

S/126/62/014/001/012/018  
E193/E383

On the problem of ....

the dotted lines representing data obtained by Martin and Moore ( Less-Com. Metals, 1959, 1, no. 2, 85) for commercial-grade metal. The solubility limit at 1 200 °C was evaluated in the following manner: experimental data on the degree of lattice distortion ( $\Delta c$ , kX/1 at.%) of Ti and Zr due to dissolution of oxygen (C.F. Domogola, D.J. McPherson - J. Metals, 1954, 6, 2, 238; E.S. Bumps, H.D. Kessler, H. Hansen - Trans. ASM, 1953, 45, 1008) were plotted against the reciprocal of the volume of the elementary cells of these metals (i.e. against the value characterizing the size of the interstitial pores); on linear extrapolation of this graph to the reciprocal of the volume and elementary cell of Be, the magnitude of  $\Delta c = 0.02$  kX/1 at.%, was obtained, which corresponded to the total solubility of interstitial impurities equalling 1 to 1.5%. This value, although evidently too high owing to inaccuracy of extrapolation and inability to take into account the increase in the thermal-expansion coefficient due to distortion of the vibration spectrum of the lattice by the impurity atoms, is not in contradiction to the value of 0.3% obtained by metallographic analysis (J. Greenspan. TID - 7526 (part 1), 1957 (quoted Card 2/0 3

On the problem of ....

S/126/62/014/001/012/018.  
E193/E383

according to G.E. Darvin, I.H. Budery - "Beryllium",  
London, 1960, p. 291)). There are 2 figures.

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

SUBMITTED: December 2, 1961

Card 3/23

1 7037-65 EWT(m)/EWP(k)/EWP(q)/EWP(b) Pf-4 AFWL/ASD(f)/RAEM(t) JD/HW/JG

ABSTRACT OF A FOREIGN SOURCE

SOURCE: *Atomnaya energiya*, v. 16, no. 5, 1/64, 426-432

TOPIC TAGS: beryllium, beryllium deformation, beryllium failure, beryllium strength, commercial beryllium, high purity beryllium, precipitation hardening

ABSTRACT: The article reports the results of experiments on the type of failure in 99.0 and 99.6% pure beryllium strip at temperatures varying from 20 to 300°C. The specimens were prepared by the method of precipitation hardening.

Page 1/2

1 7037-65

ACCESSION NO. AP4034527

affected the magnitude of plastic deformation as well as the character of failure. The yield point of the high purity specimens was much lower within the investi-

was actually found to be a precipitation-hardened alloy. The tendency towards lower plasticity in polycrystalline beryllium was also established by other investigators as the amount of impurities was increased. The authors emphasize

AMONENKO, V.M.; IVANOV, V.Ye.; TIKHINSKIY, G.F.; FINKEL', V.A.

X-ray study of the solubility of impurities in beryllium. Fiz.  
met. i metalloved. 14 no.6:852-856 D '62. (MIRA 16:2)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.  
(Beryllium—Inclusions)  
(X rays—Industrial applications)

ANONENKO, V. M.

TITLE: Seminar on refractory metals, compounds, and alloys (Kiev, April 1963).

SOURCE: Atomnaya energiya, v. 15, no. 3, 1963, 266-267

ACCESSION NR: AP3008085

Ya, A. Kraftmakher. Heat capacity of W, Ta, and Nb.

V. M. Amonenko and others. Expansion coefficients of Zr, Nb, Mo, Ta, and W.

N. V. Ageyev, M. S. Model'. Expansion coefficients of chromium-base alloys.

S. N. L'vov, V. F. Nemchenko. Temperature dependence of emf and resistivity of Cr, Ti, V, and their borides, carbides, and nitrides; Etingshausen-Nernst effect in titanium,  $TiB_2$ , TiC, and TiN.

N. V. Kolomojets. The emf of chromium-group metals and their alloys.

G. V. Samsonov and others. Superconductivity and thermal-electron properties of refractory compounds.

D. A. Prokoshkin and others. Magnetic, optical, and other properties of refractory elements and the oxidation resistance of beryllides of refractory elements.

Cord 10/11

ACCESSION NR: AT3007907

S/2957/63/000/000/0061/0064

AUTHOR: Amonenko, V. M.; Bolgov, I. S.; Zeydlits, M. P.; Azhazha, V. M.

TITLE: Effect of vacuum melting on properties of EI846, EI852, EI847, and EI437B steels

SOURCE: *Primeneniye vakuuma v metallurgii; trudy\* Trat'yego soveshchaniya po primeneniyu vakuuma v metallurgii*. Moscow, 1963, 61-64.

TOPIC TAGS: vacuum melting, vacuum induction melting, EI846 steel, EI847 steel, EI852 steel, EI437B alloy, EI846 steel vacuum melting, EI847 steel vacuum melting, EI852 steel vacuum melting, EI437B alloy vacuum melting, mechanical property, gas content, nonmetallic inclusion content, ductility, hardness, tensile strength, yield strength, notch toughness

ABSTRACT: Small, 20—25-kg, heats of EI846 [apparently an austenitic chromium nickel steel containing 0.02—0.03% C and 0.1—0.8% B], EI847 [0.5—0.10% C, 14.0—17.0% Cr, 14.0—16.0% Ni, 0.45—0.85% Nb,

Card 1/4

ACCESSION NR: AT3007907

2.5—3.5% Mo], and EI852 [0.50% max C, 1.4—2.1% Si, 12.0—14.0% Cr, 1.0% Ni, 1.2—2.0% Mo] steels and EI437B nickel-base alloy [Nimonic 80A] were melted in a laboratory induction furnace under a vacuum of 0.00005—0.0001 mm Hg. In all four materials vacuum melting greatly reduced the gas content: oxygen, to 0.0007—0.002%; hydrogen, to 0.0001—0.0003%; and nitrogen, to 0.001—0.003%, that is, by 80—90% compared with conventionally melted steels. The size and content of nonmetallic inclusions was also considerably reduced. This resulted in a significant improvement of ductility, especially at 500—800C (see Fig. 1 of the Enclosure). Tensile and yield strengths were not significantly affected by vacuum melting; hardness dropped by 10—20% compared with conventional melting. The beneficial affect of vacuum melting was especially pronounced in EI846 steel. Owing to low carbon and high boron contents, it is difficult to obtain steel of satisfactory quality by conventional arc or induction melting. Satisfactory ductility can be obtained only by keeping the boron content close to the lower limit. In vacuum-melted steel, however, ductility drops with increased boron content, but still remains satisfactory; at 0.8% boron the elongation at 20, 500, and 800C amounted to 30, 18, and 56%. Increase of boron content to

Cont 2/4

ACCESSION NR: AT3007907

1.15% did not produce any significant drop of elongation. Orig.  
art. has: 4 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 12Jul63

ENCL: 01

SUB CODE: ML

NO REF SOV: 002

OTHER: 002

Card 3/4

ACCESSION NR: AT3007907

ENCLOSURE: 01

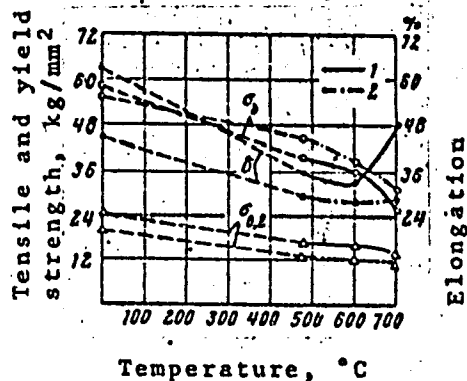


Fig. 1. Mechanical properties of EI846 steel with 0.1% boron

Melted: 1 - in vacuum; 2 - in air.  
 $\sigma_b$  - tensile strength;  $\sigma_{0.2}$  - yield strength;  $\delta$  - elongation.

Card 4/4

AMONENKO, V. M., V'YUGOV, P. N., and GUMENYUK, A. S.

"Investigation of thermal expansion of tungsten, molybdenum, tantalum, niobium, and zirconium at high temperatures"

Seminar on production methods, physical properties, and electron structure of refractory metals, compounds, and alloys, organized by the Institute of Powder Metallurgy and Special Alloys AS Ukr SSR, Kiev, 25-29 April 1963.  
(Teplofizika vysokikh temperatur, No. 1, 1963, p. 156)

*Amonenko, V.M.*

AID Nr. 983-1 5 June

STRUCTURE OF TANTALUM AT HIGH TEMPERATURES (USSR)

Amonenko, V. M., B. M. Vasyntinskiy, G. N. Kartmazov, Yu. N. Smirnov,  
and V. A. Finkel'. Fizika metallov i metallovedeniye, v. 15, no. 3,  
Mar 1963, 444-449. S/126/63/015/003/016/025

The Physicotechnical Institute, Academy of Sciences USSR, has studied the structure of Ta at 20 to 2600°C and the effect of vacuum heat treatment on the structure and properties. X-ray diffraction patterns obtained with a high-temperature x-ray camera in a vacuum of  $3 \cdot 10^{-5}$  mm Hg showed that the body-centered cubic structure of Ta remains unchanged at all temperatures tested. The lattice parameter "a" increases from 3.3030 kX at 20°C to 3.3750 kX at 2600°C. The coefficient of thermal expansion was calculated from "a." Annealing in a vacuum of  $3 \cdot 10^{-5}$  to  $1 \cdot 10^{-3}$  mm Hg at temperatures up to 2200°C was found to increase "a" and microhardness. Curves of these two parameters versus temperature show maxima under all conditions tested; their magnitude increases with increasing pressure. With a constant annealing

Card 1/2

AID Nr. 983-1 5 June

STRUCTURE OF TANTALUM [Cont'd]

S/126/63/015/003/016/025

time of 10 min these maxima occur at 1600° to 1800°C under all pressures tested. With prolonged annealing the maxima are shifted toward lower temperatures, occurring at ~1500-1600°C with annealing for 6 hrs. Both phenomena are attributed to gas absorption by the Ta. X-ray diffraction patterns of a specimen annealed for 15 hrs showed the lines of two high-temperature modifications of Ta<sub>2</sub>O<sub>5</sub> at 1460 to 1490°C and 1500 to 1540°C, . [ND]

Card 2/2

AMONENKO, V.M.; KOVTUN, G.P.; KRUGLYKH, A.A.; PAVLOV, V.S.

Absorption of air by aluminum oxide. Ukr. khim. zhur. 29  
no.10:1109-1110 '63. (MIRA 17:1)

1. Khar'kovskiy fiziko-tekhnicheskii institut AN UkrSSR.

ACCESSION NR: AP4024186

S/0294/64/000/001/0029/0031

AUTHOR: Amonenko, V. M.; V'yugov, P. N.; Gumenyuk, V. S.

TITLE: Investigation of thermal expansion of tungsten, molybdenum, tantalum, niobium, and zirconium at high temperatures.

SOURCE: Teplofizika vy\*sokikh temperatur, no. 1, 1964, 29-31

TOPIC TAGS: tungsten, molybdenum, tantalum, niobium, zirconium, thermal expansion, high temperature thermal expansion, relative elongation, thermal expansion coefficient, zirconium allotropic transformation

ABSTRACT: The relative elongation of the metals was measured with an improved contact-making vacuum dilatometer (V. S. Gumenyuk, Pribo-ry\* 1 tekhnika eksperimenta, no. 4, 1961) used in conjunction with an optical pyrometer (800-2000C range) or a Pt-PtRh thermocouple (200-1200C). The length measurements were accurate to  $\pm 1\mu$  (1 per cent at high and 3 per cent at low temperatures), and the temperature was uniform within 5°C. A tungsten resistance furnace was used to heat the tested metals (zirconium to 1450C and the others

Card 1/2

ACCESSION NR: AP4024186

to 2000C). Empirical formulas are derived to fit the temperature vs. relative elongation curves obtained, differentiation of which yields the temperature variation of the linear expansion coefficients. The kink in the curve for zirconium (beginning with 865C) is due to its allotropic transformation. Orig. art. has: 3 figures and 5 formulas.

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

SUBMITTED: 27May63

DATE ACQ: 16Apr64

ENCL: 01

SUB CODE: PH, ML

NO REF SOV: 004

OTHER: 003

Card

2/12

ACCESSION NR: AP4040990

S/0279/64/000/003/0158/0160

AUTHOR: Amonenko, V.M. (Kharkov); Krugly\*kh, A.A. (Kharkov); Pavlov, V.S. (Kharkov); Tikhinskiy, G.F. (Kharkov)

TITLE: Evaporation rate of components in thermal dissociation of yttrium and lanthanum beryllides

SOURCE: AN SSSR. Izvestiya. Metallurgiya i gornoye delo, no. 3, 1964, 158-160

TOPIC TAGS: yttrium, yttrium beryllide, lanthanum, lanthanum beryllide, beryllide dissociation, beryllium vapor pressure, thermal dissociation

ABSTRACT: The evaporation rates of components of yttrium and lanthanum beryllides during thermal dissociation of yttrium beryllide at 1040—1290C and lanthanum beryllide at 1080—1270C have been determined.  $YBe_{13}$  and  $LaBe_{13}$  beryllides were prepared by sintering 99.95%-pure beryllium powder with powders of 99.8%-pure yttrium or 99.4%-pure lanthanum. From the analysis of x-ray diffraction patterns, chemical analysis of the condensate, and calculated values of the vapor pressure of yttrium, beryllium, and lanthanum, it is concluded that both beryllides

Cord 1/2

ACCESSION NR: AP4040990

dissociate at temperatures above 1050C. Orig. art. has: 1 figure  
and 2 tables.

ASSOCIATION: none

SUBMITTED: 22Jul64

ATD PRESS: 3041

ENCL: 00

SUB CODE: MM

NO REF SOV: 006

OTHER: 005

Card 2/2

AMONENKO, V.M.; RYABCHIKOV, L.N. [Riabchykov, L.M.]; TIKHINSKIY, G.F.  
[Tykhins'kyi, H.F.]

Effect of adsorbed gases on the vaporization rate of zinc  
and magnesium. Ukr. fiz. zhur. 9 no.1:75-80 Ja '64.  
(MIRA 17:3)

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

AMONENKO, V.M.; BLINKIN, A.M.; IVANTSOV, I.G.

Self-diffusion in strongly diluted binary solutions. Part 1. Effect of additions of tin and antimony on the self-diffusion of iron in the  $\alpha$ -phase. Fiz. met. i metalloved. 17 no.1:56-62 Ja '64. (MIRA 17:2)

1. Fiziko-tehnicheskiy institut AN UkrSSR i Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.

BOLGOV, I.S.; AZHAZHA, V.M.; AMONENKO, V.M.; ZEYDLITS, M.P.

Revealing etch figures in nickel by thermal etching in vacuum. Fiz. met. i metalloved. 18 no.4:553-557 0 '64. (MIRA 18:4)

1. Khar'kovskiy fiziko-tekhnicheskii institut.

SMIRNOV, V.S.; AMONENKO, V.M.; TRON', A.S.; ALEKSANDROV, A.A.

Effect of rolling in vacuum on the properties of metals.

Trudy LPI no.238:95-100 '64.

(MIRA 17:11)

L 31869-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/T/EWP(l)/EWP(e)/EWP(w)/EWP(v)/EWP(t)

ACC NR: AT6013552 ETI IJR(c)<sup>(N)</sup> JD/HW/GD SOURCE CODE: UR/0000/65/000/000/0063/0068

AUTHOR: Amonenko, V. M.; Azhazha, V. M.; Bolgov, I. S.; Zeydlits, M. P.; Ivanov, V. Ye.; Shapoval, B. I.

ORG: Physico-Technical Institute, AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: Influence of boron on the properties of nickel

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 63-68

TOPIC TAGS: boron, nickel, alloy, boron alloy, internal friction

ABSTRACT: The effect of boron concentration (0-0.1 wt %) on mechanical strength limit, relative elongation, and relative plasticity of nickel was examined at 25° and 600°C and also the temperature dependence of internal friction ( $Q^{-1}$ ) for nickel containing 0.005-0.1% B was examined in the 20°-60°C range. Samples of nickel-boron alloys were prepared by fusing mixtures of H-O-grade nickel and NiB standard material in an electrical furnace. After 70-80% deformation for 4 hour at 400°C, the samples were held for 2 hours at 800°C. In general, boron had a beneficial effect on the mechanical properties of nickel. Specifically, boron was found to strengthen the alloy crystals and the intergrain boundaries within the alloy, to improve the internal grain structure and

Card 1/3

L 31869-66  
ACC NR: AT6013552

to retard harmful recrystallization processes. The effect of boron on strength limit, relative elongation, and relative plasticity of nickel is shown in figure 1.

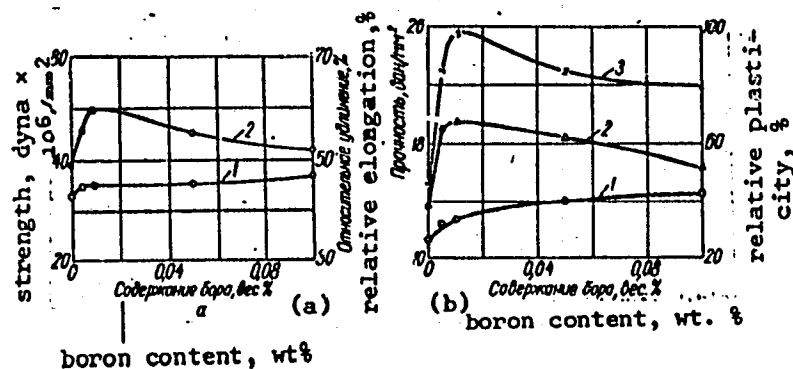


Fig. 1. The effect of boron on strength limit (1), relative elongation (2), and relative plasticity (3) of nickel at 25°C (a) and 600°C (b).

The temperature dependence of internal friction ( $Q^{-1}$ ) of Ni-B alloys is given in figure 2. Orig. art. has: 5 figures.

Card 2/3

I 31869-66

ACC NR: AT6013552

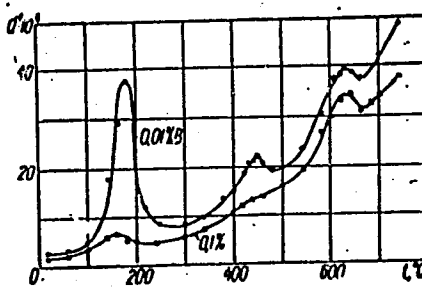
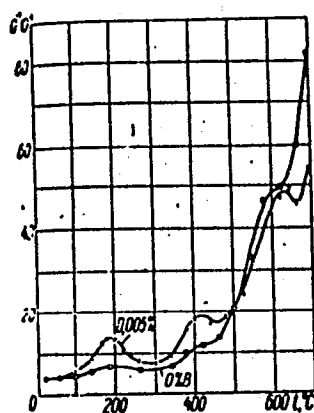


Fig. 2.

UB CODE: 11/

SUBM DATE: 03Jul65/

ORIG REF: 012/

OTH REF: 001

Card 3/3 JS

ACC NR: AT6013553

(N)

SOURCE CODE: UR/0000/65/000/000/0069/0075

AUTHOR: Azhazha, V. M.; Amonenko, V. M.; Bolgov, I. S.; Zeydlits, M. P.; Ivanov, V. Ye.

ORG: Physico-Technical Institute AN UkrSSR (Fiziko-tehnicheskii institut AN UkrSSR)

TITLE: Smelting in vacuo as a means of improving the mechanical properties of boron steels

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 69-75

TOPIC TAGS: boron steel, mechanical property, steel, ferrous metal, steel microstructure, chromium steel, nickel steel / EI437A steel, EI437B steel, EI403 steel

ABSTRACT: The effect of smelting (250°-1000°C) in vacuo and in air for 137-1300 hrs on relative elongation, impact, strength, and hardness of chromium-nickel steels containing from 0.4 to 3.0 wt % boron was investigated. EI437A (boron-free), EI437B (0.015 wt % B), EI403 (0.1-1.0 wt % B), and some specially prepared steels containing 2-3 wt % B were used as representative steel samples. It was found that the smelting of steels containing 2-3 wt % B results in a 1.5-2 fold increase in their plasticity. A 15-20% improvement in relative elongation characteristic and two-fold increase in impact strength result when high purity steel grades are smelted in vacuo. Greater improve-

Card 1/2

L 31870-00

ACC NR: AT6013553

2  
ments in mechanical properties of boron-containing steels were achieved by smelting in vacuo rather than in air. The effect of smelting in vacuo on strength and plasticity of EI437B steel on rapid breaking strength and relative elongation of EI437B is graphed. The effect of boron content on mechanical properties of EI403 steel is also graphed. Orig. art. has: 6 figures, 4 tables.

SUB CODE 11,13 SUBM DATE: 03Jul65/ ORIG REF: 006/ OTH REF: 004

Card 2/2

L 32607-66 EWT(m)/EWP(t)/ETI LJP(c) JD/JG/GD

ACC NR: AT6010591

SOURCE CODE: UR/0000/65/000/000/0163/0168

AUTHOR: Amonenko, V. M.; Kruglykh, A. A.; Pavlov, V. S.; D'yakov, I. G.;  
Balenko, E. P.

33  
b+1

ORG: Physicotechnical Institute, AN SSSR (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: On the possibility of purifying cerium by zone recrystallization

SOURCE: AN/UkrSSR. Fazovyye prevrashcheniya v metallakh i splavakh (Phase transformations in metals and alloys). Kiev, Naukova dumka, 1965, 163-168

TOPIC TAGS: metal zone refining, cerium, recrystallization, *zone melting*

ABSTRACT: The object of the study was to determine the distribution of impurities (lanthanides, silicon, magnesium, iron, and copper) in cerium during zone melting of the latter. The process was carried out at  $3 \times 10^{-6}$  mm Hg on cerium which had first been remelted for one hour at 1423K at the same pressure. The molten zone was produced by electron bombardment, and its travel rate was varied from 5 to 0.15 mm/min. The refining process turned out to be most efficient at a rate of 0.5 mm/min. However, zone melting is not effective in removing other rare earth metals from cerium. Iron, copper, and silicon impurities are driven to the end of the ingot and have a distribution coefficient  $K < 1$ . After ten passes, the iron content decreases by a factor of 5, and the silicon and copper contents decrease by a factor of 10. Magnesium is removed chiefly by vaporization as the zone moves

Card 1/2

L 32607-66

ACC NR: AT6010591

along the sample. Orig. art. has: 3 figures and 2 tables.

SUB CODE: // / SUBM DATE: 07Oct84 / ORIG REF: 003 / OTH REF: 003

Card

2/2

L 44305-63 EWT(m)/T/EWP(t)/ETI LJP(c) JD/JG

ACC NR: AP6019841

SOURCE CODE: UR/0370/66/000/001/0190/0192

AUTHOR: Amonenko, V. M. (Khar'kov); Kruglykh, A. A. (Khar'kov); Pavlov, V. S. (Khar'kov); Tikhinskiy, G. F. (Khar'kov)

ORG: none

TITLE: Evaporation rate of beryllium during dissociation of cerium beryllide 57 18

SOURCE: AN SSSR. Izvestiya. Metally, no. 1, 1966, 190-192

TOPIC TAGS: beryllium, vacuum sublimation, cerium compound, vapor pressure

ABSTRACT: The article presents the results of an investigation of the evaporation rate of Be during the thermal dissociation of the intermetallic compound  $CeBe_{13}$ , as well as of the effect of the addition of a small amount (0.4 wt. %) of Ce on the evaporability of Be.  $CeBe_{13}$  was obtained by the vacuum heating of a stoichiometric mixture of the powders of Ce and Be at 1150°C for 3 hr, while the Be-0.4% Ce alloy was obtained by direct vacuum melting of the metals. The sublimation rates of the Be-0.4% Ce alloy and of the products of dissociation of  $CeBe_{13}$  were determined by the method of evaporation from a cylindrical tantalum crucible with a residual gas pressure of  $\leq 2 \cdot 10^{-6}$  mm Hg in the vacuum chamber. The temperature was measured with

Card 1/3

UDC: 669.725.4

L 44305-66

ACC NR: AP6019841

the aid of an optical pyrometer correct to  $\pm 5\%$ . Weighing of the crucibles was carried out correct to  $\pm 0.0001$  g by the continuous method on scales without violating the vacuum. The sublimation rate of Be with 0.4% Ce was measured in the temperature range 920-1160°C; for this temperature range the saturated vapor pressure of Be over the Be-0.4% Ce alloy is described by the equation:  $\log P = 9.35 - 17,000/T$ . As for the sublimation rates of the components of the intermetallic compound  $\text{CeBe}_{13}$ , during its thermal dissociation in the temperature range 1050-1250°C, the roentgenograms of the condensates gathered following evaporation of the compound at 1100 and 1250°C lack the lines of Ce and  $\text{CeBe}_{13}$ ; therefore, appreciable dissociation occurs above 1050°C and the entire sublimated matter may be referred to Be. The saturated vapor pressure of Be over the  $\text{CeBe}_{13}$  compound during the latter's thermal dissociation may be described by the equation:  $\log P = 10.475 - 18,990/T$ . The findings were utilized to plot curves of the saturated vapor pressure of the compounds and their components (Fig. 1). Orig. art. has: 1 figures, 2 tables, 2 formulas.

Card

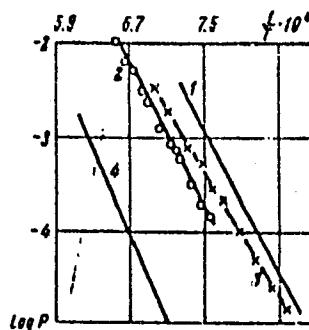
2/3

1. 44305-66

ACC NR: AP'6019841

Fig. 1. Vapor pressure (P, mm Hg) of Be as a function of temperature for:

- 1 - pure Be; 2 - over the compound  $\text{CeBe}_{13}$  during its thermal dissociation;
- 3 - over the alloy Be-0.4% Ce; 4 - pure Ce



SUB CODE: 11, 13, 20 SUBM DATE: 25Jul64/ ORIG REF: 006/ OTH REF: 001

Card 3/3 ULR

L 44078-66 EWT(m)/T/EWP(w)/EWP(L)/ETI LJP(c) JD/JG

ACC NR: AP6030804

SOURCE CODE: UR/0185/66/011/009/1023/1025

AUTHOR: Amonenko, V. M.; Pavlov, V. S.; Kruglykh, A. A.

ORG: Physicotechnical Institute, Academy of Sciences UkrSSR, Kharkov (Fizyko-  
tekhnichnyy instytut, AN UkrSSR)

TITLE: Refining lanthanum by combined zone melting and electrotransfer process

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 11, no. 9, 1966, 1023-1025

TOPIC TAGS: ~~lanthanum refining~~, lanthanum zone refining, ~~lanthanum electrotransfer refining~~ *electron beam melting*

ABSTRACT: The feasibility of refining lanthanum by combined zone melting and electrotransfer process has been investigated. Specimens, 8 mm in diameter x 120 mm long, were prepared from 99.5% pure lanthanum melted in a vacuum of  $3 \cdot 10^{-6}$  mm Hg. The specimens were subjected to zone refining in vacuum with electron-beam heating. Simultaneously, direct current with a density of 4.4 a/mm<sup>2</sup> was passed through the specimens for 70 or 180 hr, depending on the number of passes (5 or 10). It was found that the utmost purification was achieved with 5 passes, after which the impurities content was reduced as follows: oxygen from 0.080% to 0.032%, nitrogen from 0.0047% to 0.0040%, hydrogen from 0.0013% to an undetectable quantity, and carbon from 0.14% to 0.080%. The microhardness dropped from 50 to 30 kg/mm<sup>2</sup>. Orig. art. has: 3 figures and 1 table [TD]

SUB CODE: 11, 13/ SUBM DATE: 20Dec65/ ORIG REF: 003/ OTH REF: 002/ ATD PRESS: Card 1/1 *gd* 5077

L 32066-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6013334

SOURCE CODE: UR/0363/66/002/004/0578/0581.

AUTHOR: Amonenko, V.M.; Kruglykh, A.A.; Pavlov, V.S.; Mosova, L.N. 29

ORG: Physicotechnical Institute, Academy of Sciences UkrSSR (Fiziko-tehnicheskii  
institut Akademii nauk UkrSSR) 3

TITLE: Purification of cerium by electric transfer combined with zone melting 16

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 4, 1966, 578-581

TOPIC TAGS: cerium, metal zone refining, metal zone melting

ABSTRACT: To determine whether cerium can be purified by combining electric transfer with zone melting, molten cerium samples were refined by passing a current of 5.3 A/mm<sup>2</sup> in a vacuum for 50 — 150 hr. Iron, silicon, copper, and oxygen impurities were found to move to the cathode. The experiments were then repeated in helium; after 200 hr, the amount of impurities remaining in the cathodic and middle portions of the sample dropped below the sensitivity limit of spectral analysis. The samples were then subjected to zone melting, whose effectiveness was found to increase when an electric current (6 A/mm<sup>2</sup>) was passed through the metal. The amount of impurities thus dropped from 0.245% in the

Card 1/2

UDC: 546.655

L 32066-66

ACC NR: AP6013334

initial sample to 0.085% in the refined product. Following the refining process, the microhardness of cerium decreased from 25 to 23.8 kg/mm<sup>2</sup>. Orig. art. has: 2 figures and 3 tables.

SUB CODE: 11 /SUBM DATE: 31Jul65 / ORIG REF: 003 / OTH REF: 002

Card 2/2

ACC NR: AP7002844

SOURCE CODE: UR/0136/66/000/012/0078/0081

AUTHOR: Amonenko, V.M.; Tron', A.S.; Mukhin, V.V.; Rybal'chenko, N.D.; Kovaleva, Ye.A.

ORG: none

TITLE: Production and properties of vacuum-hot rolled metal composites

SOURCE: Tsvetnyye metally, no. 12, 1966, 78-81

TOPIC TAGS: composite metal, hot rolling, ~~composite metal hot rolling~~, vacuum hot rolling, ~~composite bond strength~~, molybdenum niobium composite, steel titanium composite, metal bonding, sheet metal, stainless steel, annealing, mechanical property

ABSTRACT: Packs consisting of two dissimilar metal plates 10 mm-thick, 20 mm wide, and 100 mm long, were vacuum rolled from vacuum-arc melted ingots of Cu, Ni, Ti, Nb, St.3 steel and 1Kh18N9T stainless steel under various conditions. The bond strength of all composites was found to increase with increasing reductions and deeper vacuum and, in the case of metals which form solid solutions (Cu-Ni, Mo-Ti, Mo-Nb and others), with increasing rolling temperature. In the case of metals which form brittle eutectics, or chemical compounds (Ti-steel) which lower the bond strength, satisfactory bond strength can be produced only by rolling at temperatures

Card 1/2

UDC: 669-419.4:621.771

ACC NR: AP7002844

below that of the formation of the eutectics or chemical compounds. The deeper vacuum is especially important in rolling composites from titanium, niobium and other chemically active metals. For example, Mo-Nb composite rolled with a 30% reduction at 1200C in a vacuum of  $1 \cdot 10^{-1}$ — $1 \cdot 10^{-2}$  mm Hg had a bond strength of 5—8 kg/mm<sup>2</sup> compared with 32 kg/mm<sup>2</sup> for the strength of composite rolled in a vacuum of  $2 \cdot 10^{-5}$  mm Hg, other conditions being the same. No visual changes were observed in the interface structure of Mo-Nb, Cr-W, Cr-Mo, Cu-Ni and other composites of metals which form solid solutions. But at the interface of joined Ti-Mo, Cu-steel, Ti-1Kh18N9T steel, and other composites of metals which form a eutectic or chemical compound (e.g., Ti-Fe, Nb-Ni), a transition zone formed whose thickness depended on the temperature and reduction of rolling. In all these composites, annealing brought about the formation of transition zone and the growth of the existing ones, which was associated with the interdiffusion of contacting metals. [MS]

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001  
ATD PRESS: 5114

Card 2/2

AMORASCU, R.

TECHNOLOGY

Periodicals: CELULOZA SI HERTIE. Vol. 7, no. 6, June 1958

AMORASCU, R. Experiences from the use of the Seiga vertical harvester. p. 246

Monthly List of East European Accessions (EEAI) IC, Vol. 8, No. 2,  
February 1959, Unclass.

AMORGONSKIY, L. M.

7044. Zadachi i uprazhneniya po khimii. Dlya sred. shloky. Tallin. Estgosizdat,  
1955. 148s. s ill. 23sm. 11.000 ekz. 1r. 80k. V per.---Na eston. yaz.--(55-1997)  
54(076)

Knizhnaya Letopis'No. 6, 1955

ANUNYEV, V. N.

Proizvodstvo stali. (Production of steel) Moskva, Metallurgizdat, 1950.  
366 p. illus... ports... tables.  
diags.

"Literatura": p. (361) - 364.

*RUSSIAN, N.I.*  
Category : USSR/Radiophysics    Application of radiophysical methods

I-12

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2051

Author : Amosenko, N.I., Muran, D.M.

Title : Distortion of Television Image when Receiver is Fed from an Autonomous Network, and Methods for its Elimination.

Orig Pub : Tekhnika televideniya (M-vo radiotekhn. prom-sti SSSR), 1954, No 2, 9-33

Abstract : A quantitative analysis is given of the influence of the magnetic leakage fields on the electron beam, the deflecting system, and units containing windings. Examination of the influence of pulsations of rectified voltage on the image. The permissible distortion of television images occurring when the set is fed from an autonomous line is defined. Methods of combatting distortion are indicated, particularly the shielding of the power transformer, cancellation of the leakage fields by means of a short-circuited turn, and the use of a resonant filter in the rectifier.

Card : 1/1

AMCSENKOVA, N.I.

TOKAREVICH, K.N.; ~~AMCSENKOVA, N.I.~~; GOL'DBERG, S.I.; POPOVA, Ye.M.

Materials on the study of leptospiral jaundice. Report No.11: Further data on laboratory diagnostics of leptospiral jaundice. Trudy Len. inst. epid. i mikrobiol. 9:104-112 '47. (MLR 10:9)

1. Iz laboratorii po izucheniyu leptospirozov Instituta im. Pastera (zav. laboratoriyey K.N.Tokarevich) (LENINGRAD--WEIL'S DISEASE)

А.И. ДАНСКИЙ, А.И.

ТОКАРЕВИЧ, К.Н.; ДАНСКИЙ, В.Н.; ПОПОВА, Ye.M.; АМОСЕНКОВА, Н.И.

Materials on the study of leptospiral jaundice. Report No.12:  
Experimental premisses for specific serum therapy in leptospiral  
jaundice. Trudy Len.inst.soid. i mikrobiol. 9:113-127 '47.

(MLRA 10:9)

1. Iz laboratorii po izucheniyu leptospirozov Instituta Im. Pastera  
(zav. laboratoriyey K.N.Tokarevich)  
(WELL'S DISEASE) (SERUM THERAPY)

AMSENKOVA, N.I.; POPOVA, Ye.M.

Two cases of isolation of *Leptospira icterohemorrhagiae* from dogs.  
Zhur.mikrobiol.epid.i immun. no.3:63-69 Mr '54. (MLRA 7:4)

1. Iz otdela transmissivnykh infektsiy i zoonozov (saveduyushchiy  
K.N.Tokarevich) Instituta imeni Pastera (direktor N.P.Ivanov).  
(*Leptospira icterohemorrhagiae*) (Dogs--Diseases)

AMOSENKOVA, M.I.; POPOVA, Ye. M.

Observation on the principal reservoir of *Leptospira icterohaemorrhagiae*.  
Zhur. mikrobiol. epid. 1 immun. no.12:67-70 D '54. (MIRA 8:2)

1. Iz leptospiroznoy laboratorii (zav. K.N.Tokarevich) Leningradskogo  
instituta imeni Pastera (dir. N.P.Ivanov)  
(VEIL'S DISEASE, transmission,  
carriage by rats)  
(RATS,  
carriage of Veil's dis.)

AMOSENKOVA, N. I.

"Reservoir of the Swamp Fever Pathogen in the Northwestern USSR,"  
by Ye. M. Popova and N. I. Amosenkova, Leningrad Institute of  
Epidemiology, Microbiology, and Hygiene imeni Pasteur, Zhurnal.  
Mikrobiologii, Epidemiologii i Immunobiologii, Vol 28, No 1,  
Jan 57, pp 44-50

This article presents results of studies on leptospirosis in mouse-like rodents. Since previous investigations indicated that the chief reservoir of swamp fever was mouselike rodents in other areas of the USSR, this possibility was explored in the Northwestern region, particularly around Leningrad, from June to December 1954. Animals were trapped in the Leningrad suburbs in potato fields and gardens, on large animal-husbandry sovkhoses, and in vegetable combines. The rodents were chloroformed and dissected, and changes in the internal organs were noted.

Kidney suspensions from the rodents were seeded on serum-phosphate medium, and blood was investigated by lysis and agglutination reactions with typed cultures of leptospira. The biological characteristics of the isolated cultures were studied by infecting guinea pigs. Cultures were tested with immune rabbit sera to the standard strain DV-B Monyakov and the Rulev Strain (isolated in 1953 from a swamp fever patient during an outbreak in one of the sovkhoses around Leningrad). One table shows that cultures were lysed and agglutinated by the aforementioned sera in high titers, and only one culture, isolated from a field mouse, reacted negatively. Two other tables show, results of infection of rabbits with cultures of *Leptospira* isolated from rodents and infectivity of field rodents trapped in suburban sovkhoses.

84M.1360

AMOSENKOVA, N. I.

The article presents the following conclusions on the basis of these results:

"1. It was established that 14.3% of mouselike field rodents trapped in the Leningrad suburbs were infected with *Leptospira*.

"2. On study of the biological properties of 24 cultures isolated, 23 were identified as *Leptospira* type DV-B Monyakov and one as *bataviae*.

"3. *Leptospira* type DV-B Monyakov was isolated for the first time from various mouselike rodents (field mice, common *Microtus*, domestic mice), thereby establishing a heretofore-unknown natural reservoir of this type of swamp fever pathogen. It was simultaneously established that the common *Microtus* carried *bataviae* type *Leptospira*.

"4. Considering the concrete existence of a natural reservoir of pathogenic *Leptospira* in the suburbs of the city and the possibility of the occurrence of leptospirosis among humans under certain conditions, deratization measures must be reinforced, taking into account the dynamics of propagation of field rodents and the seasonal nature of this disease."

(U)

AMOSEKOVA, N.I.

Data for the study of supplementary leptospiral reservoirs in a large city. Report no.1: Infection of dogs with *Leptospira icterohaemorrhagiae*. Trudy Len. inst. epid.i microbiol. 18: 158-166'58. (MIRA 16:7)

1. Iz laboratorii osoboopasnykh infektsiy i rikketsiozov Leningradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera (nauchnyy rukovoditel' - prof. K.N.Tokarevich). (WEIL'S DISEASE) (DOGS AS CARRIERS OF DISEASE)

AMOSENKOVA, N.I.

Data for the study of supplementary leptospiral reservoirs in a large city. Report No.2: Results of experimental inoculation of puppies with some leptospira species. Trudy Len.inst.epid. i microbiol. 18:167-176'58. (MIRA 16:7)

1. Iz laboratorii osobopasnykh infektsiy i rikketsiozov Lenin-gradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera (nauchnyy rukovoditel' - prof.K.N.Tokarevich). (LEPTOSPIROSIS) (DOGS AS CARRIERS OF DISEASE)

AMosenkova, N.I.

Data for the study of supplementary leptospiral reservoirs in a large city. Report No.3: Testing cats as to their susceptibility to leptospira. Trudy Len.inst.epid. i microb. 18:177-179 '58.  
(MIRA 16:7)

1. Iz laboratorii osoboopasnykh infektsiy i rikketsiozov Lenin-gradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera(nauchnyy rukovoditel' - prof. K.N.Tokarevich).  
(LEPTOSPIROSIS) (CATS AS CARRIERS OF DISEASE)

POPOVA, Ye.M.; AMOSENKOVA, N.I.

Cases of swamp fever among the workers of swine farms. Trudy  
Len.inst.epid.i microbiol. 18:180-187'58 (MIRA 16:7)

1. Iz laboratorii osoboopasnykh infektsiy i rikketsiozov Lenin-  
gradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni  
Pastera (nauchnyy rukovoditel' - prof. K.N.Tokarevich).  
(LEPTOSPIROSIS) (SWINE AS CARRIERS OF DISEASE)

Country : USSR

E

Category: Virology. Viruses of Man and Animals.  
Rickettsias.

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103534

Author : Krasnik, F.I.; Amosenkova, N. I.

Inst : -

Title : The Resistance of Rickettsias to Frozen Substrates

Orig Pub: Sb. Rickettsial Diseases, Leningrad, 1958, 167-177

Abstract: At a temperature of  $-20^{\circ}$  a reduction in toxicity and virulence was observed in typhus rickettsias depending on the substrate on which the rickettsias were kept. After passages through lice and chick embryos the toxic and virulent properties were restored. --  
L. Ye. L.

Card : 1/1

AMOSHKOVA, N. I., DAYTER, A. B.

"On the survival of Bernet rickettsia in the organism of a bed bug." p.127

Desyatoye Soveshchaniye po parazitologicheskim problemam i prirodnootchagovym bolezniam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

AMOSENKOVA, N. I., TOMAREVITCH, K. N., VASIL'YEVA, L. D., DAYTER, A. B.,  
POPOVA, E. N.

"Materials for the further study of the local Q-fever focus in  
the Leningrad oblast." p. 140

Desyatoye Soveshchaniye po parazitologicheskim problemam i  
prirodnoschagovym boleznyam. 22-29 Okt'yabrya 1959 g. (Tenth Conference  
on Parasitological Problems and Diseases with Natural Foci 22-29  
October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences  
USSR and Academy of Sciences USSR, No. 1 254pp.

Leningrad Inst. of Epidemiology, Microbiology and Hygiene

KHAVKIN, T.n.: AMOSENKOVA, N.I.

Local reaction in guinea pigs inoculated with *Rickettsia prowazekii*.  
Trudy Len.inst.epid.i mikrobiol. 23:85-97 '61. (MIRA 16:3)

1. Iz laboratorii infektsionnoy patologii otdela patologicheskoy  
anatomii Instituta epidemiologii i mikrobiologii AMN SSSR i  
laboratorii osobo opasnykh infektsiy i rikketsiozov Leningradskogo  
instituta epidemiologii i mikrobiologii imeni Pastera.  
(RICKETTSIA) (VACCINATION)

TOKAREVICH, K.N.; VASIL'YEVA, L.D.; AMOSENKOVA, N.I.; DAYTER, A.B.;  
POPOVA, Ye.M.; HESSONOVA, M.A.; KLENOV, K.M.

Epidemiological characteristics of a local Q-rickettsiosis focus.  
Trudy Len.inst.epid.i mikrobiol. 23:136-143 '61. (MIRA 16:3)  
(Q FEVER)

AMOSENKOVA, N.I.; DAYTER, A.B.; KLENOV, K.N.

Data on field studies in a Q fever focus. Trudy Len.inst.epid.  
i mikrobiol. 23:144-153 '61. (MIRA 16:3)

1. Iz laboratorii osobo opasnykh infektsiy rikketsiozov Lenin-  
gradskogo instituta epidemiologii i mikrobiologii imeni Pastera i  
otdela osobo opasnykh infektsiy Leningradskoy oblastnoy sanitarno-  
epidemiologicheskoy stantsii.

(LUGA DISTRICT—Q FEVER)

DAYTER, A.B.; AMOSENKOVA, N.I.; Prinimala uchastiye: KLENOVA, K.N.

Role of ticks of the superfamily Ixodoidea in Q-rickettsiosis.  
Report No.1: On natural infection of the tick Ixodes ricinus L.  
by Rickettsia burneti. Trudy Len.inst.epid.i mikrobiol. 23:  
154-165 '61. (MIRA 16:3)

1. Iz laboratorii osobo opasnykh infektsiy i rikketsiozov Lenin-  
gradskogo instituta epidemiologii i mikrobiologii imeni Pastera i  
otdela osobo opasnykh infektsiy Leningradskoy oblastnoy sanitarno-  
epidemiologicheskoy stantsii.

(TICKS AS CARRIERS OF DISEASE) (Q FEVER)

DAYTER, A.B.; AMOSENKOVA, N.I.

Role of ticks of the superfamily Ixodoidea in Q-rickettsiosis.  
Report No.2: Infection of the tick *Ornithodoros papillipes* Bir.  
by *Rickettsia burneti* in an experiment. Trudy Len.inst.epid.i  
mikrobiol. 23:166-180 '61. (MIRA 16:3)  
(TICKS AS CARRIERS OF DISEASE) (Q FEVER)

AMOSENKOVA, N.I.; VASIL'YEVA, L.D.

Antigenic characteristics of the phase variants of *Rickettsia*  
*burneti* isolated in Leningrad. Trudy Len.inst.epid.i mikrobiol.  
23:204-215 '61. (MIRA 16:3)  
(LENINGRAD-COXIELLA) (ANTIGENS AND ANTIBODIES)

GOL'DIN, R.B.; AMOSHKOVA, N.I.

Experimental Q-rickettsiosis in white mice; studies made with  
fluorescent antibodies. Trudy Len.inst.epid.i mikrobiol. 23:  
216-223 '61. (MIRA 16:3)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni Kirova i  
laboratorii osobo opasnykh infektsiy i rikketsiozov Leningradskogo  
instituta epidemiologii i mikrobiologii imeni Pastera.  
(Q FEVER) (ANTIGENS AND ANTIBODIES)

QCL'DIN, R.B.; AMOSENKOVA, N.I.

Study of experimental rickettsioses by means of fluorescent antibodies. Report No.2: Use of immune fluorescent gamma globulin for early and rapid diagnosis of Rickettsia burneti. Vop. virus, 6 no.5:591-598 S-O '61; (MIRA 15:1)

1. Voenno-meditsinskaya ordena Lenina akademiya imeni S.M.Kirova i Leningradskiy institut epidemiologii, mikrobiologii i gigiyeny imeni L.Pastera, Leningrad.  
(Q FEVER) (GAMMA GLOBULIN)

AMosenkova, N.I.; GOL'DIN, R.B.; DAYTER, A.B.

Study of experimental rickettsioses using fluorescent antibodies.  
Report No.3: Study of ticks for their infectivity with R. burneti.  
Vop. virus. 6 no.6:664-669 N-D '61. (MIRA 15:2)

1. Leningradskiy institut epidemiologii, mikrobiologii i gigiyeny  
imeni L.Pastera i Voenno-meditsinskaya ordena Lenina akademiya  
imeni S.M.Kirova.  
(TICKS AS CARRIERS OF DISEASE) (ANTIGENS AND ANTIBODIES)  
(RICKETTSIA)

AMSENKOVA, N.I.; VASIL'YEVA, L.D.; DAYTER, A.B.

Characteristics of some biological properties of Rickettsia  
burneti isolated in Leningrad. Trudy Len. inst. epid. i  
mikrobiol. 25:75-82 '63. (MIRA 17:1)

AMANZHULOV, S.A.; AMOSENKOVA, N.I.; POSTRICHEVA, O.V.

Results of virological confirmation of Q fever in Kazakhstan.  
Trudy Len. inst. epid. i mikrobiol. 25:83-94 '63.  
(MIRA 17:1)

1. Iz Instituta krayevoy patologii AN KazSSR i otdela  
osobo opasnykh infektsiy Leningradskogo instituta epidemio-  
logii i mikrobiologii imeni Pastera.

AMosenkova, N.I.; Khavkin, T.N.

Course of experimental Q fever pneumonia in white mice;  
experiments in intranasal inoculation. Trudy Len. inst. epid.  
i mikrobiol. 25:154-159 '63.

Local peritoneal reaction in experimental Q fever in white  
mice. Ibid.:160-169 (MIRA 17:1)

1. Iz otdela sobo opasnykh infektsiy Leningradskogo insti-  
tuta epidemiologii i mikrobiologii imeni Pastera i labora-  
torii infektsionnoy patologii otdela patologicheskoy anatomii  
Instituta eksperimental'noy meditsiny AMN SSSR.

KHAVKIN, T.N.; AMSENKOVA, N.I.

Immunoluminescent method for studying the morphology of experimental rickettsioses. Dokl. AMN SSSR 149 no.4:969-972 Ap '63.

(MIRA 16:3)

1. Institut eksperimental'noy meditsiny AMN SSSR i Leningradskiy institut epidemiologii i mikrobiologii im. Pastera. Predstavleno akademikom N.N. Anichkovym.

(RICKETTSIAL DISEASES) (FLUORESCENCE MICROSCOPY)

AMANZHULOV, S.A.; AMOSENKOVA, N.I.; POSTRICHEVA, O.V.

Detection of Rickettsia burneti in the horsefly Tabanus  
staegeri. Med. paraz. i paraz. bol. 34 no. 5:612-614 S-0 '65  
(MIRA 19:1)

1. Kazakhskiy institut krayevoy patologii AMN SSSR, Alma-Ata  
i otdel osobo opasnykh infektsiy Leningradskogo instituta  
epidemiologii i mikrobiologii imeni Pastera. Submitted Novem-  
ber 22, 1963.

CHALYY, A.A.; KUDRAVETS, G.V.; AMOCMA, A.I.

Flow sheet for preparing a new mine level under complex mining  
and geological conditions. Sbor. trud. Inst. gor. dela AN URSSR  
no.13826-31 '63 (MIRA 1787)

L 27844-66 ENT(d)

ACC NR: AP6001055

SOURCE CODE: UR/0107/65/000/001/0030/0031

AUTHOR: Amosov, A. (Engr.); Kholyava, V. (Engr.)

ORG: none

TITLE: 'Almaz' radio receiver

SOURCE: Radio, no.1, 1965, 30-31 and inside of rear cover

TOFTC TAGS: radio receiver, transistorized circuit, circuit design

ABSTRACT: Detailed description, characteristics, circuit diagrams and photograph of a 134 x 83 x 24 mm transistor radio (seven transistors, one crystal diode) for medium and long-wave reception are given. The apparatus was manufactured by the Leningradskiy sovmarkhoz. Orig. art. has: 4 figures, 2 tables. [JPRS]

SUB CODE: 17 / SUBM DATE: none

Card 1/1

AMOSOV, A.

Let's have more of such schools. Na Stroi. Ros. no.10:24 0 '61.  
(MIRA 14:11)

1. Direktor abshcheobrazovatel'nyy politekhnicheskoy shkoly,  
g. Dubno, Moskovskaya oblast'.  
(Dubno---Schools)

AMOSOV, A., inzh.; KHCLYAVA, V., inzh.

The "Almaz" radio receiver. Radio no.1:30-31 Ja '65. (MIRA 18:4)

L 15572-66 EWT(d)/FSS-2

ACC NR: AP0008229

SOURCE CODE: UR/0107/65/000/004/0034/0036

AUTHOR: Amosov, A. (Engineer); Khol'yava, V. (Engineer); Cherenkov, Yu. (Engineer);  
Mogil'nikov, I.

ORG: none

TITLE: Transistorized radio receiver 'Neva-2' 4

39  
B

SOURCE: Radio, no. 4, 1965, 34-36 4

TOPIC TAGS: radio receiver, transistorized circuit, circuit design, radio engineering

ABSTRACT: The article gives an overall technical description of the "Neva-2" model. It is first compared to the previous "Neva" model which it excels in terms of electro-acoustic performance and operating reliability. The "Neva-2" is designed on the super-heterodyne principle with a set of transistors and one crystal diode. It operates on battery supply and its frequency range extends over long waves and medium waves. The basic components of this receiver are a frequency converter, a two-stage intermediate-frequency amplifier, a sharp-selection filter for adjacent-channel selectivity, a detector, automatic gain control and a two-stage low-frequency amplifier. Capacitors are used for neutralization and interstage coupling, except for the second stage of the 1-f amplifier where negative feedback is effected through a resistance-capacitance circuit for the purpose of reducing non-linear distortions, and

Cerd 1/2

L 15572-66  
ACC NR: AP6008229

for the frequency converter which has an inductive feedback. The receiver delivers nominally 50 mw power, the maximum non-linear audio distortion is 12%, it operates satisfactorily down to 7.2 V but will still work at 5.6 V battery supply. The dimensions of the receiver are 150 x 95 x 35 mm, its weight is 450 grams. The built-in magnetic antenna is mounted to the printed-circuit chassis. The loudspeaker is mounted under the top of the case. Station tuning is done with a variable capacitor rotated through a 1:6 reduction gear. The overall complete circuit diagram of the receiver is shown, also the wiring diagram and transistor-amplifier details. Orig. art. has: 4 figures and 2 tables. [JPRS]

SUB CODE: 09 / SUBM DATE: none

Card 2/2 mc

AMOSOV, A.D., polkovnik meditsinskoy sluzhby

Treatment of gunshot osteomyelitis in a sanatorium. Voen.-med. zhur.  
no.6:60-63 Je '51.

(OSTEOMYELITIS) (GUNSHOT WOUNDS)

(MLRA 9:9)

AMOSOV, A.S.

"Functional and Anatomic Changes of Bronchopulmonary System During Radiation Sickness," by A. S. Amosov, Voyenno-Meditsinskiy Zhurnal, No 6, Jun 56, pp 21-28

Studies of functional and anatomic changes in external respiration were conducted on 107 rabbits, which were grouped into controls, those subjected to a single external irradiation of the thoracic region, those subjected to repeated irradiation by small doses, those subjected to irradiation of a small portion of the thoracic region (2 x 2 cm), and those subjected to exposure of only half the body. The author concludes:

1. Irradiation of the thorax by X rays causes a radiation sickness which is different from that due to total irradiation of the organism and which is characterized by the appearance of pronounced functional and anatomic changes in the bronchopulmonary system. These changes lead to the development of acute radiation pneumonia during the peak of the sickness or to the development of primary chronic pneumonia during the period of resolution of acute and chronic radiation sickness.

SUM. I287

2. Upon using equal doses, a single irradiation causes changes in the respiratory system that are more profound than repeated irradiation. Therefore, a prolonged small intensity irradiation is more rational since, by employing it, less of the surrounding healthy tissue is injured.

3. By using bronchography, it is possible to obtain accurate data on the condition of the bronchial tree during various periods of radiation sickness.

Sum. 1257

USSR/Diseases of Farm Animals - Diseases Caused by Protozoa.

R

Abs Jour : Ref Zhur Biol., No 5, 1959, 21421

Author : Perepechayev, A.N., Amosov, B.K.

Inst : -

Title : Treatment of Anaplasmosis in Cattle.

Orig Pub : Veterinariya, 1958, No 5, 34-37

Abstract : An intravenous injection of an alcoholic rivanol solution was administered. For this purpose, 0.2 g of rivanol was dissolved in 120 ml of hot boiled distilled water. After the preparation was completely dissolved, the solution was filtrated, cooled to 40-50° C and then 60 ml of rectified alcohol were added. Warmed to body temperature, the solution was slowly intravenously injected in a 180 ml dose. If after 12-24 hours the temperature did not become lower in the sick animals, the solution was once more injected in the same quantity. A 100 percent therapeutic effectiveness was obtained. In the presence of a mixed

Card 1/2

- 27 -

USSR/Diseases of Farm Animals - Diseases Caused by Protozoa.

R

Abs Jour : Ref Zhur Biol., No 5, 1959, 21421

enzooty of both anaplasmosis and piroplasmosis, a combined treatment was resorted to in which first trypanflavine and then alcohol-rivanol were administered until the temperature decreases, while simultaneously applying symptomatic therapy.

Card 2/2

EXCERPTA MEDICA Sec.17 Vol.4/4 Public Health, etc. Apr 58  
AMOSOV, B.P.

1079. EPIDEMIOLOGICAL CHARACTERISTICS OF DYSENTERY IN RURAL AREAS AND MEANS OF LOWERING ITS INCIDENCE (Russian text) - Amosov B. P., Voronova G. S. and Ivanova N. A. - TRUD. LENINGRAD. SANIT. -GIG. MED. INST. 1956, 27 (98-110)

The paper elaborates the epidemiological characteristics of dysentery in 2 districts and illustrates them by a series of examples and tables which show: the incidence of dysentery and other gastro-intestinal conditions in the P. district from 1951 to 1954 (per 10,000 population); incidence of acute dysentery in 3 age groups in 1954 (per 1,000 persons); incidence of dysentery in 1952-1954 in the medical district S. (per 1,000 persons); distribution of the incidence of dysentery according to age groups in the medical district S. in 1954 (per 100 persons); admission of dysentery patients to hospital against days of illness in the medical district S. in 1954; incidence of dysentery and other gastro-intestinal conditions in the K. district from 1953 to October 1955 (per 10,000 population); incidence of dysentery and other

1079

gastro-intestinal diseases during the different months of 1955 (per 10,000 population) in the K. district. This work has made it possible to determine the main reasons responsible for the lowering of the effectiveness of various anti-dysentery measures in rural areas.  
(S)

AMOSOV, B.V., inzh.

Ultrasonic waves used in welding metals for electric engineering  
purposes. [Trudy] MVTU no.101:100-107 '61. (MIRA 14:8)  
(Semiconductors--Welding)  
(Ultrasonic waves--Industrial applications)

41864

S/549/62/000/106/003/010  
1003/1203

12380

AUTHOR: Amosov, B.V., *Ingenieur*

TITLE: Thermal phenomena during supersonic welding

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. [Trudy] no. 106, 1962.  
93-105. Svarka tsvetnykh splavov i nekotorykh legirovannykh staley

TEXT: The factors influencing the quantity and the distribution of the heat generated during supersonic welding of copper, steel, aluminum, and tantalum were investigated and the results are discussed. A formula is given for calculating the wave amplitude at any point in the mass of the treated metal

$$a = \frac{A}{r} \sin \omega \left( t - \frac{r}{c} \right)$$

This equation does not, however, take into account the fading of vibrations as they pass through the metal, and the calculated values may therefore be a little too high. There are 8 figures and 3 tables.

Card 1/1

AMOS'IV, B.V., inzh.

Thermal phenomena during ultrasonic welding. Trudy MVTU  
no.106:93-105 '62. (MIRA 16:6)  
(Ultrasonic welding)

S/137/61/000/007/021/072  
A060/A101

THORS: Vydrin, V. N.; Boyko, M. Ye.; Amosov, E. N.; Moshkin, S. E.

LE: Investigation of the tension schedule on a continuous light-section mill

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1960, abstract 7D41.  
("Tr. Konferentsii: Tekhn. progress v tekhnol. prokatn. proiz-va".  
Sverdlovsk, Metallurgizdat, 1960, 363-364)

TEXT: The method of tension measurement by means of tension pulley is inapplicable in the section rolling practice, and the authors propose their own method according to which the pressure between the pad of the roll bearing and the bedplate of the rolling stand is measured by a special dynamometer. It is established that the relationship between the tension and the velocity mismatch is linear. See also RZhMet, 1960, no. 4, 7653. ✓

A. Bulanov

[Abstracter's note: Complete translation]

Card 1/1

AMOSOV, G. A. And VASSOYEVICH, N. B.

"Change of Petroleum in the Crust of the Earth", Collection of Geology  
Articles of the All-Union Petroleum Scientific Research Institute for Geological  
Survey, No. 2, 1953.

*AMOSOV, G. A.*

USSR/Chemical Technology. Chemical Products and Their I-14  
Application--Treatment of natural gases and  
petroleum. Motor Fuels. Lubricants.

Abs Jour: Ref Zhur Khimiya, No 3, 1957, 9277

Author : Amosov, G. A.

Inst : All-Union Science Research Institute for Petroleum  
Exploration

Title : The Optical Rotation of Petroleum

Orig Pub: Pr. Vses. neft. n.-i. geol.-razved. in-ta, 1955,  
No 83, 196-230

Abstract: No abstract.

Card 1/1

AMOSOV, G.A.; VASSOYEVICH, N.P.

Means for determining the temperature of petroleum formation.

VNIGRI no.105:61-65 '57.

(MIRA 11:9)

(Petroleum geology)

USSR / Forestry. General Problems.

X

Abs Jour : Ref Zhur - Biologiya, No 22, 1958, No. 100140

Author : Amceoy, G. A.

Last : Not given

Title : The Use of Chemical Substances in the Control of Forest  
Fires in the USA

Orig Pub : Lesn. kh-vo, 1958, No 4, 86-88

Abstract : No abstract given

Card 1/1

GDR / Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour : Referate Zhur--Khimiya, No. 11, 1959, 38196

Author : Amosov, G. A.; and Vassoyevich, N. B.

Inst : Not given

Title : On the Methods Used for the Determination of the  
Temperature in Petroleum Deposits.

Orig Pub : Z angew Geol, 4, No. 9, 410-413 (1958) (in German)

Abstract : See RZhKhim, 1958, 7460.

Card 1/1

AMOSOV, G.A.

"Micropetroleum." Trudy VNIGRI no.224:16-21 '63.

Statistical demands imposed upon the methods of sampling rocks for the  
analysis of organic matter. Ibid.:22-23 (MIRA 17:2)

KOZINA, T.A.; AMOSOV, G.A.

Genetic succession of oils in Sakhalin. Geol. i geofiz. no.2:3-12  
'64. (MIRA 18:4)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologo-razvedochnyy institut, g. Okha-na-Sakhaline.

AMOSOV, G.I.; YEROSHENICH, M.S.

Primary migration. Geol. naftn. i gaza v no.2:38-40. 1965.

(MIRA 18:2)  
1. Vsesoyuznyy naftyanoy nauchno-issledovatel'skiy geologorazvedochnyy  
institut, Leningrad.

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101310007-8

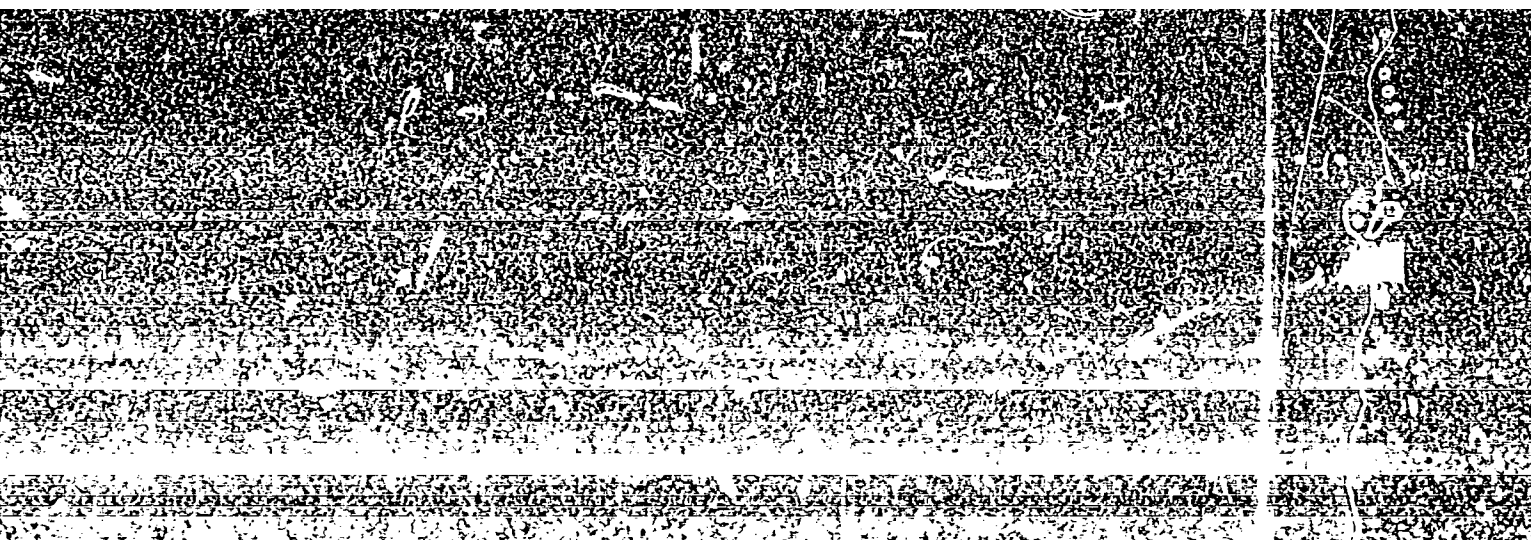


APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101310007-8"

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101310007-8



APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101310007-8"

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101310007-8

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101310007-8"

AMOSOV, S.Ya.

Torsion of prismatic rods in elastoplastic deformations.

Vest. Makh. un. Ser. 1: Mat. nat. 21 no. 1:98-106

Jan-F 1966.

(NIRA 10.1)

.. kultura teorii uprugosti M. vukogo gosudarstvennogo  
universiteta. Submitted March , 1965.

AMOSOV, I.

USSR/Electronics - Repair

Card 1/1

Authors : Amosov, I.; Pigarev, I.

Title : The work of radio repair shops should be improved

Periodical : Radio, 3, 13, Mar, 1954

Abstract : Radio repair shops in Ulan-Ude (Buriat-Mongolian ASSR) do not satisfy customer requirements because they (shops) are poorly equipped and repairs are made in unsuitable buildings. The article calls upon the Ministry of Communication to pay more attention to such a situation and to take measures for improving it.

Institution : .....

Submitted : .....

*AMOSOV, I.S.*  
ZEDGENIDZE, G.A., prof., AMOSOV, I.S., SINENKO, L.F.

Problem of radiation reactions and radiation sickness [with summary in English]. Med.rad. 3 no.2:3-10 Mr-Apr'58 (MIRA 11:5)  
(ROENTGEN RAYS, inj.eff.

mild radiation reactions & radiation sickness, funct.  
changes in thoracic & abdom.organs (Rus))

AMOSOV, I.S.

Changes in the pulmonary blood vessels in experimental radiation sickness. Med.rad. 4 no.9:33-39 S '59. (IRA 12:11)

1. Iz kafedry rentgenologii i meditsinskoy radiologii (nach. -  
chlen-korrespondent AMN SSSR prof.G.A.Zedgenidze) Voenno-  
meditsinskoy ordena Lenina akademii imeni S.M.Kirova.  
(RADIATION INJURY exper)  
(LUNGS blood supply)