

67882

Some Exact Solutions of the Equations of
Compatibility for the Components of the Deform-
ation Tensor Under Simple Load

S/020/60/130/06/011/059
B013/B007

first indices are linearly interdependent. If ψ_{11} , ψ_{22} , ψ_{33} are chosen as arbitrary functions, one obtains $\psi_{12} = a\psi_{11}$, $\psi_{13} = b\psi_{11}$; $\psi_{21} = \frac{1}{a}\psi_{22}$, $\psi_{23} = \frac{b}{a}\psi_{22}$; $\psi_{31} = \frac{1}{b}\psi_{33}$, $\psi_{32} = \frac{a}{b}\psi_{33}$, where a and b are arbitrary constants. This corresponds to the following values of the components of the tensor of finite deformation (with arbitrary ε_{11} , ε_{22} , ε_{33}): $\varepsilon_{12} = \frac{1}{2}(a\varepsilon_{11} + \frac{1}{a}\varepsilon_{22})$, $\varepsilon_{13} = \frac{1}{2}(b\varepsilon_{11} + \frac{1}{b}\varepsilon_{33})$, $\varepsilon_{23} = \frac{1}{2}(\frac{b}{a}\varepsilon_{22} + \frac{a}{b}\varepsilon_{33})$. There are 2 Soviet references.

ASSOCIATION: Matematicheskii institut im. V. A. Steklova Akademii nauk SSSR (Mathematics Institute imeni V. A. Steklov of the Academy of Sciences of the USSR)

PRESENTED: November 9, 1959, by L. I. Sedov, Academician

SUBMITTED: October 29, 1959

Card 4/4

BCNDAR', V.D. (Novosibirsk)

Tensor characteristics of finite deformations of a continuum.
Prikl. mat. i mekh. 25 no.3:508-518 My-Je '61. (MIRA 14:7)
(Deformations (Mechanics)) (Calculus of tensors)

BONDAR', V.D.

One representation of a tensor function. Dokl. AN SSSR 141
no.1:16-18 N '61. (MIRA 14:11)

1. Novosibirskiy gosudarstvennyy universitet. Predstavleno
akademikom L.I. Sedovym.
(Calculus of tensors)

BONDAR', V.D. (Novosibirsk)

On the possibility of considering the deformed and stressed
state of a medium as the initial state. Prikl. mat. i mekh.
27 no.1:135-141 Ja-F '63. (MIRA 16:11)

S/040/63/027/001/015/027
D251/D308

AUTHOR: Bondar', V.D. (Novosibirsk)

TITLE: On the possibility of considering the stress-strain state of a medium as the initial state

PERIODICAL: Prikladnaya matematika i mekhanika, v. 27, no. 1, 1963, 135-141

TEXT: Using tensor methods, the author investigates the mathematical consequences of considering a medium as a second initial state. A number of conclusions are drawn as to when certain terms (corresponding to physical phenomena) may be ignored: it is shown, for example that when the displacements and their two first derivatives with respect to the coordinates are all small, that the dependence of the massive force on the stress may be ignored. A brief discussion is given of an elastic-plastic medium, based on the postulate of D.G. Drucker.

SUBMITTED: July 5, 1962

Card 1/1

BONDAR', V.G.

Celestite deposit associated with hydrothermal activity of
traps in the Siberian Platform. Zap.Vses.min.ob-va 88
no.2:177-180 '59. (MIRA 12:8)
(Siberian Platform--Celestite)

DERBAREMDI FER, M.I.; SEREBRENNIKOVA, K.L.; TERNOVSKIY, V.A.; Frinimali
uchastiye: SHAROV, P.M.; NOVIKOV, L.Z.; LUR'YE, E.I.; PIS'MEN,
M.K.; KARABIN, A.I. [deceased]; KCSTIN, L.I.; FROLOV, V.P.;
MEDVEDEV, F.V.; GELIMKHANOV, S.G.; BONDAR', V.G.; TIMCFEYEV,
P.I.; MININA, L.V.; ARBEKOV, F.F.; NIKOLAYEV, N.I.; YAROSLAV,
T.Ye.; NUDEL'MAN, V.G.

Gasification of mazut under pressure in a steam-oxygen blast.
Gaz. prom. 9 no.11:49-50 '64. (MIRA 17:12)

BONDAR', V.I.

Precision and smoothness of machining with a V.Kolesov cutter.
Stan.1 instr. 25 no.2:30-32 F '54. (MLRA 7:5)
(Cutting tools)

БАНДАРИ

Резь

✓ 2736* (Russian) The Size Effect in Studying Friction and Wear in Metals. Mashtabnyi effekti pri issledovanii protsessov treniya i iznosa metallov. V. I. Bander. *Fizika Metallov i Metallocedenie*, v. 3, no. 2, 1958, p. 303-309.

A study of factors to be considered when making wear and friction tests. Effects of changing shape and size of specimens on the results obtained.

1. Kharkovskiy Politekhniceskii Inst.
Imeni V.I. Lenina.

AKOL'ZIN, L.Ye.; BOROZDOV, I.A.; BEDILO, V.Ye.; TERESHKIN, F.N. Prinimali uchastiye: BKLYAYEV, F.R.; BEREZHNOY, N.V.; BUBYR', V.A.; VARSHAVSKIY, I.N.; DUDKO, V.P.; YERSHOV, V.S.; DUGIN, Ye.V.; DUKALOV, M.F.; IVANOV, P.S.; KONAREVA, V.F.; MONIN, M.I.; MOGILKO, A.P.; PANCHENKO, A.I.; POKALYUKOV, S.N.; PRIKHOD'KO, N.D.; RUBIN, I.A.; SIDORENKO, P.A.; TYUTYUNIK, Ye.I.; KEMEL'NITSKIY, L.Ya.; BONDAR', V.I.; KRIVTSOV, A.T.; LOKSHIN, V.D.; SOFIYENKO, N.P. RABINKOVA, L.K., red.izd-va; BOLDYREVA, Z.A., tekhn.red.

[Types of mine cross section] Tipovye sechenia gornyykh vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.4.

[Cross section of mines supported by a sectional reinforced-concrete lining of URP-11 panels for 1-, 2- and 3-ton railroad cars] Sechenia vyrabotok, zakreplennykh sbornoj zhelezobetonnoi krep'iu iz plit URP-II, dlia 1-, 2- i 3-tonnykh vagonetok. 1960. 278 p.

(MIRA 13:12)

1. Khar'kov. Gosudarstvennyy proyektnyy institut Yuzhgiroshakht. (Mine timbering)

SEMKO, M.F.; BONDAR', V.I.

Investigating the averaging of the thermoelectromotive force of
natural thermocouples. Trudy KhPI, Ser. mash. 19 no. 5: 19-29 '59.
(MIRA 14:9)

(Thermocouples)

VOLOSHINA, N.M., inzh.; BONDAR', V.I., inzh.

Yenakiyevo metallurgical plant. Metallurg 8 no.9:21-23 S '63,
(MIRA 16:10)

(Yenakiyevo--Iron and steel plants)

BONDAR', V. *Lik J*

"Automatic and semi-automatic flux welding." D.Vainboim, Reviewed
by V.Bondar'. Avtom.svar. 6 no.4:82-84 J1-ag '53. (MLRA 7:11)

1. Institut elektrosvariki im. Ye.O.Patona Akademii nauk USSR.
(Electric welding) (Vainboim, D.)

BONDAR V. Kh.

KAZIMIROV, A.A.; BONDAR', V.Kh.

Double-arc welding of sheet strips on a magnetic stand. Avtom.
svar. 6 no.5:60-66 S-O '53. (MLRA 7:11)

1. Institut elektrosvariki im. Ye.O.Patona Akademii nauk USSR.
(Steel--Welding)

BONDAR, V. KH.

AID P - 4840

Subject : USSR/Engineering
Card 1/1 Pub. 11 - 13/13
Authors : Kazimirov, A. A. and V. Kh. Bondar'
Title : Improved electromagnetic welding sets for assembly work
Periodical : Avtom. svar., 3, 102-107, Mr 1956
Abstract : The two latest models of welding units developed at the Institute of Electrowelding im. Paton for the automatic welding of the metal sheets up to 20 mm thick used mostly in the shipbuilding industry are described. Five drawings, 2 graphs. 4 Russian references (1951-53).
Institution : Electrowelding Institute im. Paton
Submitted : 6 D 1955

18(5), 25(5)

SOV/125-59-9-1/16

AUTHOR: Kazimirov, A.A., Candidate of Technical Sciences,
Bondar', V.Kh., Meshkov, V.V., and Lozovskiy, V.P.,
Engineers

TITLE: Three-Electrode Automatic Welding of Fillet and Groove
Welds under Powder Flux

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 9, pp 3-12 (USSR)

ABSTRACT: In large serial production of structures with long
welds, such as beams, columns, tubes, wings, etc., the
speeding-up of the welding process plays an important
role. This impelled the Institute of Electric Welding
imeni Ye.O. Paton, to carry out systematic research
on welding under forced conditions. In 1946-1948, the
Institute worked out the process of automatic welding
under powder flux permitting making the longitudinal
groove welds at a speed of 100-120 m/hour. Later on,
the process of double-arc welding was introduced and
raised the welding efficiency up to 150 m/hour. In

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SOV/125-59-9-1/16

Three-Electrode Automatic Welding of Fillet and Groove Welds under Powder Flux

1955-1956, research on technology of three-electrode automatic welding of large-section double-T beams was conducted. On the basis of experiments, it was determined that groove welding of beams having wallsides 8-20 mm thick, (Fig 1), can be accomplished by the three-electrode method at a speed of 100-180 m an hour. Three-electrode welding can be performed using a 3-6 mm electrode wire; for this purpose both direct and alternating current can be applied. Welding with the first electrode provides good results independently of whether its current differs from that of the other two arcs. The first arc heats the edges to be welded, the second and the third increase the depth and width of fusing; combined action of all three electrodes permits welding at high speeds, which are unattainable when other methods of arc welding are used. Tables 1 and 2 give specific conditions of welding for two-sided groove-welds. The three-electrode process enables

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SOV/125-59-9-1/16

Three-Electrode Automatic Welding of Fillet and Groove Welds under Powder Flux

performing of high quality fillet welds at a speed up to 100 m/hour, provided the carbon content in welds is under 0.13%; the groove welding speed can be brought up to 180 m/hour. Automatic three-electrode welding is a variety of three-phase welding and possesses all the advantages of the latter. Chemical composition of the weld metal and its mechanical properties can be regulated within broad limits by using electrodes of different makes and diameters. There are 4 graphs, 10 tables 3 diagrams and 5 references, 4 of which are Soviet and 1 German.

ASSOCIATION: Ordena trudovogo krasnogo znameni institut elektrosvarki imeni Ye. O. Patona AN USSR (Order of the Red Banner of Labor Institute of Electric Welding imeni Ye.O. Paton AS Ukr SSR)

Card 3/3

SUBMITTED: April 8, 1959

L 29982-66 EWT(1)/EEC(k)-2 IJP(c)

ACC NR: AP6012483

SOURCE CODE: UR/0181/66/008/004/1188/1192

AUTHORS: Ashe, M.; Bondar, V. M.; Sarbey, O. G.

ORG: Institute of Physics, AN UkrSSR, Kiev (Institut fiziki AN UkrSSR)

TITLE: Dependence of the piezoresistance of germanium on the electric field

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1188-1192

TOPIC TAGS: germanium, single crystal, piezoelectric property, carrier scattering, pressure effect, electric field, semiconductor band structure

ABSTRACT: The purpose of the investigation was to check experimentally, in the case of germanium, a hypothesis advanced in an earlier paper (Phys. St. Sol. v. 11, 255, 1965) that in semiconductors in which the intervalley scattering does not play an important role in the electron-lattice energy balance, the piezoresistance should have a nonmonotonic dependence on the field. To this end the authors investigated samples of n-type germanium, cut along the $\langle 111 \rangle$ direction from a single crystal ingot with electron density $3.25 \times 10^{13} \text{ cm}^{-3}$ and mobility $2.6 \times 10^4 \text{ cm}^2/\text{v-sec}$, at 77K. The electric field was applied along the crystal and its deformation was effected in the same direction. The field was applied

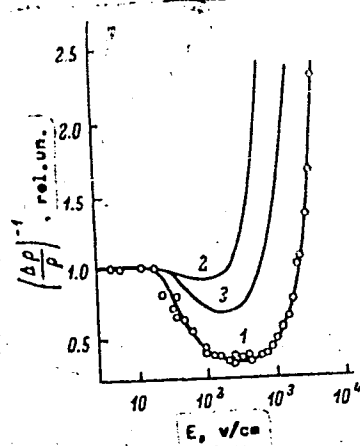
Card

1/3

L 29982-65

ACC NR: AF6012483

Fig. 1. Dependence of piezoresistance of n-type G on the electric field intensity. 1 -- Experimental, 2 and 3 -- theoretical, based on the assumption that the temperatures and electron concentrations in the nondeformed state of the crystal are the same (2) or different (3) in all the valleys.



in the form of rectangular pulses of 0.2 μ sec duration and repetition frequency 10 -- 15 cps. The dependence of the resistance on the pressure was linear up to 300 kg/cm² and the experiments were carried out in the linearity region. The results (Fig. 1) confirm the theoretically deduced nonmonotonicity of the piezoresistance. This confirmation, however, is only qualitative, and quantitatively the minimum of theoretical curve, and the experimental change in the piezoresistance due to the

Card

2/3

L 29902-00

ACC NR: AP6012483

field is larger than called for by the theory. The discrepancies are ascribed to the simplifying assumptions made during the calculation. Orig. art. has: 4 figures and 3 formulas.

SUB CODE: 20/ SUBM DATE: 24Aug65/ ORIG REF: 001/ OTH REF: 007

Card

3/3 lo

BONDAR; V.M.; SEN', Z.P., kand. tekhn. nauk

Automatic control of kilns with walking floors for porcelain
firing. V.M. Bondar, Z.P. Sen'. Leh. prom. no. 2:66-68 Ap-Je '64
(MIRA 17:7)

LYUDVINSKIY, A.I.; ROMANOVSKIY, L.B.; KOREN, L.N.; MISHCHENKO, V.S.;
FROLOVA, A.I.; KOTIK, P.L.; KHIL'KO, M.M.; MOLCHANOVA, M.I.;
VINOGRADOV, N.M.; PYLAYEV, S.V.; BEYGUL, Ye.I.; ROKHLIN, N.A.;
MASYUKOV, N.T.; BONDAR', V.I.

In the country's steelmaking plants. Metallurg 9 no.9:
16-19 S '64. (MIRA 17:10)

1. Saldinskiy metallurgicheskiy zavod (for Pylayev).
2. Zavod im. Dzerzhinskogo (for Beygul, Rokhlin).
3. Yenakiyevskiy metallurgicheskiy zavod (for Masyukov, Bondar').

POLETAYEV, A.P.; BONDAR', V.I., inzh.

Yenakiyevo Metallurgical Plant. Metallurg 9 no.11:17 N '64.
(MIRA 18:2)

1. Starshiy master Yenakiyevskogo metallurgicheskogo zavod
(for Poletayev). 2. Byuro tekhnicheskoy informatsii Yenakiyev-
skogo metallurgicheskogo zavoda (for Bondar').

I 06448-67 EWI(M)/EWP(T)/ETI ISF(C) UD
ACC NR: AP6026727 SOURCE CODE: UR/0181/66/008/008/2511/2513

AUTHOR: Bondar, V. M.; Sarbey, O. G.; Tomchuk, P. M.

ORG: Physics Institute, AN UkrSSR, Kiev (Institut fiziki, AN, UkrSSR)

TITLE: Dependence of the anisotropy of scattering of current carriers in n-Ge on the impurity concentration

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2511-2513

TOPIC TAGS: semiconductor carrier, germanium single crystal, carrier scattering

ABSTRACT: The anisotropy parameter $K = \mu_{\perp} / \mu_{\parallel}$ was measured at the liquid nitrogen temperature on single crystals of n-germanium doped with antimony. The carrier concentrations were between 3×10^{13} and $8 \times 10^{17} \text{ cm}^{-3}$. Fig. 1 shows the measured anisotropy of mobility versus the carrier concentration in n-Ge. Curve 1 represents results obtained without considering interelectronic interaction, and curve 2 shows them with this interaction taken into account. With the exception of very high concentrations ($n \approx 5 \times 10^{17} \text{ cm}^{-3}$), a good agreement was obtained between the experimental results and the curve calculated by allowing for the electron-electron interaction. The value of $\tau_{\parallel}^{(a)} / \tau_{\perp}^{(a)}$, which characterizes the anisotropy of the relaxation time for acoustic scattering, was found to be 1.52. Authors thank V. N. Vasilevskiy and A. N. Kvasnitskaya for supplying certain germanium samples and V. M. Vsetskiy for his assist-

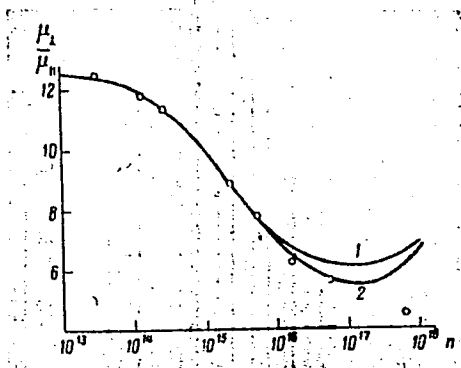
Card 1/2

L 00448-67

ACC NR: AP6026727

ance in the measurements. Orig. art. has: 1 figure.

Fig. 1



SUB CODE: 20/ SUBM DATE: 20Jan66/ ORIG REF: 001/ CPH REF: 004

Card 2/2 *pla*

BONDAR', V.N. [Bondar, U.M.]

Effect of the time factor on the permeability of concrete. Vestsi
AN BSSR. Ser. fiz.-tekh. nav. no.2:130-135 '64.

(MIRA 18:1)

AKHVERDOV, I.N.; BONDAR', V.N.

Effect of structural and technological factors on the permeability of concrete. Dokl. AN BSSR 8 no.9:584-586 S '64.

(MIRA 17:12)

GORBACHEV, M.S., doktor med.nauk, BONDAR', V.P.

Use of neocide in treating brain tumors. Vrach.delo no.3#235-237
Mr'58 (MIRA 11:5)

1. Neyrokhirurgicheskaya klinika Ukrainskogo nauchno-issledovatel'
skogo psikhonervologicheskogo instituta i Khar'kovskaya psi-
khonevrologicheskaya bol'nitsa.
(ANTIBIOTICS)
(BRAIN--TUMORS)

BONDAR', V. P.: Master Med Sci (diss) -- "'vakat'-oxygen and the functional state of the kidneys in patients with brain tumors". Khar'kov, 1959. 14 pp (Khar'kov State Med Inst), 200 copies (KL, No 14, 1959, 123)

BONDAR', V.P.; KABANOV, V.M.; SIMANOVSKIY, Yu.S.

Miniature transformer torque transducer. Izm. tekhn. no.9:
23-24 S '63. (MIRA 17:1)

17(

SOV/177-58-5-29/30

AUTHOR: Bondar' V.S., Lieutenant of the Medical Corps

TITLE: The Image of the Military Medical Assistant in the Fiction (Obraz voyennogo fel'dshera v khudozhestvennoy literature)

PERIODICAL: Voenno-meditsinskiy zhurnal, 1958, Nr 5, pp 93-95 (USSR)

ABSTRACT: The author reports on the heroism of Military Medical Assistants during the Great Patriotic War. He mentions A.V. Zubkov, Military Medical Assistant, Lieutenant of the Medical Corps, Anatoliy Kokorin, Military Medical Assistant, Zinaida Tusnolobova, Master-Sergeant, who have been awarded the title "Hero of the Soviet Union". Many authors, including K. Simonov, P.Ye. Beylin, Hero of the Soviet Union V. Maksakov, A.Koptayeva, Arkadiy Korovin, O. Dzhigurda, A. Zaytsev and G. Skul'skiy, have described heroic deeds of many other Military Medical Assistants.

Card 1/1

SOV/137-58-7-14492

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 81 (USSR)

AUTHOR: Bondar', V.V.

TITLE: A Unique Case of Current Distribution in an Electrolytic Bath
(Svoeobraznyy sluchay raspredeleniya toka v elektrolite)

PERIODICAL: Soobshch. o nauchno-issled. rabotakh chlenov Primorsk.
otd. Vses. khim. o-ya im. D.I. Mendeleeva, 1957, Nr 3,
pp 197-200

ABSTRACT: Preliminary communications are presented on experiments in electrolysis with separation of the cathode and anode spaces by a partition with a hole. In some cases the partition used was a dielectric and in others it was a metal. It was found that when the electrodes are at a short distance from a partition with a round hole (5-15 mm), the deposit on the cathode has a central spot around which there is a number of concentric circles; if the aperture is in the form of a slit, there is an oval spot and a series of concentric ovals. The phenomenon described was observed independent of the metal (Me) precipitated and the composition of the electrolyte. The anode also revealed uneven dissolution of the Me, with formation of rings or ovals.

Card 1/2

SOV/137-58-7-14492

A Unique Case of Current Distribution in an Electrolytic Bath

A dielectric partition in electrolysis behaves like a flat dipole electrode. A metallic partition with a hole also behaves like a dipole electrode, but certain deviations from standard behavior are observed in the vicinity of the aperture.
N.P.

1. Electrolysis--Test results
2. Cathodes (Electrolytic cell)--Performance
3. Anodes (Electrolytic cell)--Performance

Card 2/2

SHAFERSHTEYN, I.Ya.; BONDAR', V.V.; MALAKHOVA, S.I.; KHAMATOVA, A.T.;
TSAREVSKAYA, Ye.A.

New method for the determination of nitrates. Dokl. AN Tadjh. SSR
1. no.2:11-15 '58. (MIRA 12:1)

1. Tadjhikskiy sel'skokhozyaystvennyy institut. Predstavleno akademi-
kom AN Tadjhikskoy SSR S. Yusupovoy.
(Soils--Analysis) (Nitrates)

AUTHORS: Bondar', V. V., Polukarov, Yu. M. 60V/20-120-3-32/67

TITLE: The Phenomenon of Zone Formation on Electrodes in the Process of the Electric Crystallization of Metals (Tavleniye zono-obrazovaniya na elektrodakh v protsesse elektrkristallizatsii metallov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 3, pp.552-553 (USSR)

ABSTRACT: The authors investigated the electric precipitation of alloys (Cu-Pb, Cu-Zn, Cu-Bi, Cd-Bi, Cu-Sn) as well as of pure metals (Cu, Ni, Co, Zn, Bi and others) and of the dissolution of copper on the anode under conditions analogous to those prevailing during the experiments carried out by Arndt (Ref 4). In all cases distinctly marked concentrical zones were formed. According to radiographical tests the precipitations of the alloys in the various zones differ by their phase composition. The nonuniform current distribution on the cathode gives rise to different values of the potential in the center and on the periphery of the cathode. The authors carried out measurements of the potential of the cathode in its various parts. A diagram shows the curves obtained for

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SOV/20-120-3-32/67

The Phenomenon of Zone Formation on Electrodes in the Process of the Electric Crystallization of Metals

the change of potential with increasing distance from the center of the cathode. The material found experimentally seems to indicate that transition from one zone to another takes place at certain strictly definable potentials only. The character of zone distribution depends on the composition of the electrolyte as well as on the distribution of the current on the surface of the electrode. Also in the course of the electric precipitation of pure metals the forming of zones may be observed. In this case the zones are distinguished from one another by the size, orientation, and by the nature of the boundaries of the crystals contained in them. In the case of the deposits of pure metals the forming of zones is apparently due to the difference in the electrochemical conditions of the precipitation. There are 2 figures, 1 table, and 8 references, 3 of which are Soviet.

PRESENTED: October 4, 1957, by A. N. Frumkin, Member, Academy of Sciences, USSR

Card 2/3

SCV/2c-12c-3-32/67
The Phenomenon of Zone Formation on Electrodes in the Process of the
Electric Crystallization of Metals

SUBMITTED: October 4, 1957

1. Electrodes--Structural analysis
2. Electrodes--Radiographic analysis
3. Alloys--Electrolysis
4. Metals--Electrolysis
5. Anodes--Properties

Card 3/3

5(4)

SOV/20-123-4-41/53

AUTHORS: Polukarov, Yu. M., Bondar', V. V.

TITLE: The Dependence of the Structure of the Surface of Electrolytic Deposits of Alloys on Their Phase Composition (Zavisimost' stroyeniya poverkhnosti elektroliticheskikh osadkov splavov ot ikh fazovogo sostava)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 4, pp 720-721 (USSP)

ABSTRACT: Extensive material has hitherto been collected concerning electric deposits of alloys. However, the influence exercised by structural factors and the character of component interaction in the formation of alloys (by which the physico-chemical properties of the coating are, to a great extent, determined), have received but little attention. According to the results obtained by the present paper the forming of the non-equilibrium phase of an oversaturated solid solution is connected with a considerable structural variation of the surface of the deposit. In order to reduce the influence exercised by secondary factors upon the surface structure of deposits to a minimum, investigations were carried out on such metals as permit common depositing without the addition

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SOV/20-123-4-41/53

The Dependence of the Structure of the Surface of Electrolytic Deposits of Alloys on Their Phase Composition

of surface-active or complex-forming substances to the solution. The system copper-bismuth is particularly well suited for this purpose. When using the solution $\text{Cu}(\text{ClO}_4)_2$ 0.6 N, $\text{Bi}(\text{ClO}_4)_3$ 0.4 N, pH 0.6 (solution I), alloys were obtained which contain the phase of the oversaturated solid solution of bismuth and copper (with a corresponding increase of the copper lattice parameter up to $3.635 - 3.645 \text{ \AA}$). The bismuth content in the solid solution increased with current density and, according to the data of radiographic measurements, it attained 12 per cent by weight. With a further increase of current density, the lattice was disturbed to such an extent by the increase of oversaturation, that the lines on the X-ray picture vanished completely. A figure shows electron-microscopic pictures of deposits of alloys with different bismuth content. With an increasing oversaturation of the solid solution, the surface of the deposit becomes smoother, and if oversaturation is considerable it becomes glossy. The deposits forming in a solution $\text{Cu}(\text{ClO}_4)_2$ 0.2 N, $\text{Bi}(\text{ClO}_4)_3$ 0.8 N, pH 0.6 (solution II) are a mixture of pure copper-

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SOV/20-123-4-41/53

The Dependence of the Structure of the Surface of Electrolytic Deposits of Alloys on Their Phase Composition

and bismuth crystals. The dependence of deposit structure of an alloy on its phase composition is confirmed also by the data on copper-tin and tin-lead alloys. The third figure shows a photograph of the surface of the deposit of the alloy copper-tin. This deposit was of a dense and finely-crystalline nature. When obtaining a tin-lead alloy from the solution $\text{Sn}(\text{ClO}_4)_2$ 0.8 N, $\text{Pb}(\text{ClO}_4)_2$ 0.2 N, HClO_4 1N, no forming of oversaturated solutions was observed according to the data obtained by radiographic investigations. Deposits had a coarse-crystalline structure. The forming of oversaturated solid solutions exercises an essential influence upon the structure of electrolytically deposited alloys in that it promotes the formation of finely-crystalline deposits. Finely-crystalline and glossy deposits are thus to be expected whenever electrochemical conditions promote the production of oversaturated solid solutions. There are 3 figures and 11 references, 6 of which are Soviet.

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SOV/20-123-4-41/53

The Dependence of the Structure of the Surface of Electrolytic Deposits of Alloys on Their Phase Composition

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR
(Institute of Physical Chemistry of the Academy of Sciences, USSR)

PRESENTED: July 14, 1958, by A. N. Frumkin, Academician

SUBMITTED: June 21, 1958

Card 4/4

BONDAR', V. V. Cand Chem Sci -- (diss) "Study of conditions determining the phase structure of electrodeposited alloys." Mos, 1959. 14 pp (Acad Sci USSR. Inst of Physical Chemistry), 150 copies (KL, 50-59, 124)

ALEKSEYEVSKIY, N.Ye.; BONDAR', V.V.; POLUKAROV, Yu.M.

Superconductivity of electrolytically deposited copper-bismuth alloys. Zhur. eksp. i teor. fiz. 38 no.1:294-295 Jan '60.
(MIRA 14:9)

1. Institut fizicheskikh problem AN SSSR.
(Superconductivity) (Copper-bismuth alloys--Electric properties)

FOLUKAROV, Yu.M.; GORBUNOVA, K.M.; BONDAR', V.V.

Certain aspects of the theory of electrodeposition of alloys.
Part 8. Zhur. fiz. khim. 36 no.9:1870-1876 S '62.

(MIRA 17:6)

1. Institut fizicheskoy khimii AN SSSR.

BONDAR', V.V.; MEL'NIKOVA, M.M.; POLUKAROV, Yu.M.

Electrodeposition of hard magnetic alloys; preliminary report.
NTI no.1:28 '64. (MIRA 17:3)

L 32905-65 EWT(m)/EPA(s)-2/EHA(c)/EWP(t)/EPA(bb)-2/EWP(b) Pad/Pt-10 IJP(c)
ACCESSION NR: AT5004145 S/0000/64/000/000/0117/0123 JD/HW/GS

AUTHOR: Bondar', V. V. ; Mel'nikova, M. M. ; Polukarov, Yu. M. 36
8

TITLE: Electrodeposition of magnetically-hard alloys, Part I. Electrodeposition of a cobalt-phosphorus alloy

SOURCE: AN SSSR. Institut nauchnoy informatsii. Informatsionnyye sistemy (Information systems). Moscow, 1964, 117-121

TOPIC TAGS: magnetic memory, magnetically hard alloy, alloy magnetic property, alloy electrodeposition, cobalt alloy, phosphorus containing alloy

ABSTRACT: The authors call attention to the interest centering on the development of miniaturized machine memories using thin magnetic films for high-density information storage and to the use of electrodeposited ferromagnetic alloys for these purposes. The magnetic coverings used in information storage must possess a high coercive force (better than 500 oersteds), residual induction and orthogonality factor; that is $B_r/B_m > 0.5$. The work reported on in this article was carried out in the Laboratoriya elektromodelirovaniya (Electrosimulation laboratory) of VINITI for the purpose of determining and investigating the properties of magnetically-hard alloys employed in the recording stage of the overall information-storage problem. Of the different alloys presently in use as carriers of
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L 32905-65

ACCESSION NR: AT5004145

recorded informations, the authors focused their attention in particular on the study of the magnetic characteristics of Co-P alloys, since, according to the structural diagram, at specific compositions one can expect the electrodeposition of heterogeneous alloys possessing a high coercive force. The purpose of the present work was to investigate the effect of the conditions of the deposition and the composition of the electrolyte on the composition, quality, structure, magnetic properties and current efficiency of the Co-P alloy. The tests were conducted in glass electrolyzers of 0.5-1 liter capacity, with a thermostat used in high-temperature work. The pH of the electrolyte was checked by a glass electrode and an LP-58 potentiometer. The magnetic properties were determined through the use of a device not described in this article, while current efficiency values were verified by means of a copper coulomb-meter. Polarization measurements were made in a special thermostatically-controlled cell, and the electrodes were subjected to preliminary purification by activated carbon and low-density current. Other test procedures and a concise description of the methodology employed in the preliminary investigations are outlined in the article. The buffer properties of the electrolyte are discussed in a separate section. The results, presented primarily in graph form, indicate the following basic conclusions: 1. the coercive force of pure electrolytic cobalt increases somewhat as the cobalt concentration in the solution increases and then shows no further change; 2. the pH

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L 32905-65

ACCESSION NR: AT5004155

of the solution has the most marked effect on the magnetic properties of the depositions, with an increase in pH above 3-4 resulting in low precipitate quality; 3. the temperature of the solution also has a considerable influence on the magnetic properties of the depositions, with maximum coercive force achieved at temperatures of 25-40 C; 4. as the current density is increased, the coercive force passes through a maximum, shifting toward lower densities as the temperature is lowered; optimal current densities are: 2.5 amp/dm² for 20 C and 5-10 amp/dm² for 40 C; 5. for the electrodeposition of a Co-P alloy possessing a coercive force of 600-800 oersteds and an orthogonality factor of 0.55-0.6, an electrolyte of the following composition is recommended: CoCl₂ · 6H₂O 200-400 g/liter; NH₄H₂PO₂ 25-100 g/liter; Trilon B 10-15 g/liter, pH 1.8-2; temperature 20-40 C, current density 2.5-5 amp/dm². Orig. art. has 7 figures.

ASSOCIATION: none

SUBMITTED: 09Oct64

ENCL: 00

SUB CODE: MM, DP

NO REF SOV: 007

OTHER: 304

Card 3/3

L 32904-65 EWT(m)/EPA(s)-2/EWP(t)/EPA(bb)-2/EWP(b) Pad/Pt-10 IJP(c)
JD/HW/GS

ACCESSION NR: AT5004146

S/0000/64/000/000/0124/0127

AUTHOR: Bondar', V.V.; Mel'nikova, M. M.; Polukarov, Yu. M.

37

TITLE: Electrodeposition of magnetically-hard alloys. Part II. Electrodeposition
of cobalt-nickel-phosphorus and cobalt-manganese-phosphorus alloys

BT1

SOURCE: AN SSSR. Institut nauchnoy informatsii. Informatsionnyye sistemy (In-
formation systems). Moscow, 1964, 124-127

TOPIC TAGS: magnetic memory, magnetically hard alloy, alloy electrodeposition,
cobalt alloy, nickel alloy, phosphorus containing alloy, manganese alloy, alloy
magnetic property

ABSTRACT: For the purpose of expanding the assortment of alloys which may be
used in information recording (computer storage applications), and also of de-
veloping electrolytes to operate in a wider pH interval, the authors studied the
effect of nickel and manganese ions on the electrodeposition of a Co - P alloy. A
number of bibliographical references (most of them American) are cited in a dis-
cussion of the magnetic properties of Co - Ni alloys obtained by the electrodepo-
sition method. The authors call attention to the fact that Co-Ni-P alloys, chemi-
cally obtained, possess a coercive force of 4-14 oersteds and contain about 5% P

Card 1/3

L 32904-65

ACCESSION NR: AT5004146

and different quantities of nickel and cobalt (these alloys have been used in the manufacture of memory elements in high-speed computers). An investigation was made of the conditions for the electrodeposition of Co-Ni-P and Co-Mn-P alloys, and the effect of different factors on the magnetic properties and composition of the alloys was studied. For the electrodeposition of a Co-Ni-P alloy having a coercive force of 1000-14000 oersteds and a rectangularity factor of 0.7, an electrolyte of the following composition is recommended:

$\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$ 100-200 g/l;

$\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$ 140 g/l;

$\text{NH}_4\text{H}_2\text{PO}_2$ or NaH_2PO_2 25-100 g/l.

The pH of the electrolyte is 2.5-3, the temperature is 40C. For the electrodeposition of a Co-Mn-P alloy having a coercive force of 500-900 oersteds, residual inductance of 6000-9000 gauss and rectangularity factor of 0.65-0.85, the following electrolyte is recommended:

$\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$ or $\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$ 200-400 g/l;

$\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ or $\text{MnSO}_4 \cdot 4\text{H}_2\text{O}$ 20-30 g/l;

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L 32904-65

ACCESSION NR: AT5004146

$\text{NH}_4\text{H}_2\text{PO}_2$ or NaH_2PO_2 25-50 g/l.

As a buffer admixture 10 g/l Trilon B may be added to the electrolyte, the deposition of the alloy occurring at a temperature of 18-40 C, pH 1.8-5. The current efficiency of the alloy is about 100% (cobalt anodes). Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 08Oct64

ENCL: 00

SUB CODE: MM, DP

NO REF SOV: 006

OTHER: 008

Card 3/3

L 36298-65 EWT(m)/ENP(b)/T/LWA(d)/ENP(w)/ENP(t) Pad IJP(c) JD/HW

ACCESSION N^o: AP5011516

UR/0286/64/000/023/0070/0070

AUTHOR: Polukarov, Yu. M.; Mel'nikova, M. M.; Bondar', V. V.; Botova, V. P.

25
B

TITLE: Electrodeposition of Ni-Co alloy. Class 48, No. 166870

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1964, 70

TOPIC TAGS: nickel alloy, cobalt alloy, electroplating, metal property

Abstract: The electrodeposition of a Ni-Co alloy for the purpose of improving physical and mechanical properties is done in an electrolyte containing:

Ingredient	g/l
Nickel chloride	140
Cobalt chloride	140
Ammonium hypophosphate	100
Trilon B	10

at 40 C and D = 10 a/dm².

Card 1/2

L 38967-65 EWT(m)/EWA(a)/EWP(t)/EWP(b) JD

ACCESSION NR: AP5008570

S/0286/65/000/006/0101/0101

AUTHORS: Bondar', V. V.; Polukarov, Yu. M.; Mel'nikova, M. M.

21
B

TITLE: A method for electrolytic deposition of a magnetic ternary alloy, Glass 48, No. 169371 4 1/8 1/8

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 101

TOPIC TAGS: electrolysis, magnetic alloy, cobalt, phosphorus, manganese, ammonium compound, sodium compound / Trilon B 2 }

ABSTRACT: This Author Certificate presents a method for electrolytic deposition of a magnetic ternary alloy containing cobalt and phosphorus. To obtain films of alloy cobalt-manganese-phosphorus, the process is conducted at a temperature of 18-40C, with current density of 1-10 amp/dm², and a pH of 1.8-5. The electrolyte contains sulfuric acid or chlorine salts of cobalt (200-300 g/liter), of manganese (20-40 g/liter), ammonium hypophosphate or sodium hypophosphate (35-50 g/liter), and Trilon B (10 g/liter).

ASSOCIATION: none

SUBMITTED: 17Jul63

ENCL: 00

SUB CODE: GC

NO REF SOV: 000

OTHER: 000

Card 1/1 *ML*

BONDAR', V.V., inzh.; KULEV, G.B., inzh.

Application of polyethylene for the protection of pipelines
against corrosion. Khim. i neft. mashinostr. no.6:35 D '64
(MIRA 18:2)

L 53917-65 EWT(m)/EWP(i)/EPR/EWP(t)/EWP(b) P3-4 IJP(c) JD

ACCESSION NR: AP5011420

UR/0073/65/031/004/0359/0363

AUTHOR: Galushko, V. P., Bondar', V. V.

A
18
B

TITLE: Anodic behavior of aluminum under electropolishing conditions

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 4, 1985, 339-363

TOPIC TAGS: aluminum anode, electropolishing, anode potential, polarization curve, aluminum oxide layer

ABSTRACT: The article is devoted to a study of the anodic behavior of aluminum in $H_2SO_4 - H_3PO_4$ and $H_2SO_4 - H_3PO_4 - CrO_3$ aqueous electrolytes, aimed at determining the stable and unstable stationary portions of the polarization curve and also portions where the process of electropolishing takes place. $I - V$, $\Phi - t$, and $V - t$ curves were plotted. All the $I - \Phi$ curves display three distinct portions (see Fig. 1 of the Enclosure): in the first (a - b), the current density increases with the anode potential; the second (b - c) corresponds to the unstable anode potential, where a sharp rise in anode potential is associated with a smooth rise in current density; the third which has a negative slope, is associated with oscillatory processes (pronounced fluctuation of the anode potential and current intensity in the cell). It was found that the electropolishing of aluminum could be carried out best in the region of the portion having a negative slope: at the start of this

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L 53917-65

ACCESSION NR: AP501142)

portion, oxide layers are formed and broken down, marking the beginning of the electro-
polishing process. As the current density is increased further, the voltage becomes more
stable, and a high-quality electropolishing takes place. Orig. art has: 4 figures and 1
table.

ASSOCIATION: Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State
University)

SUBMITTED: 26Jun63

ENCL: 01

SUB CODE: MM, IC

NO REF SOV: 006

OTHER: 000

Card

2/3

1 33917-69
ACCESSION NR: AP5011420

ENCL: 01

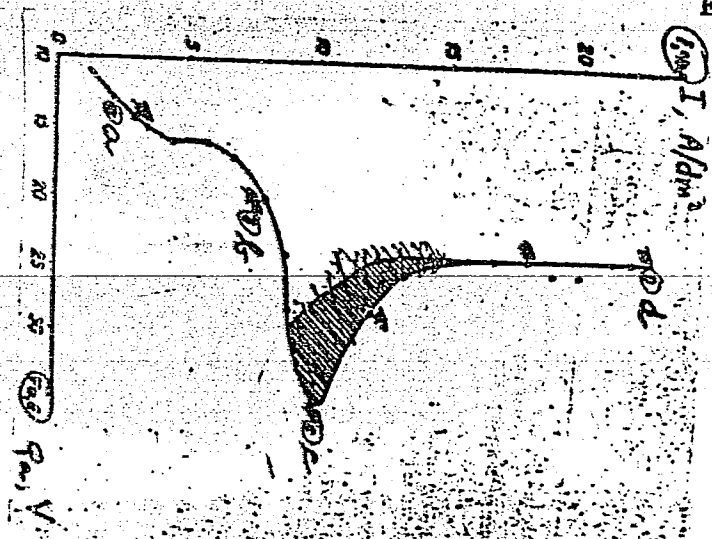


Fig. 1. Current density versus anode potential in an $H_2SO_4 - H_3PO_4 - CrO_3$ electrolyte; the anode is AOO aluminum.

Card 3/3

BONDAR', V.V.; MEL'NIKOVA, M.M.

Mechanism of the electrodeposition of a cobalt-phosphorus alloy.
Zashch. met. 1 no.5:530-533 S-0 '65. (MIRA 18:9)

1. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii AN
SSSR.

L 3588-66 EWT(m)/EWP(i)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/HV
ACCESSION NR: AP5022661 UR/0365/65/001/C95/0534/0538
621.357.7

05
59
B

AUTHOR: Bondar', V. V.; Mel'nikova, M. M.; Polukarov, Yu. M.

TITLE: Electrodeposition of hard magnetic Co-Mn-P alloys

SOURCE: Zashita metallov, v. 1, no. 5, 1965, 534-538

TOPIC TAGS: cobalt alloy, manganese containing alloy, phosphorus containing alloy, magnetic alloy, alloy electrolytic deposition, electrolyte composition, alloy film magnetic property

ABSTRACT: Experiments have been made to determine the optimum conditions for electrodeposition of thin films of Co-Mn-P alloy with high magnetic properties. Copper rods or foil, or phosphorous bronze foil with an area of 4 cm², were used as cathodes, cobalt or platinum were used as anodes, and the electrolyte temperature was varied from 20, 40, and 60C, electrolyte acidity (pH) from 1.1 to 4.8, and current density from 0.5 to 5 a/dm². The best electrolytically deposited Co-Mn-P films — about 10-μ thick, with a saturation induction B_m of (8—11) x 10³ gs, a residual induction B_r of (6—7) x 10³ gs, a coercive force H_c of 800—6000C and a hysteresis-loop rectangularity factor B_r/B_m ranging from 0.65 to 0.85 — were obtained with an electrolyte containing 200 g/l CoCl₂·6H₂O, 25 g/l MnCl₂·4H₂O,
Card 1/2

L 3588-66

ACCESSION NR: AP5022661

25 g/l $\text{NH}_4\text{H}_2\text{PO}_4 \cdot \text{H}_2\text{O}$, and 10 g/l Trilon "B"; the electrolysis conditions were: pH 1.8—4.8, temperature 15—50C, and cathode current density 2.5—1.5 a/dm². A unique feature of the electrolyte is the wide pH range in which deposits with high magnetic and decorative properties are obtained. Orig. art. has: 4 figures and 3 tables. [MS]

ASSOCIATION: Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii Akademii nauk SSSR (All-Union Institute of Scientific and Technical Information, Academy of Sciences, SSSR); Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 20Jan65

ENCL: 0044,55

SUB CODE: MM,GC

NO REF SOV: 010

OTHER: 005

ATD PRESS: 4116

mlr
Card 2/2

ACC NR: AP6021486

SOURCE CODE: UR/0413/66/000/011/0128/0128

INVENTOR: Rabkin, D. M.; Yagupol'skaya, L. M.; Langer, N. A.; Dovbishchenko, I. V.;
Nikitina, A. V.; Zotova, L. M.; Martynova, N. A.; Yelagin, V. I.; Ishchenko, A. Ya.;
Bondar', V. V.

ORG: none

TITLE: Filler-wire for argon-shielded arc welding of aluminum. Class 49, No. 182487
[announced by the Electric Welding Institute im. Ye. O. Paton (Institut' elektrosvarki)]

SOURCE: Izobreteniya, promyshlennyye obratzysy, tovarnyye znaki, no. 11, 1966, 128

TOPIC TAGS: welding, aluminum ~~welding~~, arc welding, argon, ~~shielded arc welding~~,
welding wire, aluminum wire, ~~chromium-containing wire~~, ~~zirconium-containing wire~~
~~corrosion resistance~~, ~~chromium containing alloy~~, ~~zirconium containing alloy~~

ABSTRACT: This Author Certificate introduces a filler-wire for argon-shielded arc
welding of aluminum. To improve the weld corrosion resistance, the wire contains
0.8-1.2% chromium and 0.7-1.2% zirconium. [ND]

SUB CODE: 11, 13/²⁷ SUBM DATE: 25Dec63/¹⁶ ATD PRESS: 5036

Card 1/1 *lll*

UDC: 621.791.753.93.042

BONDAR, V.V.; MELAMED, A.V.; STAROBINS'KA, R.Kh.

Anticorrosion measures in the shops of coke-oven gas
purification by monoethylamines. Khim. prom. [Ukr.]

no.4:73-75 O-D'63.

(MIRA 17:6)

SHUL'TS, G.E.; BONDAR', V.V.; FEDULOVA, A.P.

Effect of foliar application of nitrogen fertilizers on the
oxidation-reduction processes in cotton leaves. Trudy Bot.
inst. Ser. 4 no.16:64-74 '63. (MIRA 17:2)

BONDAR', V.V.

Case of torsion of the omentum. Nov. khir. arkh. no.3:92 My-Je '60.
(MIRA 15:2)

1. Khirurgicheskoye otdeleniye Ulanovskoy rayonnoy bol'nitsy Vinnitskoy oblasti. Adres avtora: Vinnitskaya oblast', s.Ulanov, rayonnaya bol'nitsa.

(OMENTUM_DISEASES)

BONDAR, V.V.

Rare case of strangulated inguinal interstitial hernia. Nov.khir.
arkh. no.1:80-81 '62. (MIRA 15:8)

1. Khirurgicheskoye otdeleniye Ulanovskoy rayonnoy bol'nitsy,
Vinnitskoy oblasti.

(HERNIA)

POLUKAROV, Yu.M.; GORBUNOVA, K.M.; BONDAR', V.V.

Some problems in the theory of the electrodeposition of alloys.
Part 7: Investigation of the phase structure of copper-bismuth
alloys in relation to the electrochemical conditions of their
production. Zhur.fiz.khim. 36 no.8:1661-1666 Ag '62.

(MIRA 15:8)

1. Institut fizicheskoy khimii AN SSSR.
(Bismuth-copper alloys) (Electrochemistry)

S/076/62/036/009/001/011
B101/B102

AUTHORS: Polukarov, Yu. M., Gorbunova, K. M., and Bondar', V. V.
(Moscow)

TITLE: Some problems of the alloy electrodeposition theory. VIII.
Study of the dependence of copper alloy phase structure on
the electrochemical conditions of deposition

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 9, 1962, 1870 - 1876

TEXT: The electrodeposition of supersaturated solid solutions of lead, thallium, tin, or cadmium in copper from solutions of perchlorates (Pb-Cu, Sn-Cu, Cd-Cu) or of sulfates (Sn-Cu), or nitrates (Tl - Cu) was investigated. In all cases, the deposition of Pb, Tl, Sn, and Cd started at more positive potentials than would correspond to the equilibrium potential of these metals, and the lattice constant of the copper was greatly expanded. The solid Sn-Cu solution contained more than 22% Sn, the lattice constant was 3.75 Å, and at a cathode potential more positive than -130 mv the $Cu_{31}Sn_8$ phase (high-temperature δ -phase) was formed. The solid Cd-Cu

Card 1/2

Some problems of the alloy ...

5/076/62/036/009/001/011
B101/B102

solution contained ~16% Cd, the maximum lattice constant was 3.716 Å at -0.350 v. The supersaturation observed is explained as follows: Owing to high overvoltage, a highly active Cu lattice is formed in which the electro-negative metals have higher solubility, so that the separation potential becomes more positive. The lattice then loses its excess energy, and a supersaturated solid solution is formed. The supersaturation depends on the cathode overvoltage attaining 150 - 200 mv with H₂, and on the rate of electrodeposition. There are 4 figures.

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskoy khimii (Academy of Sciences USSR, Institute of Physical Chemistry) ✓

SUBMITTED: September 27, 1960

Card 2/2

YESHCHEKHO, A.A., gornyy inzh.; BONDAR', A.S., student; BONDAR',
V.Ya., student

Increasing the output of the Ingulets strip mine. Sbor. nauch.
trud. KGRI no.15:53-59 '63. (MIRA 17:8)

BONDAR', Ya. [Bondar, IA.]

The best people of the interfarm building organization. Sil'.
bud. 12 no.8:6 Ag '62. (MIRA 15:9)

1. Sekretar partorganizatsii mizhkolgospbudu Yemil'chins'kogo rayonu, Zhitomirs'koi oblasti.
(Collective farms--Interfarm cooperation)
(Emil'chino District--Farm buildings)

1. ТОРОПОВ, N. A., GALAKHOV, F. YA., BONDAR, Y. A.
2. USSR (600)
4. Aluminum Silicates
7. Structural diagram of the ternary system BaO-Al₂O₃- SiO₂. Dokl. AN SSSR 89, no. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

Chemistry) and BONDAR, Y. A. (Dipl.-Ing., Leningrad) Acad. Architecture of USSR Inst. of Silicate

"The Influence of Calcium Fluoride on Crystallization Characteristics in the System $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2$ ".

paper submitted at European Assn. of Ceramics, Sixth Intl. Ceramic Congress - Wiesbaden, GFR, 14-20 Sep '58.

C- 3,800,828, 26 25 July 1958.

BONDAR', Yelena Mikhailovna; BRAGINA, L.F., red.; ZAYONTS, L.A.,
tekh. red.

[Possibility of cultivating the most frost resistant European
grape varieties in Moldavia without covering them in winter]
O vozmozhnosti kul'tury naibolee morozoustoichivvykh sorotv
evropeiskogo vinograda v Moldavii bez ukrytiia na zimnu. Ki-
shinev, Izd-vo "Shtiintsa," 1961. 73 p. (MIRA 16:2)
(Moldavia--Viticulture)

32750. Rezistentnost' gryzunov k preogatu "krysid". Izvestiya turkm, filiala
akad. Nauk sssr, 1949, No. 1, s. 44-47

SO: Letopis' Zhurnal'nykh Statey, Vol. 44, Moskva, 1949

BONDAR, YE. P.

Apr 49

USSR/Medicine - Rodents
Medicine - Taxonomy

"Discovery in Turkmen SSR of New-Type of Jerboa
(Kangaroo Mouse) of the Genus *Jaculus* Erxl. (*J.*
Turcomenicus Sp. Nov., *Mammalia*, *Rodentia*)," B. S.
Vinogradov, Ye. P. Bondar', 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 4

In 1947, Ye. P. Bondar' discovered new form of
jerboa in Nebit Dag region of Turkmen SSR. This
type is related to genus *Jaculus* Erxl., represent-
atives of which previously had been found only in
North Africa and Asia Minor down to southern Iran.
Submitted by Acad Ye. N. Pavlovskiy, 29 Jan 49.
41/49154

BONDAR, I. G.

USSR/Zooparasitology - Acarina and Insect-Vectors of Disease Pathogens.

Abs Jour : Ref Flav - Biol., No 5, 1958, 1963a

Author : Ioff, I.G., Bondar, I.G.

Inst : -
Title : Turkmenian Fleas.

Orig Pub : Tr. N.-i. protivochum. in-ta Kavkaza i Zakavkazyia, 1958, No 1, 99-118

Abstract : A review of flea species (219 species and subspecies) known up to the present time in Soviet Middle Asia and adjacent localities. 82 species and subspecies found in Turkmenia were studied, including detailed reports of localities and hosts, with notations of characteristics in habitation areas, of landscape adaptation, etc. For a portion of these species, data are given (with drawings) on their morphology and new information on classification. Identifying charts are given of Mid-Asian species of

Card 1/2

... numerous institutions and ... 334,654 fleas).

BONDAR', Ye.P., inzhener.

Erecting transmission line poles over the Usa River. Nov.tekh. 1
pered.op. v stroi. 18 no.11:19-22 N^o56. (MLRA 10:1)
(Electric lines--Poles)

BONDAR', Ya. P., inzh.

Platform used in assembling composite girders. Nov.tekh. 1 pered.
op. v stroi. 19 no.12:11-14 D '57. (MIRA 11:1)
(Prestressed concrete) (Girders)

BONDAR', Ye. P. inzh.

Reusable enclosure for the heating of composite girders.
Stroitel' no.11:14 N '59. (MIRA 13:3)
(Girders--Cold weather conditions)

BONDAR', Ye.[↑], inzh.

Devices for winding reinforcements into channels. Stroitel'
no.10:8-9 0 '59. (MIRA 13:2)
(Girders)

BONDAR', Ye., inzh.

Standa for assembling NII-200 beams. Stroitel' no. 3:14 Mr '59.
(MIRA 12:6)
(Girders)

BONDAR', Ye.P., inzh.

Belt hoist. Mekh.stroi. 16 no.2:21-23 F '59. (MIRA 12:2)
(Hoisting machinery)

GANSBURG, B.M., inzh.; BONDAR', Ye.P.

Assembling precast reinforced concrete long-span galleries.
Prom.stroi. 37 no.12:29-33 D '59. (MIRA 13:4)

1. Trest Stal'montazh - 5 (for Gansburg).
2. Proyektnyy institut Prometal'konstruktsiya (for Bondar').
(Precast concrete construction)

BONDAR', Ye.P., inzh.; VLASOVA, M.A., inzh.; KALININ, B.P., inzh.; KOPP, L.M., inzh.; SOKOLOVA, A.D., kand.tekhn.nauk; TSEGEL'SKIY, V.L., inzh.; UTENKOV, V.F., kand.tekhn.nauk [deceased]; BOGDANOV, S.I., inzh., nauchnyy red.; TRUBIN, V.A., glavnyy red.; SOSHIN, A.V., zam.glavnogo red.; GRINEVICH, G.P., red.; YKPIFANOV, S.P., red.; ONUFRIYEV, I.A., red.; KHOKHLOV, B.A., red.; ZIMIN, P.A., red.; SKVORTSOVA, I.P., red.izd-va; GOL'BERG, T.M., tekhn.red.; KL'KINA, E.M., tekhn.red.

[Handbook for the erection of reinforced-concrete elements of industrial buildings] Spravochnik po montazhu zhelezobetonnykh konstruksii promyshlennykh zdani. Pod red. B.P.Kalinina. Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam, 1960. 315 p. (MIRA 14:3)

1. Moscow. Gosudarstvennyy institut po proyektirovaniyu stal'nykh konstruksiy. (Reinforced concrete construction)

BONDAR', Ye., inzh.

Using jigs in erecting columns. Stroitel' no.2:19,22
F '60. (MIRA 13:5)
(Columns, Concrete) (Jigs and fixtures)

BONDAR', Ye.P., inzh.

Reusable devices for assembling reinforced concrete girders.
Bet.i zhel.-bet. no.6:266-271 Je '60. (MIRA 13:7)
(Girders)

VASIL'YEV, A.M., inzh.; GANSBURG, B.M., inzh.; BONDAR', Ye.P., inzh.

Using assembly-line methods in assembling construction elements of
a 2800/1700 sheet rolling mill. Mont.i spets.rab.v stroi. 22
no.4:10-14 Ap '60. (MIRA 13:8)

1. Trest Stal'montazh-5-i Proyektnyy institut Promstal'konstruktsiya.
(Assembly-line methods)
(Rolling mills)

GANSBURG, B.M., inzh.; BONDAR', Ye.P., inzh.

Assembling the crossing poles of electric transmission lines. Mont.
i spets.rab.v stroi. 22 no.11:22-25 N'60. (MIRA 13:10)

1. Trest Stal'montash-5 i Proyekt'naya kontora Glavstal'konstruktsii.
(Electric lines--Poles)

BONDAR', Ye.P., inzh.

Setting up of a power line span across the Sheksna river. Elek.
sta. 31 no.6:73-76 Je '60. (MIRA 13:7)
(Sheksna River--Electric lines--Overhead)

BONDAR', Ye.P., inzh.; RONZHINA, A.A., red.izd-va; ABRAMOVA, V.M.,
tekhn.red.

[Safety engineering guide for assemblers of reinforced-
concrete structures] Pamiatka po tekhnike bezopasnosti
dlia montazhnikov zhelezobetonnykh konstruktsii. Moskva,
Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam,
1961. 23 p. (MIRA 14:7)
(Reinforced concrete construction--Safety measures)

BONDAR', Ye.P., inzh.

Truck transportation of precast reinforced concrete beams and
trusses. Bet. i zhel.-bet. no.6:261-264, Je '61. (MIRA 14:7)
(Precast concrete--Transportation)

LONDRIN, Ye.P., inzh.

Standard anchor. Mont. i spets. rab. v stroit. 23 no.7:7-11
Jl '61. (I'BA 14:7)

1. ZPSIU tresta Stal'konstruksiya.
(Building machinery)

GANSBURG, B.M., inzh.; BONDAR', Ye.P., inzh.

Assembly of a metallic arch with a span of 76 m. Prom. stroi. 39
no.3:53-55 '61. (MIRA 14:4)

(Estonia--Metal arches)

BONDAR', Ye.P., inzh.

Erection of large reinforced concrete slabs. Mont. i spets. rab. v
stroi. 24 no.1:19-22 Ja '62. (MIRA 15:7)

1. ZhSSMU tresta Stal'konstruktsiya.
(Precast concrete construction)

BONDAR', Yevgeniy Petrovich, inzh.; FETISOV, Konstantin Semenovich,
laureat Gosudarstvennoy premii, inzh.; KALININ, B.P., inzh.,
nauchn. red.; YUDINA, L.A., red.; SHERSTNEVA, N.V., tekhn.
red.

[Assembling reinforced concrete structures] Montazh zhelezo-
betonnykh konstruktsii. Moskva, Gosstroizdat, 1963. 246 p.
(MIRA 17:1)

BONDAR', Yevgeniy Petrovich, inzh.; ZVORYKINA, L.N., red.

[Safety manual for assembling reinforced concrete elements] Pamiatka po tekhnike bezopasnosti dlia montazhnika zhelezobetonnykh konstruksii. Izd.2., ispr. i dop. Moskva, Stroiizdat, 1964. 31 p.
(MIRA 17:6)

BURDELEV, A.S.; BCNDAR*, Ye.P.; ZHURAVLEVA, V.I.

Mobility of greater gerbils (*Rhombomys opimus*) and its epizootiological role in compact colonies in the northern desert (southern Balkhash region). Zool. zhur. 43 no.1:115-124 '64
(MIRA 17:7)

1. Central-Asiatic research Anti-Plague Institute, Alma-Ata.

BONDAR, Yu., inzh.

Cinder-concrete blocks made of brick industry waste. Stroim. mat.
4 no.10:40 0 '58. (MIRA 11:11)
(Cinder blocks)

BONDAR', Yuriy Mikhaylovich; YAKOVLEVA, A.I., red.; DONSKAYA, G.D., tekhn,
red.

[Manual on safety measures for loading and unloading operations]
Pamiatka rabochemu na pogruzochno-razgruzochnykh rabotakh. Mo-
skva, Nauchno-tekhn. izd-vo M-va avtomobil'nogo transp. i shosseinykh
dorog RSFSR, 1961. 40 p. (MIRA 14:8)
(Loading and unloading—Safety measures)