about 12 min, which constitutes a reduction by a factor of 6-8 as compared with visual observations. The accuracy is higher by a factor of 5-10. There are 5 figures and 1 Soviet-bloc reference.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya
Akademii nauk SSSR
(Main Astronomical Observatory, Academy of Sciences, USSR)

SUBMITTED: July 18, 1961

S/033/62/039/003/009/010
E032/E114

AUTHOR: Bystrov, N.F.

TITLE: On the accuracy of determination of the coordinates of the lunar centre of mass from photographic observations

PERIODICAL: Astronomicheskiy zhurnal, v.39, no.3, 1962, 527-531

TEXT: The method described by Kh.I. Potter (Gl. astron. observ. v Pulkove, v.22, no.168, 1961) is subject to various errors which are: 1) errors introduced in measurements of the position of points on the lunar limb; 2) irregularity in the limb; 3) asymmetry in the figure of the moon; and 4) photographic irradiation. The contributions of these errors to the total error are discussed. The first two of the above errors have been reduced by the use of the automatic photoelectric device described by the author in a previous paper. The asymmetry of the figure of the moon has been discussed by Kh.I. Potter and the present author (Astron. zh. v.38, 1961, 946). Photographic irradiation is said to be a difficult problem for which no

solution is proposed in the present paper. A new modification of the method of determining the centre of mass of the moon from lunar photographs is briefly described.
There is 1 table.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya
Akademii nauk SSSR
(Main Astronomical Observatory, AS USSR)

SUBMITTED: November 17, 1961

L 43545-65 EED(b)-3/EWG(v)/EWT(l)/EEC(t)/T/EWA(d)/FSS-2 Pe-5/Pn-4/Pae-2
IJP(c) GW/GS

ACCESSION NR: AT5009187 UR/0000/63/000/000/0403/0406

AUTHOR: Bystrov, N.F.

TITLE: Astrometric measurements of lunar photographs by means of a photoelectric device

SOURCE: Astrometricheskaya konferentsiya SSSR, 15th, Pulkovo, 1960. Trudy. Moscow, Izd-vo AN SSSR, 1963, 403-406

TOPIC TAGS: moon, astrometry, lunar limb, astronomical instrument, photoelectric instrument

ABSTRACT: Until 1960, Pulkovo astronomers determined the coordinates x, y of the lunar center and the radius r of the most probable circle passing through a point of the illuminated solar limb by measuring the distances from an artificial mark near the lunar center to 32 points evenly distributed along a 155° - arc. In this method, the mean square errors of the coordinates were:

$\varepsilon_x = \pm 7$ microns $= \pm 0''.42$, $\varepsilon_y = \pm 3$ microns $= \pm 0''.18$.

However, if irregularities of the lunar limb, photographic irradiation and the asymmetry of the lunar figure are taken into account, the errors in determination of the coordinates

Card 1/2

ACCESSION NR: AT5009187

of the lunar center will be considerably greater. Pulkovo astronomers therefore decided to adopt a photoelectric method for increasing the accuracy and productivity of professional personnel. A photoelectric instrument was developed in 1959-1960 for the measurement of lunar photographs. The instrument automatically measures the distance ℓ_i to the inner edge of a circular template (Fig. 1 of the Enclosure). Fig. 2 of the Enclosure shows the optical system of the instrument. The light from the source, after passing through the condensing lens, the iris diaphragm and the lens (4), uniformly illuminates the part of the plate with the moon. The lunar image is projected by a micro-objective onto the plane where there are two slits. The light beam then passes through the Fabry lens and reaches the photocathode of the photomultiplier. The light beam is modulated by a rotating toothed disk: the light reaches the photomultiplier first from one slit and then the other. Further details are given on the components of this system and how the necessary values are determined automatically and punched onto punch cards. A comparison of the results of visual and photoelectric measurements revealed that the accuracy of the latter is greater by approximately a factor of 10. The photoelectric instrument also can be used for compiling maps of the limb zone of the moon. "The author expresses deep appreciation to Kh. I. Potter, Yu. P. Platonov, A. F. Dravskikh and Yu. A. Belyayev for assistance in planning and constructing the instrument". Orig. art. has: 3 formulas and 4 figures.

L 43545-65

ACCESSION NR: AT5009187 0

ASSOCIATION: none

SUBMITTED: 06Apr63 ENCL: 02 SUB CODE: AA, ES

NO REF SOV: 000 OTHER: 000

Card 3/5

SMOLYAR,P.M.; NIKULIN, P.I.; BYSTROV, N.I.

Joiner's bench for finishing assembled door leaves. Suggested by Smoliar, P.M.; P.I.Nikulin, N.I.Bystrov. Rats.i izobr.v stroi. no.9:71-73 '59. (MIRA 13:1)

1. Rabotniki zavoda "Stroydetal'" stroitel'nogo tresta No.16 Glavleningradstroya, Leningrad, Moyka, d.67/69.
(Doors)

BYSTROV, N.M., agronom; LYSYAKOV, M.P., tekhnik-khimik.

Storage of peanuts and soybeans at low temperatures. Masl.-zhir.prom. 19 no.3:8-9 '54. (MLRA 7:6)

1. Armavirskiy maslozavod No.4. (Peanuts) (Soybean)

KONDRAT'YEVA, T.F., kand.tekhn.nauk; BYSTROV, N.M., inzh.

Efficient type of fully-opening safety valve. Khim.mash. no.1:5-10 Ja '60. (MIRA 13:5)
(Valves) (Compressors)

MOSIN, M.I.; KATS, G.I.; SHEVYAKOV, L.D., akademik, red.; SHUKHARDIN, S.V., red.; AGOSHKOV, M.I., red.; BORISOV, S.F., red.; BYSTROV, N.M., red.; KISLOV, V.M., red.; KRAKHMALEV, M.K., red.; KUZNETSOV, N.A., red.; MAN'KOVSKIY, G.I., red.; MEL'NIKOV, N.V., red.; POLKOVNIKOV, A.A., red.; POPOV, K.S., red.; CHAYKIN, S.I., laureat Leninskoy premii, red.; GONCHAROVA, Ye.A., tekhn. red.

[Kursk Magnetic Anomaly; history of the discovery study, and commercial development of iron-ore deposits. Collection of documents and materials in two volumes, 1742-1960] Kurskaia magnitnaia anomaliia; istoriia otkrytiia, issledovanii i promyshlennogo osvoeniia zhelezorudnykh mestorozhdenii. Sbornik dokumentov i materialov v dvukh tomakh, 1742-1960. Belgorod, Belgorodskoe knizhnoe izd-vo. Vol.1. 1742-1926. 1961. 417 p. (MIRA 15:3)

(Kursk Magnetic Anomaly--Iron ores)
(Magnetic prospecting)

BYSTROV, N.V. (Rostov-na-Donu)

Application of combined therapy in various diseases. Klin. med. 31 no.11:62-66 N '53. (MLRA 6:12)

1. Iz Man'kovo-Berezovskoy sel'skoy rayonnoy bol'nitsy (glavnyy vrach N.V.Bystrov) Milyutinskogo rayona Rostovskoy oblasti.
(Therapeutics)

BYSTROV, N.V.

Extensive resections of small intestine. Khirurgiia 33 no.2:109-110 F '57. (MLRA 10:6)

1. Iz Krasnoyarskoy gorodskoy bol'nitsy.
(INTESTINE, SMALL, surg.
resection, extensive (Rus))

Bystrov, N.V.

BYSTROV, N.V.

Novocaine-paraffin block. Zhur.nevr. i psikh. Supplement:29 '57.
(MIRA 11:1)

1. Utorgoshskaya sel'skaya rayonnaya bol'nitsa (galvnyy vrach N.V. Bystrov) Novgorodskoy oblasti.

(LOCAL ANESTHESIA) (PARAFFINS) (NOVOCAINE)

BELYAYEV, A.A.; BYSTROV, N.V.

Dangers and complications in enterostomy [with summary in English]. Khirurgiia 34 no.9: 68-73 S '58. (MIRA 12:4)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. S.V. Lobachev) Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N.V. Sklifosovskogo (dir. M.M. Tarasov, glavnyy khirurg-prof. B.A. Petrov).
(INTESTINES--SURGERY)

BYSTROV, N.V.

Clinical forms of acute pancreatitis; their diagnosis and treatment. Khirurgiia 35 no.12:17-24 D '59. (MIRA 13:6)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. S.V. Lobachev) Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N.V. Sklifosovskogo (dir. - zasluzhennyy vrach USSR M.M. Tarasov, glavnyy khirurg - prof. B.A. Petrov).
(PANCREATITIS)

TULYAKOVA, L.S.; BYSTROV, N.V.

Rare case of osteosynthessis with a three-bladed nail with a plate in a subtrochanteric gunshot fracture of the right femur. Khirurgiia 35 no. 5:105-106 My '59. (MIRA 13:10)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. S.V. Lobachev) Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi im. Sklifosovskogo (dir. - zasluzhennyy vrach USSR M.M. Tarasov, glavnyy khirurg - prof. B.A. Petrov).
(FEMUR--FRACTURE)

BYSTROV, N.V. (Moskva, Sadovaya-Triumfal'naya ul., d.19, kv. 2)

Anesthesia in amputations of the extremities of seriously injured persons. Vest. khir. 82 no.6:135-137 Je '59. (MIRA 12:8)

1. Iz 1-y khirurgicheskoy kliniki (rukovod. - prof. S.V. Lobachev) Institute im. N.V. Sklifosovskogo (gl. khirurg - prof. B. A. Petrov)
(ANESTHESIA) (AMPUTATION)

BYSTROV, N.V.

Traumatic pancreatitis. Khirurgiia 37 no.2:16-21 F '61.
(MIRA 14:1)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. S.V. Lobachev) Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N.V. Sklifosovskogo (glavnyy khirurg - zasluzhennyy deyatel' nauki prof. B.A. Petrov; dir. - zasluzhennyy vrach USSR M.M. Tarasov).
(ABDOMEN--WOUNDS AND INJURIES) (PANCREAS--DISEASES)

SHADRIN, B.P.; BYSTROV, N.V.

Operating the OMS-2 cleaning machine. Transp. i khran. nefti i nefteprod. no.1:11-12 '65. (MIRA 18:4)

1. Severno-Zapadnoye nefteprovodnoye upravleniye.

BYSTROV, P., prepodavatel'

Materials on the seven-year plan in classes on the technology of metals. Prof.-tekh.obr. 17 no.3:11-13 Mr '60. (MIRA 13:6)

1. Remeslennoye uchilishche No.1, g.Magnitogorsk.
(Metallurgy--Study and teaching)

BYSTROV, P. D. and YEVSTYUKHIN, A. I.

"A study of the phase diagram of the sytem NaF-ThF_4 over the concentration range 0 to 35 mole % ThF_4. Report of the MIFI, 1949 (umpublished).

SO: J. Nuclear Energy, II, 1957, Vol. 5, p. 114, Pergamon Press Ltd., London

BYSTROV, P. D. and YEVSTYUKHIN, A. I.

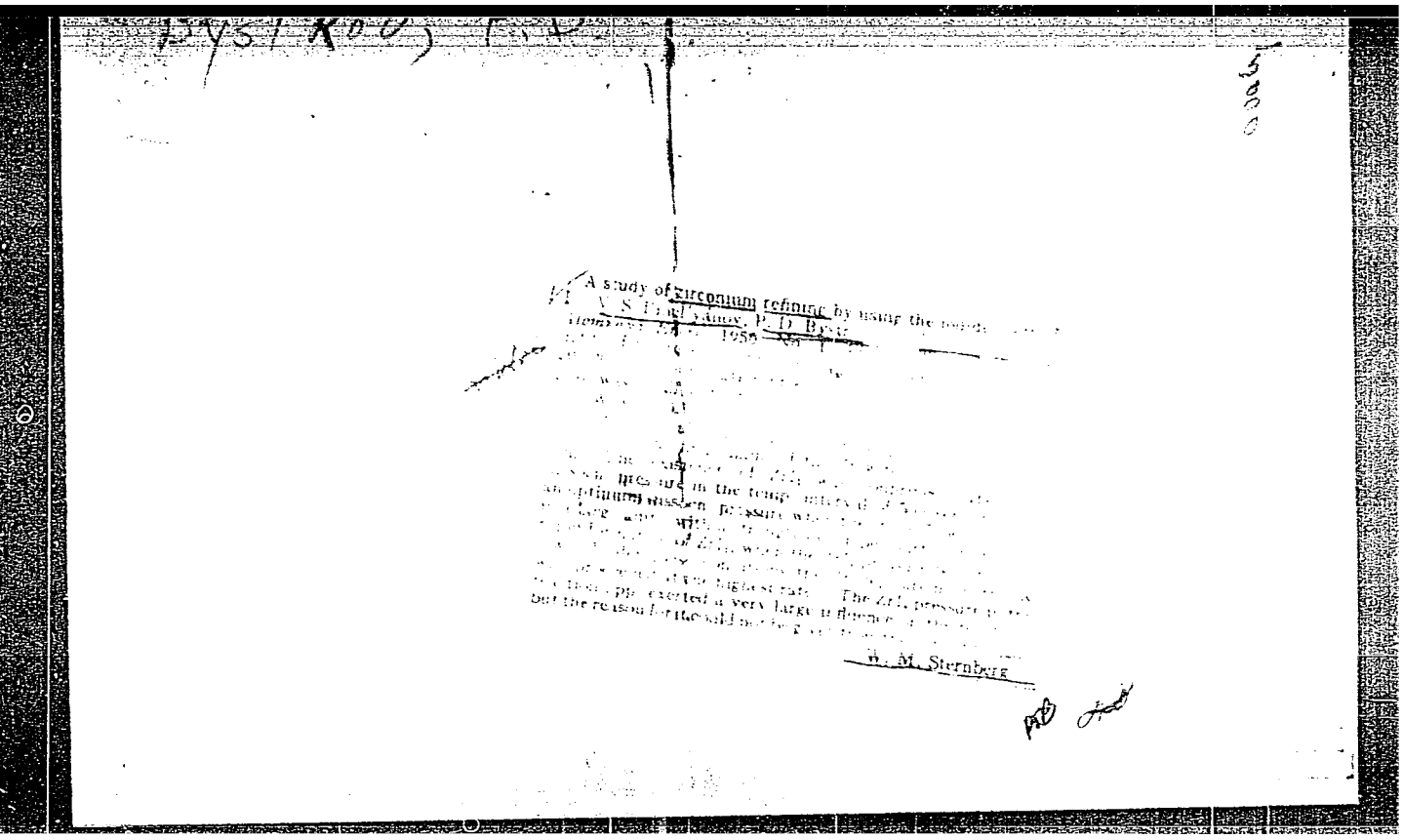
"A Study of the system NaF-KF-ThF_4 and the composition of the electrolyte during electrolysis of the chloride-fluoride system NaCl-KCl-ThF_4. Report of the MIFI, 1953 (unpublished).

SO: J. Nuclear Energy, II, 1957, Vol. 5, p. 114, Pergamon Press Ltd., London

BYSTROV, P. D.

BYSTROV, P. D.: "Investigation of the process of iodide-refining of zirconium". Moscow, 1955. Min Higher Education USSR. Moscow Engineering-Physics Inst. (Dissertation for the Degree of Candidate of TECHNICAL Sciences)

SO: Knizhnaya Letopis' No. 51, 10 December 1955



A study of zirconium refining by using the [illegible]

W. M. Sternberg

BYSTROV, P. D.

USSR/ Inorganic Chemistry. Complex Compounds C.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11437

Author : Yemel'yanov V.S., Bystrov P.D., Yevstyudhin A.I.
Title : Investigation of Iodide Method of Zirconium Refining. Communication 2. Lower Zirconium Iodides and Effect of Tetraiodide Pressure on Rate of Deposition of the Metal

Orig Pub : Atom. energiya, 1956, No 3, 122-131

Abstract : In continuation of previous work (Part. 1, RZhKhim, 1956, 68069) an investigation was made of the influence of lower iodides (LI) and vapor pressure of ZrI_4, on the process rate of zirconium refining by the iodide method. Following refining LI are found on the surface of the raw metal in the form of black, black-brown, occasionally bluish-black bloom. The deposit approximates ZrI_3 in composition at reaction flask temperatures of 300-500°, and that of ZrI_2 at 620°. Combining of ZrI_4 at LI at the surface has as a final result, according to the authors, elimination of excess ZrI_4 on prolonged iodizing and consequently a decrease of its pressure in the reaction flask, which in turn changes the rate. The authors believe that other important factors which affect the rate of the

1/2

USSR/ Inorganic Chemistry. Complex Compounds C.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11437

process at pressures of ZrI_4 > 0.2 - 0.3 mm Hg., are inhibition of diffusion process of metal transfer, due to lowering of diffusion coefficient of gaseous phase components on increase in pressure, and formation of LI at surface of incandescent Zr rod.

2/2

BYSTROV, R. D.

3

1271

A STUDY OF THE IODIDE PROCESS OF REFINING ZIR-[illegible]

[illegible]

[illegible] the slowing down [illegible] diffusion [illegible] with increasing pressure and the formation of the [illegible] on the surface of the heated [illegible] of the latter factor is considerable at [illegible] tetraiodide pressures when the reverse process [illegible] dissolution of the rod can also begin [illegible]

SOV/137-58-9-18827

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 95 (USSR)

AUTHORS: Yemel'yanov, V.S., Bystrov, P.D., Yevstyukhin, A.I.

TITLE: An Iodide Method of Refining Zirconium. A Contribution to the Problem of the Relationship of Rate of Deposition of the Metal to the Temperature of an Incandescent Zirconium Filament (Iodidnyy metod rafinirovaniya tsirkoniya. K voprosu o zavisimosti skorosti otlozheniya metalla ot temperatury raskalennoy tsirkoniyevoy niti)

PERIODICAL: V sb.: Nekotoryye vopr. inzh. fiz. Nr 2. Moscow, 1957, pp 15-23

ABSTRACT: Taking the hypothesis that processes of diffusion are decisive in the kinetics of the process of the transfer of Zr to a central filament (F), it is shown that the rate of deposition of the Zr on the F is directly proportional to the pressure of free I near the surface of the F, and that this in turn determines the temperature of the F. Inasmuch as the vapor pressure of the I around the F cannot exceed the total pressure in the apparatus, which is governed by the wall temperature, the rate of deposition of Zr on the F ceases to increase with a further rise in F

Card 1/2

SOV/137-58-9-18827

An Iodide Method of Refining Zirconium. (cont.)

temperature after the attainment of some specific F temperature which depends upon the total pressure in the apparatus. These concepts afford an explanation of the available experimental data of various authors on the dependence of the rate of Zr deposition upon an F on the temperature of that F. It is also shown that the quantity of Q_A introduced by Döring and Molière (J.H. Döring,. K. Molière, Z. für Elektrochemie, 1952, Vol 56, Nr 4, p 403) in the equation log a const Q_A/RT_D, where a is the rate of Zr deposition and T_D, the temperature of the F, is related to ΔH in the process of dissociation by the expression $Q_A = \Delta H/4$. If account be taken of the formation of lower Zr iodides on the surface of the F, the value of Q_A, it appears, is also dependent upon the vapor pressure of the ZrI_4.

V.M.

1. Zirconium--Processing 2. Filaments (Incandescent lamp)--Temperature factors
3. Zirconium--Electrodeposition 4. Mathematics

Card 2/2

BYSTROV, Y. D.

8775 An Investigation of the Iodide Method of Refining Zirconium. II. Lower Zirconium Iodides and the Influence of Tetra-Iodide Pressure Upon the Rate of Metal

When the refining process proceeds slowly, ... causes the complete disappearance ... and a consequent change of it vapor pressure ... and this in turn leads to a change in the rate of ...

30659
S/137/61/000/010/009/056
A006/A101

5.2200 1067 1454, 1521

AUTHORS: Yemel'yanov, V. S., Bystrov, P. D., Yevstyukhin, A. I.

TITLE: Production of plastic hafnium by the iodide method

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 10, 1961, 20, abstract 100153 (V sb. "Metallurgiya i metalloved. chist. metallov", no. 1, Moscow, 1959, 63 - 69)

TEXT: The authors studied the dependence of Hf precipitation rate on the temperature of the initial metal, the pressure in the retort, and the temperature of the filament. Hf precipitation was performed in a cylindrical Mo-glass retort of 18 - 20 cm length and 8 cm in diameter. The initial tungsten-filament of 0.05 mm in diameter and 8 cm length, was heated by a-c. The retort was heated in an electric resistance furnace. In all the experiments Hf rods were used as initial metal. The Hf was fourfold refined by the iodide method; the rods were about 2 mm in diameter and weighed 35 g. The iodine was introduced in the form of HfI in an amount of 1.5 g. The temperature of the filament was 1,350°C; the initial temperature of the retort was 355°C and attained 370 - 375°C at the end of the experiment. The experiments showed that the maximum rate of Hf precipitation

Card 1/2

30659
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A006/A101

Production of plastic hafnium by the iodide method

on the filament was attained at 230°C. The temperature of the raw metal affects the precipitation rate less than the pressure in the retort. The dependence of the Hf precipitation rate on temperature was investigated at 360°C in the retort and 230°C temperature of the ampoule with I_2. The rate of Hf precipitation increases under these conditions, but is considerably less than that of Zr precipitation.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

KOSTERIN, Yu.I., kand.tekhn.nauk; BYSTROV, P.G.; MIKHAYLOV, V.V.

Some data on effective performance of motor-vehicle brake linings. Avt.prom. 31 no.7:17-18 Jl '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tekhnologicheskiy institut asbestovykh tekhnicheskikh izdeliy.

ACCESSION NR: AP4042469 S/0294/64/002/003/0429/0436

AUTHOR: By*strov, P. I. (Moscow)

TITLE: Nonstationary temperature field of frozen sections in systems with liquid-metal coolants

SOURCE: Teplofizika vy*sokikh temperatur, v. 2, no. 3, 1964, 429-436

TOPIC TAGS: nuclear reactor, liquid metal coolant, nonstationary temperature field, reactor coolant, maintenance

ABSTRACT: An analytical solution was obtained which permits determination of the nonsteady-state temperature field in the center and at the boundaries of frozen sections of pipings in nuclear power stations using liquid metal as the coolant. Freezing of the coolant can be used for sealing of liquid-metal systems. In nuclear power stations with liquid-metal cooling, some sections of the loops can be frozen, which makes it possible to exchange separate loop elements and to perform preventive maintenance without draining the coolant from the pipes and the reactor. Knowledge of the temperature fields

Card 1/2

ACCESSION NR: AP4042469

in the frozen section permits accurate selection of the type of coolant, the intensity of heat removal, and the dimensions of this section. The freezing time is of great importance for evaluating the effectiveness of the frozen section. Nomograms are given for determining the dimensionless temperature in the center and at the boundaries of the frozen section as a function of Biot and Fourier numbers. The dimensionless temperature was plotted versus the pipe length for a flow of sodium (1073K) cooled with air (293K) for 1380 sec in a pipe 0.2 m in diameter. Orig. art. has: 4 figures and 23 formulas.

ASSOCIATION: none

SUBMITTED: 10Feb64	ATD PRESS: 3067	ENCL: 00
SUB CODE: NP, MM	NO REF SOV: 002	OTHER: 000

Card 2/2

BYSTROV, P. P.

ALEKSEYEVA, V.P.; SMIRNOV , V.I., akademik, redaktor; CHEBOTAREV, G.A., professor, doktor fiziko-matematicheskikh nauk, redaktor; BYSTROV, P.P., redaktor; ZENDEL', R.Ye., tekhnicheskiy redaktor.

[Mathematics and mechanics in the publications of the U.S.S.R. Academy of sciences; a bibliography] Matematika i mekhanika v izdaniiakh Akademii nauk SSSR; bibliografiia. Sostavila V.P. Alekseeva pod red. V.I.Smirnova. Moskva, Vol.2, 1936-1947. 1955. 515 p. (MLRA 9:1)

1. Akademiya nauk SSSR. Biblioteka.
(Bibliography--Mathematics) (Bibliography-- Mechanics)

NOVIKOV, I.T.; NEPOROZHNIY, P.S.; LAVRENENKO, K.D.; BOGDANOV, N.M.; FINOGENOV, Ya.I.; PLATONOV, N.A.; SHIRKOV, I.S.; BELYAKOV, A.A.; SEVAST'YANOV, V.I.; ERISTOV, V.S.; ERISTOV, V.S. RAZIN, N.V.; MNATSAKANOV, L.N.; PLATONOV, V.A.; SHKUDLIN, B.M. SHKUDLIN, B.M.; ROZANOV, K.A.; LIVSHITS, A.Ya.; LOPATIN, N.A.; BYSTROV, P.S.

Sergei Borisovich Fogel'son. Gidr. stroi. 31 no. 1:59-60 Ja '61. (MIRA 14:2)
(Fogel'son, Sergei Borisovich, 1911-1960)

BYSTROV, S.

Unwarranted building. Zhil.-kom. khoz. 8 no. 8:10-12 '58. (MIRA 11:8)

1. Glavnyy inzhener Glavnogo upravleniya proyektnykh organizatsiy Ministerstva kommunal'nogo khozyaystva RSFSR.
(Building--Contracts and specifications)

BYSTROV, S.; BERSENEV, S.

Good intentions or a specific suggestion? Izobr. i rats. no. 4:47-48 Ap '61. (MIRA 14:4)
(Technological innovations)

BYSTROV, S.

Indemnification regulations when buildings are torn down. Na stroi. Ros. 4 no.5:26-27 My '63. (MIRA 16:5)

1. Glavnyy spetsialist Gosstroya RSFSR.
(Eminent domain) (Building laws)

BYSTROV, S.A.; PATRIKEYEV, G.S.

The SShCh-1 chip sorter. Der. prom. 13 no.4:8-9 Ap '64. (MIRA 17:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki drevesiny.

OTLEV, I.A.; BYSTROV, S.A., inzh.; SHIRYAYEV, Yu.D., mladshiy nauchnyy sotrudnik; SVETLOVA, A.F., mladshiy nauchnyy sotrudnik.

Economics of the manufacture of piezothermoplastics. Otlev. Nauch. trudy TSNIIMOD no.16:91-99 '63 (MIRA 17:3)

1. Zaveduyushchiy laboratoriyey spetsial'nogo oborudovaniya dlya proizvodstva novykh materialov TSentral'nogo nauchno-issledovatel'skogo instituta mekhanicheskoy obrabotki drevesiny (for Otlev). Laboratoriya spetsial'nogo oborudovaniya dlya proizvodstva novykh materialov TSentral'nogo nauchno-issledovatel'skogo instituta mekhanicheskoy obrabotki drevesiny (for Bystrov, Shiryayev, Svetlova).

MOSHKIN, A.M., dotsent; BYSTROV, S.G., zhurnalist; ADAMOV, V.V., dotsent, kand. istor. nauk, retsenzent; KOLOSNITSYN, V., red.; PAL'MINA, N., tekhn. red.

[Alapayevsk] Alapaevsk. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1961. 125 p. (MIRA 15:4)

1. Sverdlovskiy pedagogicheskiy institut (for Moshkin). 2. Ural'skiy gosudarstvennyy universitet (for Adamov).
(Alapayevsk--Economic conditions) (Alpayevsk--History)

BYSTROV, S.I., inzh.; BOREVSKIY, V.M., inzh.

Flowsheet for preparing ingot mold trains for bottom pouring. (MIRA 11:7)
Stal' 18 no. 6:513-514 Je '58.

1. Chelyabinskiy metallurgicheskiy zavod.
(Steel ingots)

BYSTROV, S. N. Eng.

Kilns, Rotary

Fast repair of rotary kiln tubes. TSement 18, no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952, UNCLASSIFIED.

Bystrov, S.N.

Metal

"Open-hearth furnaces' operation with air addition into gas ports. S. N. Bystrov, A. A. Dobrokhotov, and A. N. Morozov (Met. Plant, Chelyabinsk). *Stal'* 16, 597-601 (1956).—An air injector installed in the gas ports of an open-hearth furnace, the design and functioning of which are well detailed, leads to a higher flame temp., a greater heat input, and an increase in steel production of 5-7%. Coke-oven gas consumption per ton remained about the same. I. D. Gat

3

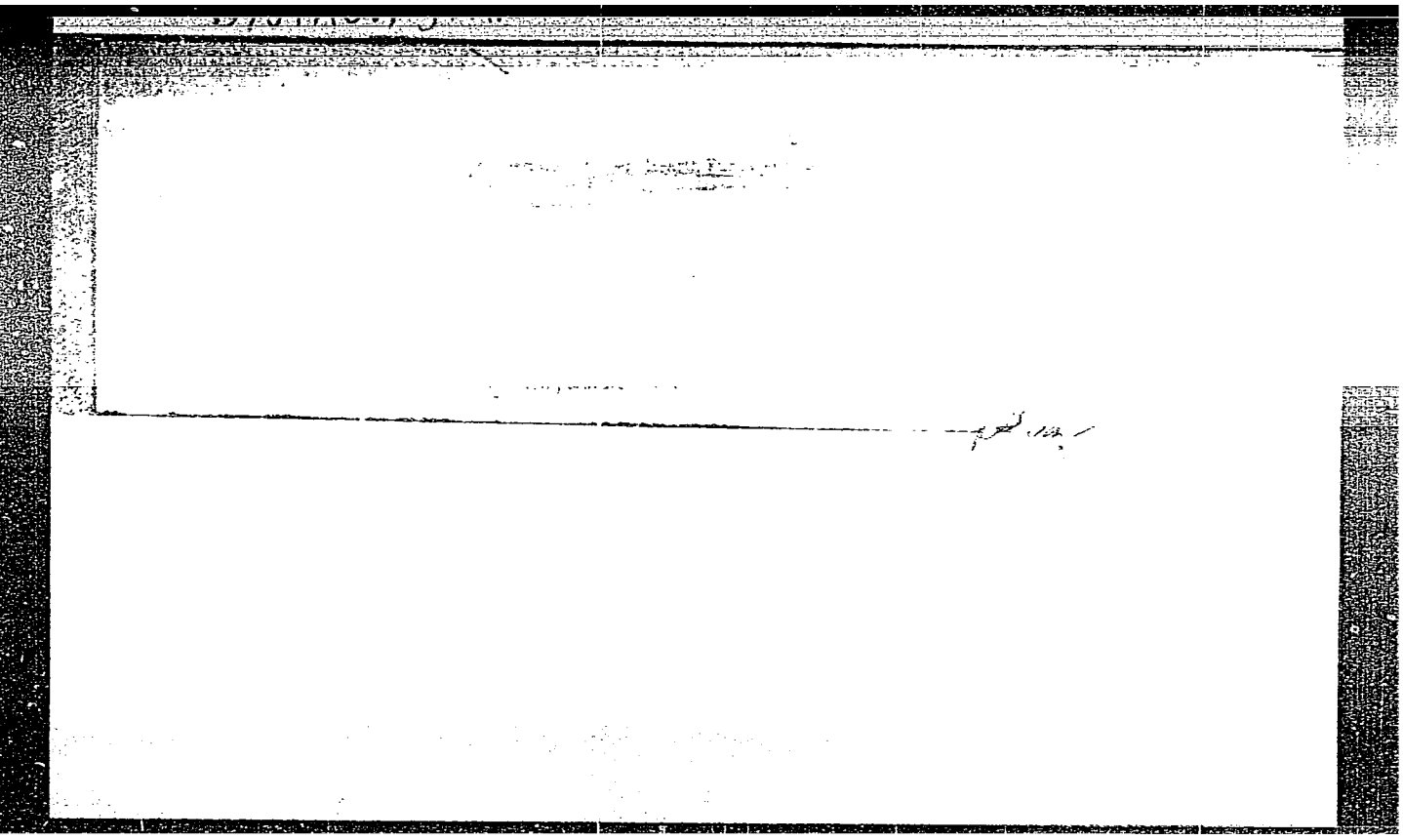
BYSTROV, S.N., inzhener.

Preventing the formation of cracks in rotary kiln recuperator funnels. TSement 22 no.2:30 Mr-Ap '56. (MIRA 9:9)

1.Novo-Pashiyskiy tsementnyy zavod.
(Kilns, Rotary)

AFONIN, K.B.; BURTSEV, K.I.; BYSTROV, S.N.; VINETS, G.B.; VODNEV, G.G.; VORONIN, A.S.; GEVLICH, A.S.; GRYAZNOV, N.S.; GUDIM, A.F.; GUSYATINSKIY, M.A.; DVORIN, S.S.; DIDENKO, V.Ye.; DMITRIYEV, M.M.; DONDE, M.M.; DOROGOBID, G.M.; ZHDANOV, G.I.; ZAGORUL'KO, A.I.; ZELENETSKIY, A.G.; IVASHCHENKO, Ya.N.; KAFTAN, S.I.; KVASHA, A.S.; KIREYEV, A.D.; KLISHEVSKIY, G.S.; KOZYREV, V.P.; KOLOBOV, V.N.; LGALOV, K.I.; LEYTES, V.A.; LERNER, B.Z.; LOBODA, N.S.; LUBINETS, I.A.; MANDRYKIN, I.I.; MUSTAFIN, F.A.; NEMIROVSKIY, N.Kh.; NEFEDOV, V.A.; OBUKHOVSKIY, Ya.M.; PERTSEV, M.A.; PETROV, I.D.; PODOROZHANSKIY, M.O.; POPOV, A.P.; RAK, A.I.; REVYAKIN, A.A.; ROZHKOV, A.P.; ROZENGAUZ, D.A.; SAZONOV, S.A.; SIGALOV, M.B.; STOMAKHIN, Ya.B.; TARASOV, S.A.; FILIPPOV, B.S.; FRIDMAN, N.K.; FRISHBERG, V.D.; KHAR'KOVSKIY, K.V.; KHOLOPTSEV, V.P.; TSAREV, M.N.; TSOGLIN, M.E.; CHERNYY, I.I. CHERTOK, V.T.; SHELKOV, A.K.

Samuil Berisovich Bamme. Koks i khim. no.6:64 '56. (MLRA 9:10)
(Bamme, Samuil Berisovich, 1910-1956)



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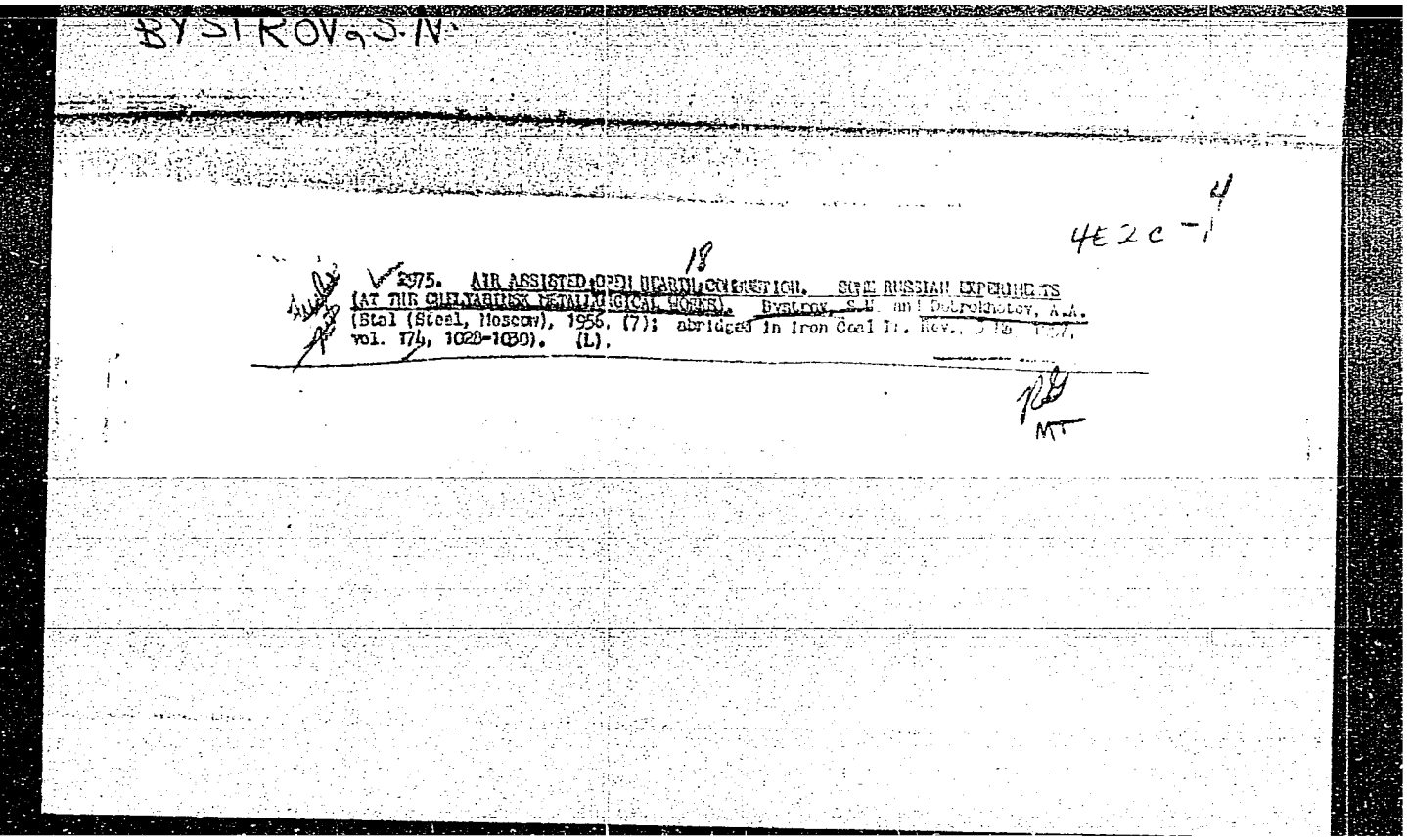
BYSTROV, S.M., inzhener

Gear cutting on the inside of "Fast" type couplings. TSement 23 no.1:25 Ja-F '57. (MLRA 10:4)

1. Novo-Pashiyskiy tsementnyy zavod.
(Gear cutting)



BYSTROV, S.N.

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18

2975. AIR ASSISTED OPEN HEARTH COMBUSTION. SOME RUSSIAN EXPERIMENTS (AT THE CHELYABINSK METALLURGICAL WORKS). Bystrov, S.N. and Dobrolubov, A.A. (Stal (Steel, Moscow), 1956, (7); abridged in Iron Coal Tr. Rev., 1956, vol. 174, 1028-1030). (L).

18
MT

SOV/133-58-6-10/33

AUTHORS: Bystrov, S.N. and Borevskiy, V.M., Engineers

TITLE: A Scheme for Preparation of Mould Trains for Bottom Pouring of Metal (Potochnaya skhema podgotovki sostavov dlya sifonnoy razlivki)

PERIODICAL: Stal', 1958, nr 6, pp 513 - 514 (USSR)

ABSTRACT: The organisation of the mould preparation shop which serves two melting shops on the Chelyabinsk Metallurgical Combine is described. Some special features which are particularly recommended: cleaning of mould bottom with water, cleaning and coating of the walls, pre-heating of cold stands directly on bogies. There are 2 figures.

ASSOCIATION: Chelyabinskiy metallurgicheskiy kombinat (Chelyabinsk Metallurgical Combine)

Card 1/1

1. Molds--Preparation 2. Molds--Maintenance

SOV/130-59-1-15/21

AUTHORS: Bystrov, S.N. and Sanpiter, S.A.

TITLE: Improvement in Internal Transport at the Chelyabinsk Metallurgical Works (Uluchsheniye transportnykh perevozok na Chelyabinskom metallurgicheskom zavode)

PERIODICAL: Metallurg, 1959, Nr 1, pp 30-32 (USSR)

ABSTRACT: Stating that many improvements have recently been effected in the transport system at the Chelyabinsk metallurgical works where bottom pouring requires the monthly handling of 4300 tonnes of refractories at the refractories plant, the authors briefly describe some of the handling methods adopted at the works. Fig 1 shows a bucket for friable materials, Figs 2 and 3 the transport of ladle bricks and hollow-ware, respectively, in containers, and Fig 4 a side-dump wagon for fireclay powder. The dumping of ferro-alloys into special containers and refractory-brick transport on pallets are shown in Figs 5 and 6, respectively. Supply trains within the works are run to a schedule, with some locomotives specially assigned to

Card 1/2

Improvement in Internal Transport at the Chelyabinsk Metallurgical Works

given trains and others to given stations. As far as possible rolling-mill scrap is prepared at the mill for direct transport to the melting shops. A plan for improving production organisation is drawn up at the works each quarter.

There are 6 figures

BYSTROV, S.N.

Production of semikilled steels in India. Metallurg 8 no.12: 19-20 D '63. (MIRA 17:4)

L 35031-65 EWT(m)/EWP(b)/EWP(t) JD

ACCESSION NR: AP5008155 S/0286/65/000/005/0034/0034

AUTHOR: Paton, B. Ye.; Dudko, D. A.; Medovar, B. I.; Latash, Yu. V.; Maksimovich, B. I.; Shevchenko, A. I.; Stupak, L. M.; Goncharenko, V. P.; Grigor'yev, L. F.; Petukhov, G. K.; Chudin, N. I.; Lubenets, I. A.; Yartsev, M. A.; Keys, N. V.; Tulin, N. A.; Kapel'nitskiy, V. G.; Privalov, N. T.; Pis'mennov, V. S.; Kholodov, Yu. A.; Bystrov, S. N.; Bastrakov, N. F.; Donets, I. D.; Silayev, A. Ya.

TITLE: Method of electroslag casting of ingots. Class 18, No. 168743

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 34

TOPIC TAGS: ingot casting, ingot electroslag casting, electroslag melting, steel melting, alloy melting, metal melting

ABSTRACT: This Author Certificate introduces a method of electroslag casting of ingots in an open or protective atmosphere or in vacuum, in which slag is first melted in a mold with a nonconsumable or consumable electrode arc or plasma jet. To improve the metal quality and the ingot surface and to raise the yield, the molten metal or, if needed, the slag is poured into the mold through a hollow consumable or nonconsumable electrode (see Fig. 1 of the Enclosure). Orig. art. has: 1 figure. [ND]

Card 1/3

L 35031-65

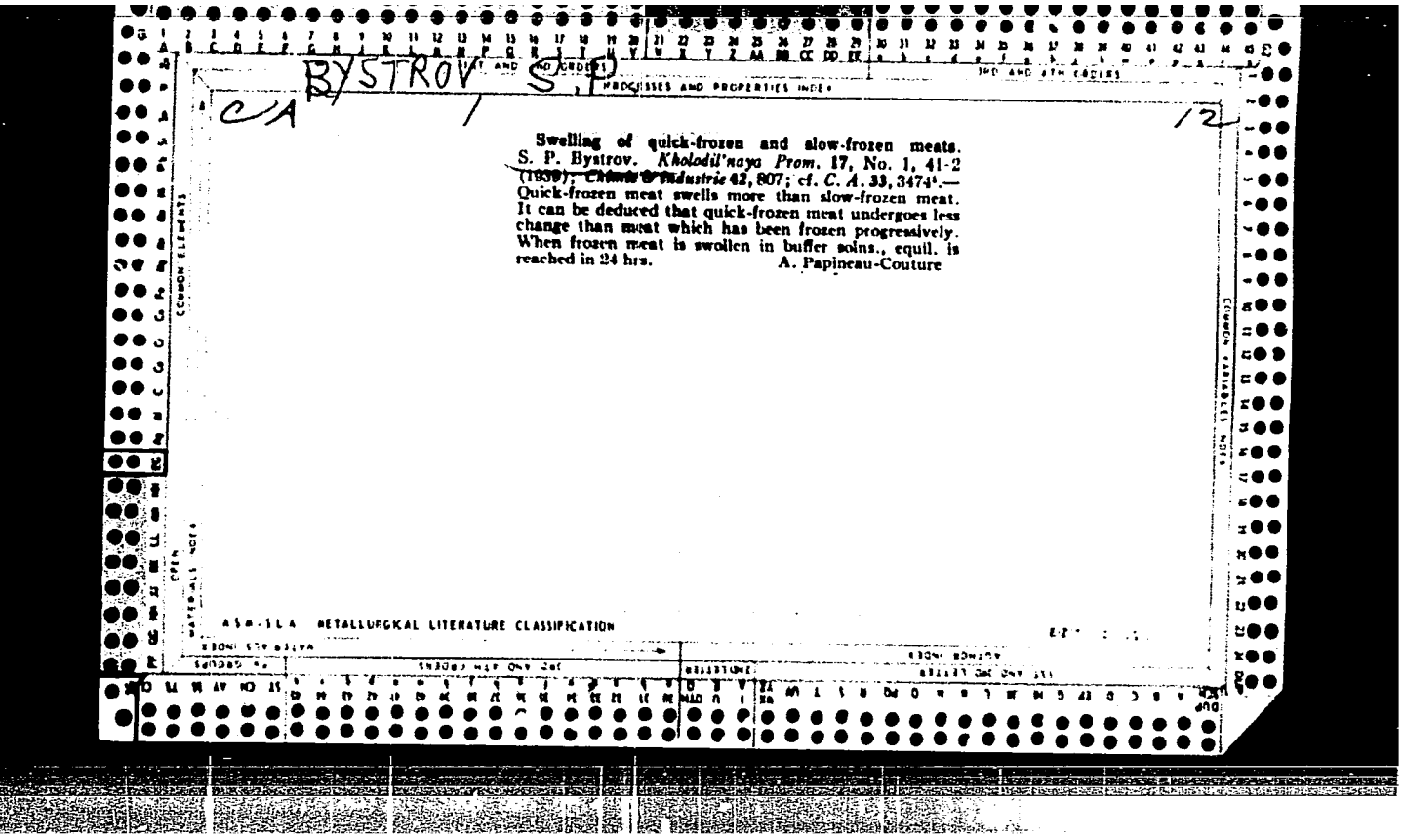
ACCESSION NR: AP5000155

ASSOCIATION: Chelyabinskiy metallurgicheskiy savod (Chelyabinsk Metallurgical Plant)

SUBMITTED: 06Feb63 ENCL: 01 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3215

Card 2/3

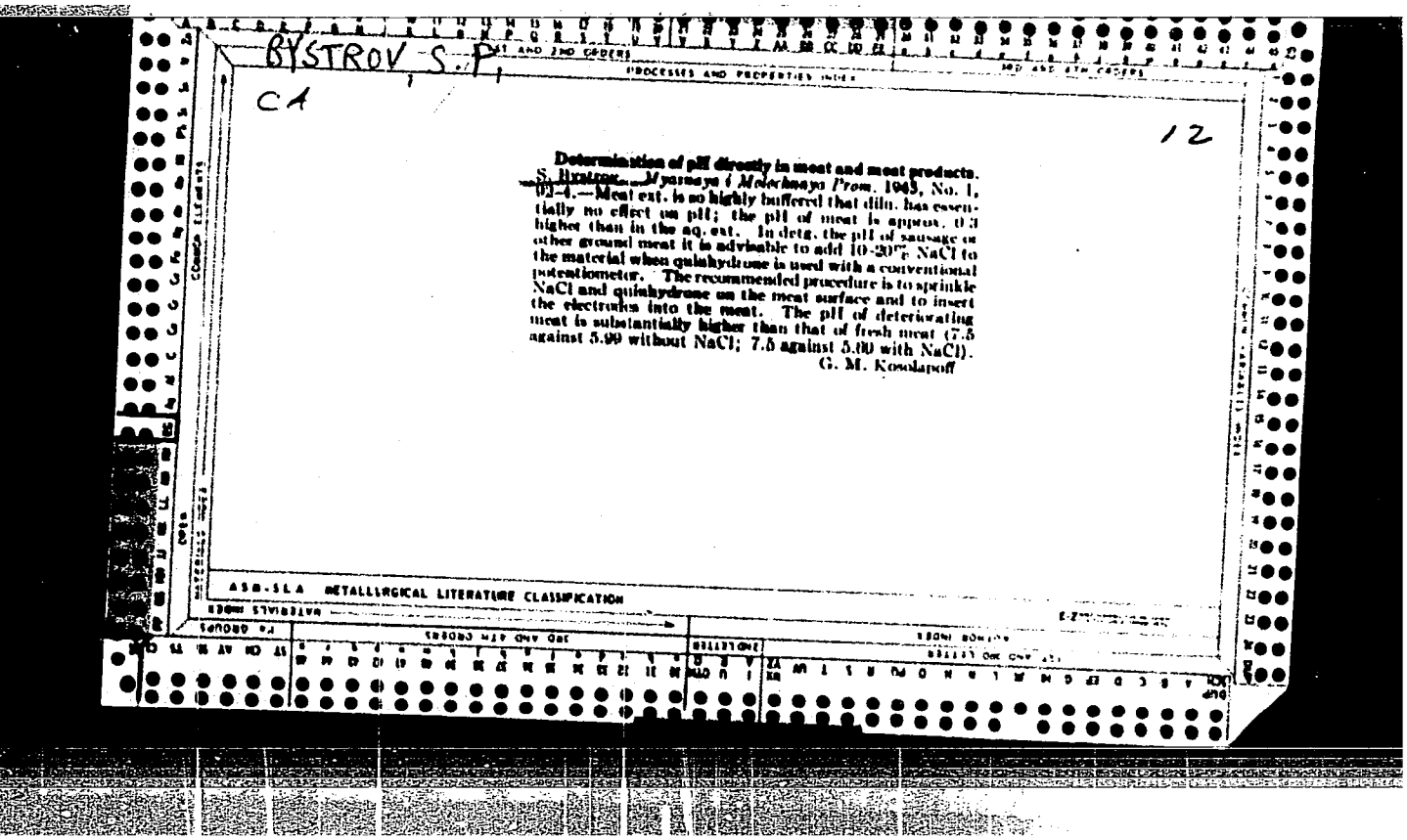


BYSTROV, S.P.

CA 1 12

Swelling of quick-frozen and slow-frozen meats. S. P. Bystrov. *Kholodil'naya Prom.* 17, No. 1, 41-2 (1939); *Chimie & Industrie* 42, 807; *cf. C. A.* 33, 3474⁶.—Quick-frozen meat swells more than slow-frozen meat. It can be deduced that quick-frozen meat undergoes less change than meat which has been frozen progressively. When frozen meat is swollen in buffer solns., equil. is reached in 24 hrs. A. Papineau-Couture

ASM-TLA METALLURGICAL LITERATURE CLASSIFICATION



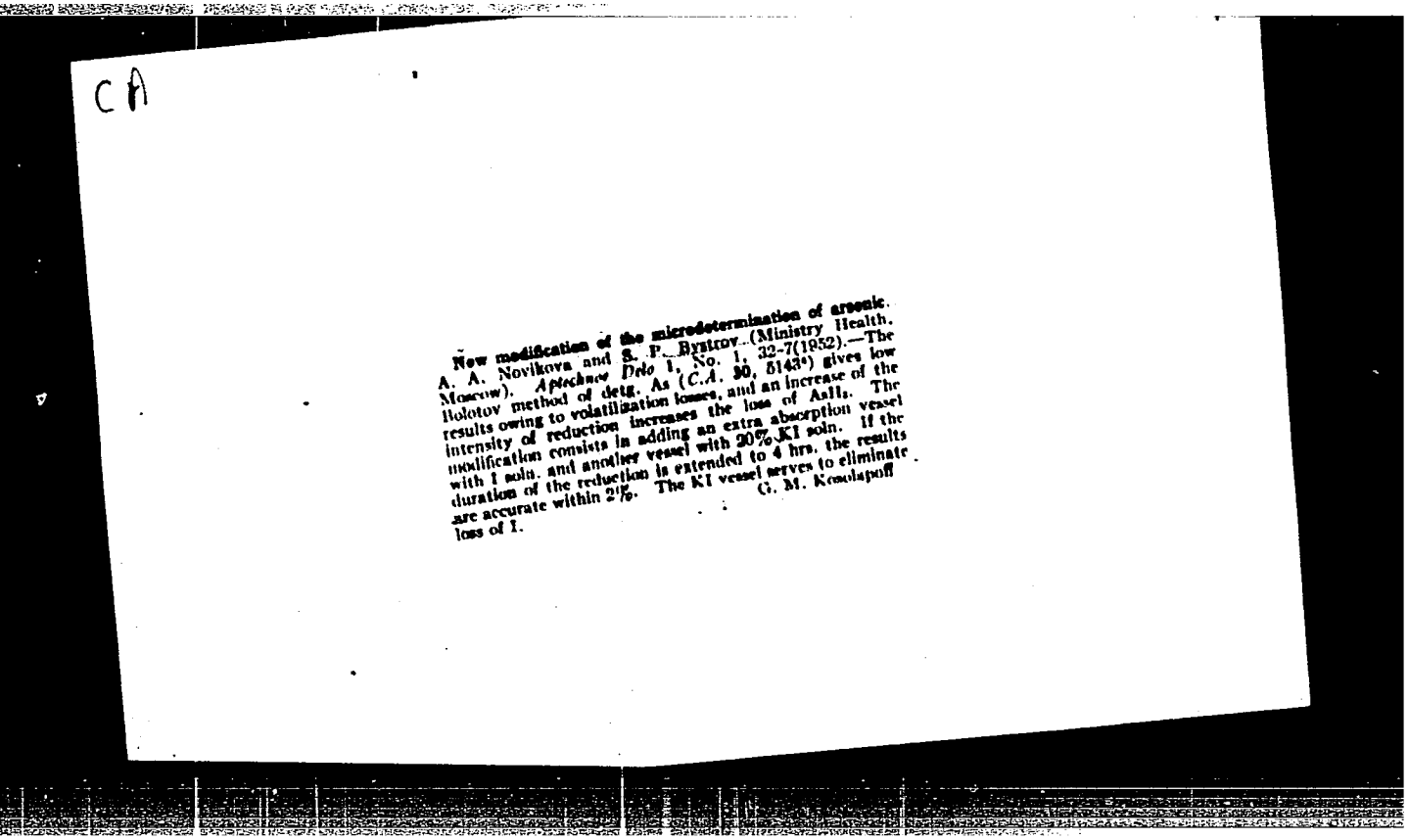
BYSTROV S.P.

CA

12

Determination of pH directly in meat and meat products. S. Bystrov. *Myasnaya i Molochnaya Prom.* 1945, No. 1, 02–4.—Meat ext. is so highly buffered that dilu. has essentially no effect on pH; the pH of meat is approx. 0.3 higher than in the aq. ext. In detg. the pH of sausage or other ground meat it is advisable to add 10-20% NaCl to the material when quinhydrone is used with a conventional potentiometer. The recommended procedure is to sprinkle NaCl and quinhydrone on the meat surface and to insert the electrodes into the meat. The pH of deteriorating meat is substantially higher than that of fresh meat (7.5 against 5.99 without NaCl; 7.5 against 5.80 with NaCl).
G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

New modification of the microdetermination of arsenic. A. A. Novikova and S. P. Bystrov (Ministry Health, Moscow). *Aptechnoe Delo* 1, No. 1, 32-7(1952).—The Holotov method of detg. As (*C.A.* 30, 8143[9]) gives low results owing to volatilization losses, and an increase of the intensity of reduction increases the loss of AsH$_3$. The modification consists in adding an extra absorption vessel with I soln. and another vessel with 20% KI soln. If the duration of the reduction is extended to 4 hrs. the results are accurate within 2%. The KI vessel serves to eliminate loss of I.

G. M. Kosolapoff

NOVIKOVA, A. A., Docent; BYSTROV, S. P., Docent

Arsenic

Determination of small quantities of arsenic. Apt. delo No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress. November, 1952. UNCLASSIFIED.

Bystrov, S. P.

USSR

Determination of small amounts of arsenic. I. Importance of the nature of the acid and addition of stannous chloride. Keeping qualities of arsenic solution. S. P. Bystrov and N. V. Brorov (Moscow Pharm. Inst., Ministry of Health, U.S.S.R.). *Aptechnoe Delo* 3, No. 6, 12-16 (1954).—Either HCl or H_2SO_4 of equal concn. can be used in Zanger-Black's method for detg. 2–10 γ of As. Addn. of $SnCl_2$ is necessary. Weak standards of 2 γ per cc. are stable for only 15 days.

A. S. Mirkin

BYSTROV, S.P., dotsent; PARSHIKOV, Yu.I., student III kursa

Determining small quantities of arsenic. Report No.2. Apt.delo 6 no.1:38-42 Ja-F '57. (MLRA 10:3)

1. Iz Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya RSFSR.
(ARSENIC)

BYSTROV, S.P., dotsent

Quantitative determination of arsenic in preparations containing arsenous anhydride. Apt.delo 9 no.2:67-72 Mr-Ap '60.
(MIRA 13:6)

1. Iz farmatsevticheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(ARSENIC)

SHEVERDYAYEVA, V.M.; BYSTROV, S.P.

Quantitative determination of arsenic in osarsol. Apt. delo 9 no.3:22-27 My-Je '60. (MIRA 14:3)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(ARSENIC—ANALYSIS)

BYSTROV, S.P., dotsent; VARAKINA, A.F., studentka IV kursa

Quantitative determination of arsenic in crystalline sodium arsenate. Apt. delo 9 no. 4:20-26 Jl-Ag '60. (MIRA 13:8)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova.
(ARSENIC--ANALYSIS)

SHEVERDYAYEVA, V.M.; BYSTROV, S.P.

Quantitative determination of arsenic in aminarsone. Apt. delo 9 no.6:29-32 N-D '60. (MIRA 13:12)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(ARSENIC—ANALYSIS)

BYSTROV, S.P., dotsent

Determination of arsenic in a potassium arsenite solution .
Apt. delo 10 no. 1:29-34 Ja-F '61. (MIRA 14:2)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(ARSENIC—ANALYSIS)