BALZHI, M.F.; BEREZKIN, P.N.; GOL'DSHTEIN, Ya.Ye.; GAL'PERIN, Ye.B.; YEDLICHKO, V.V.; KERAS, A.F.; LEKUS, I.D.; POTEKUSHIN, N.V.; POZDNYSHEV, V.M.; SUBBOTIN, N.A.; SAVINTSEV, R.I.; TAMAROVSKIY, V.M.; SHEREMET'YEV, A.D.; BAKSHI, O.A., kand. tekhn. nauk, retsenzent; BONDIN, Ye.A., inzh., retsenzent; BOYKO, F.I., inzh., retsenzent; VASIN, Yu.P., inzh., retsenzent; LAZAREV, A.A., inzh., retsenzent; SOROKIN, A.I., inzh., retsenzent; KON'KOV, Arkadiy Sergeyevich, dots., red.; DUGINA, N.A., tekhn. red.

[Economy of metals in the machinery industry]Ekonomiia metallov v mashinostroenii. [By]M.F.Balzhi i dr. Moskva, Mashgiz, 1962. 235 p. (MIRA 16:2)
(Machinery--Design and construction)
(Metals, Substitutes for)

POTEKUSHIN, Nikolay Vasil'yevich; SOROKIN, A.I., kand. tekhn. nauk, dots., nauchnyy red.; SVET, Ye.B., red.; KOLBICHEV, V.I., tekhn. red.

[Mechanization and automation of cold pressing operations] Mekhanizatsiia i avtomatizatsiia kholodnoshtampovochnykh rabot. Cheliabinsk, Cheliabinskoe knizhnoe izd-vo, 1961. 45 p. (MIRA 16:4)

(Sheet-metal work) (Automation)

25(1) SOV/128-59-5-24/35

AUTHOR: Potekushin, N.V.; Engineer

TITLE: Continuous Knocking-off of Runners and Risers

PERIODICAL: Liteynoye Proizvodstvo 1959, Nr 5, p 40, (USSR)

ABSTRACT: Since the knocking-off of runners and risers by hand requires much energy, inthe tractor plant at Chelyabinsk, a continuously operating machine for knocking-off of runners and risers was built on the initiative of Engineer Shapiro. The basic principle of this machine is that castings which have been cooled down to 120°C. fall into a rotating drum 200 mm in height (Fig. 2) by means of a transporter (Fig. 1). This machine works with 25 rpm and has a capacity of 10 tons of casting per hour. There are 2 diagrams.

Card 1/1

POTEKUSHIN, N.V., inzh.; SVETLOV, S.A., inzh.

Mechanizing operations in billet shops. Mashinostroitel' no.2/3: 29-31 M-D '56. (MIRA 12:1)
(Factory management)

25(7) SOV/117-59-7-3/28

AUTHOR: Potekushin, N.V., Engineer

TITLE: Mechanization and Automation of Stamping

PERIODICAL: Mashinostroitel', 1959, Nr 7, pp 6-10 (USSR)

ABSTRACT: The article contains information on the automation and mechanization of such operations as the feeding of blanks to dies, ejection of finished stampings, and deburring. As sources of information the author used the publications listed at the end of the article. Several devices are described. One is an automatic gripper for feeding the metal strip to the punching dies. Figure 1 shows the punching die, and Figure 2 the gripper feeding mechanism. The powerful presses with sliding tables used for stamping, create favorable conditions for the mechanization of technological processes. Following this principle, one plant successfully uses dies with movable lower plates with a stamping press of 800 tons pressure force (Figure 3).

Card 1/3

Mechanization and Automation of Stamping

The movable lower die plate slides in guides fixed to the under plate of the press. The plate is shifted by a rod of the pneumatic pusher. Figure 4 is a sketch of a lever ejector (author technologist G.G. Samarets) used at the Chelyabinskiy Traktornyy Zavod (Chelyabinsk Tractor plant) for ejecting heavy flat work pieces. At the same plant senior designer F.V. Yurkov has developed a deburring installation (Figure 7) for deburring tractor side members using a special mill. Technologist Yu.G. Gerasimov, of the same plant, has introduced rotary cleaning drums with mechanical discharge (Figure 8). Figure 9 shows a deburring device with an abrasive roller and a rubber roller used on a special machine tool. The abrasive roller turns at 8,000 rpm. The most logical and progressive method of heating short blanks for stamping is the induction method. It shortens the time necessary for heating, in comparison with flame furnaces, from 15 to 20 times. At the Chelyabinsk

Mechanization and Automation of Stamping

Tractor plant the blanks of tractor engine valves are heated before forging in the "KIM-20" induction heater developed by the NII TVCh imeni professor Vologdin. Detailed design information is given on this unit, which is provided with an automatic feed for blanks (Figures 10, 11, 12). There are 12 diagrams and 4 Soviet references.

Card 3/3

POTEKUSHIN, N.V., inzh.

Device for leakage test of cylindrical parts. Mashinostroitel' no.11:32-33 N '59. (MIRA 13:3)
(Testing machines)

POTEKUSHIN, N.V., inzh.

Mechanization and automatization in stamping. Mashinostroitel' no.7:6-10 Jl '59. (MIRA 12:11)
(Forging) (Automation)

POTEKUSHIN, N.V.; KURATOVA, L.P.; RIGER, M.M.; BAKULIN, S.B.

"Handbook on the manufacture of sheet metal working dies" by V.M.Anikin, IU.S.Lukashin. Reviewed by N.V.Potekushin and others. Kuz.-shtam.proizv. 4 no.2:45-47 F '62. (MIRA 15:2)
(Dies (Metalworking)) (Sheet-metal work)
(Anikin, V.M.) (Lukashin, IU.S.)

ZLATKIN, Moisey Grigor'yevich; DOROKHOV, Nikolay Nikolayevich; LEBEDEV, Nikolay Ivanovich; MAKAROV, Nikolay Yevgen'yevich; NEYSHTAT, Zyama Fal'kovich; SYCHEV, Arkadiy Mikhaylovich; SKLYUYEV, P.V., kand. tekhn. nauk, retsenzent; TASHCHEV, A.K., kand. tekhn. nauk, retsenzent; TRUBIN, V.N., kand. tekhn. nauk, retsenzent; VSHIVKOV, P.P., inzh., retsenzent; KON'KOV, A.S., inzh., retsenzent; LEBEDEV, N.S., inzh., retsenzent; POTEKUSHIN, N.V., inzh., retsenzent; TYAGUNOV, V.A., doktor tekhn. nauk, red.; SOKOLOV, K.N., kand. tekhn. nauk, red.; SKORNYAKOV, V.B., red.; YAROSHENKO, Yu.G., red.; ZAKHAROV, B.P., inzh., red.; AMIROV, I.M., inzh., red.; MYSHKOVSKIY, V.A., inzh., red.; SHELEKHOV, V.A., inzh., red.; BOGOMOLOV, O.P., inzh., red.; KATS, I.S., inzh., red.; LEVANOV, A.N., inzh., red.; DUGINA, N.A., tekhn. red.

[Handbook on forging practices] Spravochnik rabochego kuznechno-shtampovochnogo proizvodstva. By M.G.Zlatkin i dr. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 776 p. (MIRA 14:9)

(Forging—Handbooks, manuals, etc.)

POTEL', doktor (ostrov Rims)

Friedrich Löffler Scientific research Institute of Epizotiology on Rims Island. Zhur.mikrobiol.epid. i immun. 27 no.7:101-102 Jy '56. (MLRA 9:9)
(SCHOOLS, MEDICAL
epizoologic institute of Friedrich Löffler on Rims Island)

POTEL, J.

A case of vaccination complications three months after vaccination.
J. Hyg. Epidem., Praha 1 no.3:317-321 1957.

1. Aus dem Hygiene-Institut der Martin-Luther-Universitat Halle a.d.S.
(VACCINIA, prev. and control
vacc. causing otogenic meningitis 3 months later with isolation of virus)
(MENINGITIS, in inf. and child
3 months after vaccinia vacc., isolation of virus)

E

COUNTRY : CZECHOSLOVAKIA
CATEGORY :

ABS. JOUR. : RZBiol., No. 1959, No. 9985

AUTHOR : Potel, J.
INST. : ---
TITLE : Complication Three Months After Smallpox Vaccination

ORIG. PUB. : Zh. gigiyeny, epidemiol., mikrobiol. immunol., 1957, 1, No 3, 275-278
ABSTRACT : No abstract.

CARD: 1/1

1288

END

19

BULGARIA/Diseases of Farm Animals - Diseases Caused by Viruses and Rickettsiae. R-3

Abs Jour : Ref Zhur - Biol., No 14, 1958, 64657

Author : Potel, Kurt

Inst : Institute of Experimental Veterinary Medicine of the Bulgarian Academy of Sciences.

Title : The problem of Encephalitis in Swine Plague.

Orig Pub : Izv. In-ta eksperim. vet. med. B"lgar. AN, 1956, 4, 233-248.

Abstract : On the basis of the neurohistological and general pathologico-anatomic changes observed in the viral affections of swine, including that of the plague, it is assumed that spontaneous and experimental encephalites can also be caused by organotropic viruses without the acquiring of neurotropic properties by the latter.

Card 1/2

POTEMIN, B.A.

The V-78-1 heavy-duty suspended vibrator set. Stroi. i dor. mashinostr. 4 no.2:25 F '59. (MIRA 12:2)
(Vibrators)

SOV/123-59-15-59238

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, p 53 (USSR)

AUTHOR: Potemin, B.A.

TITLE: Automatic Device for the Simultaneous Cutting and Trimming of Control Cables

PERIODICAL: Yaroslavsk. prom-st' (Sovnarkhoz Yaroslavsk. ekon. adm. r-na, 1958, Nr 4, pp 30 - 33

ABSTRACT: The design of an automatic device for the cutting and trimming of cables with rubber or plastic insulation up to 8 mm in diameter is described. The cable is cut into pieces of 60 - 1,000 mm long which are trimmed over a length of from 8 to 35 mm. The power of the driving electromotor of the automatic device is 0.55 kw. The control of the manufacturing cycle is effected by a camshaft. 1 figure.

M.I.V.

Card 1/1

SHUKHMAN, Z.; SHTAMM, V.; SHLEYMOVICH, S.; KALMYKOV, P.; RAL'TSEVICH, V.; PYATENKOV, V.; POTEMIN, I.; SOKRATOV, Yu.

There are all conditions for building strong and good elevators. Muk.-elev. prom. 29 no.8:18-19 Ag '63. (MIRA 17:1)

1. Zamestitel' upravlyayushchego trestom TSentroelevatormel'stroy (for Shtamm). 2. Nachal'nik sektora organizatsii stroitel'nykh rabot Gosudarstvennogo instituta Promzernoproyekt (for Ral'tsevich). 3. Starshiy inzh. TSentral'nogo konstruktorskogo byuro tresta Spetselevatormel'montazh (for Potemin). 4. Zamestitel' nachal'nika proizvodstvenno-tekhnicheskogo otdeleniya tresta Petropavlovskelevatormel'stroy (for Sokratov).

POTEMIN, I. I.

USSR/Miscellaneous - Religion vs. Science

Card 1/1 Pub. 77 - 2/20

Authors : Potemin, I. I.

Title : Science incompatible with religion

Periodical : Nauka i zhizn' 21/12, 4-6, Dec 1954

Abstract : Propaganda article emphasizing the conflict between religion and science with an appeal to historical events and logic for support.

Institution : ...

Submitted : ...

POTEMIN, I.I. (g. Penza)

Science is incompatible with religion. Nauka i zhizn' 21 no.12: 4-6 D '54. (MIRA 8:1)
(Religion and science)

NIKOL'SKAYA, O.D.; POTEMINA, Z.F.

Rare complication of nephrolithiasis. Urologiia no.4:64-65 '61. (MIRA 14:11)

1. Iz khirurgicheskogo otdeleniya bol'nitsy No.16 Stalingrada.
(CALCULI, URINARY)

L 63171-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JH

ACC NR: AP6021077 (A) SOURCE CODE: UR/0365/66/002/002/0168/0175

AUTHOR: Tolstaya, M. A.; Ioffe, E. I.; Poteminskaya, I. V.

ORG: Academy of Public Economy im. K. D. Pamfilov (Akademiya kommunal'nogo khozyaystva)

TITLE: Electrocorrosion of underground aluminum materials in anodic and cathodic zones

SOURCE: Zashchita metallov, v. 2, no. 2, 1966, 168-175

TOPIC TAGS: corrosion rate, corrosion protection, aluminum alloy, polarization, cathode polarization, electrochemistry

ABSTRACT: A study of the electrocorrosion of aluminum cable sheathing under the action of anodic and cathodic currents is described. The rate of electrocorrosion was measured by weight loss after the surfaces were cleaned in a solution of CrO_3 (20 g/l) and 85% H_3PO_4 (35 ml/l) at 90-95°C for 10-20 min. Weight loss is given as a function of anodic current density (constant time--30 sec) and time (constant current densities of 0.02, 0.2, 0.75 and 5 ma/dm^2). The intensity of corrosion in the anodic regions is characterized by a coefficient of aggressiveness--K_a (defined as the ratio of actual corrosive wear to that calculated from Faraday's law) which ranged from 1.5 to 1.7. Polarization characteristics of Al and AMg-6 were obtained in sandy soils moist-

UDC: 620.193.92

Card 1/2

L 38171-66

ACC NR: AP6021077

ened with 10-12% solutions containing different amounts of Na_2SO_4, NaCl, $NaHCO_3$, $MgSO_4$ and $MgCl_2$. The intensity of local electrocorrosion was high and caused pitting as a result of erratic currents in both the anodic and cathodic zones. Under the action of the erratic currents in stable cathodic zones, the basic indicator of corrosion danger is the displacement of the electrode potential in the negative direction, surpassing the value of the maximum safe potential -1.4 v (relative to a copper sulfate electrode). Above -1.4 v, alkaline corrosion of Al takes place. The results attest to the difficulty of cathodic protection for underground aluminum materials. Orig. art. has: 5 figures.

SUB CODE: 11 / SUBM DATE: 20May65/ ORIG REF: 012/ OTH REF: 007

Card 2/2

TOLSTAYA, M.A.; POTEMINSKAYA, I.V.; IOFFE, E.I.

Electrolytic corrosion of cables with an aluminum sheathing under the effect of a commercial frequency alternating current. Zashch. met. 2 no.1:67-74 Ja-F '66. (MIRA 19:1)

1. Akademiya kommunal'nogo khozyaystva imeni K.D. Pamfilova, Leningrad. Submitted May 20, 1965.

TOLSTAYA, M.A.; IOFFE, E.I.; POTEMINSKAYA, I.V.

Effect of the salt content, ion composition, the value of pH, and the degree of ground aeration on the corrosion of underground steel pipelines under the influence of a.c. Transp. i khran. nefti i nefteprod. no. 1:16-23 '64. (MIRA 17:5)

1. Akademiya kommunal'nogo khozyaystva im. K.D.Pamfilova.

TOLSTAYA, M.A.; IOFFE, E.I.; POTEMINSKAYA, I.V.

Electrochemical corrosion of underground steel equipment by commercial frequency currents. Gaz. delo no. 3:19-26 '64. (MIRA 17:5)

1. Akademiya kommunal'nogo khozyaystva imeni K.D.Pamfilova.

13.1521

S/123/61/000/014/034/045
A004/A101

AUTHOR: Potemkin, A.A.

TITLE: Investigating the effect of vibrations on the readings of gyrocompasses

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1961, 20-21, abstract 14D153 ("Tr. Tsentr. n.-i. in-ta morsk. flota", 1960, no. 30, 72 - 82)

TEXT: The author investigates the problems of the vibration effect of the ships hull on the accuracy of a double-rotor gyrocompass. It is proved that, if the ship has a heeling or a trim, vertical vibrations may cause considerable errors of the instrument. Recommendations to reduce these errors are given.

Z. Varshavskaya

[Abstracter's note: Complete translation]

Card 1/1

POTEMKIN, A.F.

Electric and radio navigation equipment of the "Mazbek" type diesel engine powered vessels. Mor.flot 17 no.6:11-12 Je '57. (MLRA 10:7)

1. Prepodavatel' Odesskogo vysshego morekhodnogo uchilishcha.
(Radio in navigation) (Electricity on ships)

E.

POTEMKIN, A., starshiy prepodavatel'

Temperature cycles of "Kurs"-type gyrocompasses when used on ships. Mor.flot 19 no.3:8-9 Mr '59. (MIRA 12:4)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche.
(Gyrocompass)

PASS, Anatoliy Yegorovich; SAZONOV, A.Ye., doktor tekhn. nauk, retsenzent; KOTENKIN, A.E., kand. fiz.-mat. nauk, red.

[Electronics and radio systems of ships] Sudovaia elektronika i radiotekhnika. Moskva, Transport, 1964. 207 p. (MIRA 17:9)

POTEMKIN, A. E.

Cand Phys-Math Sci - (diss) "Theoretical and experimental study of errors of bi-gyroscopic compass under conditions of use on sea-going ships." Odessa, 1961. 19 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Odessa State Univ imeni I. I. Mechnikov); 200 copies; price not given; (KL, 7-61 sup, 219)

POTEMKIN, A. G.: Master Biol Sci (diss) -- "Variability of symptoms and the properties of vetch in inter- and intra-specific hybridization". Leningrad, 1959. 15 pp (All-Union Order of Lenin Acad Agric Sci im V. I. Lenin, All-Union Inst of Plant Growing), 150 copies (KL, No 18, 1959, 123)

POTEMKIN, A.P., staeshiy prepodavatel'

Torsional rigidity of rods with a noncircular cross section.
Izv.vys.ucheb.zav.; mashinostr. no.7:45-50 '63. (MIRA 16:11)

1. Volgogradskiy sel'skokhozyaystvennyy institut.

POTEMKIN, A.P. (Stalingrad)

Approximate method of conformal mapping. Zhur.vych.mat.i mat. fiz. 1 no.4:728-733 Jl-Ag '61. (MIRA 14:8)
(Conformal mapping)

POTEMKIN, A.P., inzh.

Damping of natural vibrations caused by bending and torsion.
Vest. mash. 41 no.6:15-17 Je '61. (MIRA 14:6)
(Vibration)

L 23858-65 EWT(d)/T-2 IJP(c)
ACCESSION NR: AR4046319 S/0044/63/000/008/B124/B125

SOURCE: Ref. zh. Matematika, Abs. 8B617

AUTHOR: Potemkin, A. P.

TITLE: Approximation method of conformal mapping of symmetric regions

CITED SOURCE: Tr. Volgogradsk. s.-kh. in-ta, v. 17, 1963, 228-234

TOPIC TAGS: approximation, conformal mapping, symmetric region, Fourier series, trigonometric Fourier series, successive approximation, approximation error

TRANSLATION: A method of conformal mapping of a circle on a given region is developed, the region having at least one axis of symmetry. It is assumed that the outline of the region has no analytic expression, but that its polar equation may be expressed by a trigonometric Fourier series obtained by one of the known methods of practical harmonic analysis. The proposed method represents a development of the L. V. Kantorovich method of successive approximations for

Card 1/1

curves given in the form

$$\rho = \frac{a_0}{2} + \sum_{n=1}^{\infty} a_n \cos nt. \qquad (1)$$

After a number of transformations, function (2) is obtained from the equation of a family of curves with the parameter λ,

$$\rho = \frac{a_0}{2} + \lambda \sum_{n=1}^{\infty} a_n \cos nt,$$

written in complex form

$$z = \frac{a_0}{2}\xi + \sum_{n=1}^{\infty} a_n \xi^{n+1} + \frac{1}{2a_0}\sum_{n=0}^{\infty} c_n \xi^{n+1}, \qquad (2)$$

giving the conformal mapping of the interior of the circle $|\xi| \leq 1$ on the interior of the curve (1). For $\lambda = 1$, formula (2) is written in a simplified form

KARPOV, Mikhail Mikhaylovich; POTEMKIN, A.V., dots., otv. red.; KORNILOV, Ye.A., red.; PAVLICHENKO, M.I., tekhn. red.

[Basic principles governing the development of the natural sciences] Osnovnye zakonomernosti razvitiia estestvoznaniia. Rostov-na-Donu, Izd-vo Rostovskogo univ., 1963. 300 p. (MIRA 17:3)

Dissertation: "Investigation of the Alloys of the Silver-Manganese-Aluminum System." Cand Tech Sci, Moscow Inst of Nonferrous Metals and Gold, Moscow, 1953. Referativnyy Zhurnal--Khimiya, Moscow, No 8, Apr 54.

SO: SUM 284, 26 Nov 1954

AUTHORS: Layner, D.I. and Potemkin, A. Ya., Candidates of Technical Sciences. (NII Giprotsvetmetobrabotka).

TITLE: Influence of additions of aluminium on the speed of reactive diffusion. (Vliyaniye dobavok k alyuminiyu na skorost' reaktivnoy diffuzii).

PERIODICAL: "Metallovedenie i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.5, pp.33-35 (U.S.S.R.)

ABSTRACT: The bi-metal Ni-Al is used as a material for anodes of special radio tubes. In manufacturing strips of aluminised nickel reactive diffusion takes place, the result of which has a considerable influence on the quality of the components. In this paper the influence of the chemical composition of the Al on the reactive diffusion in aluminised nickel is investigated; it was found that silicon and certain other additions to aluminium bring about a considerable braking of the reactive diffusion and the authors propose a hypothesis explaining this braking effect. In the same way as in the case of iron, presence of silicon in aluminium leads to the formation during diffusion of complicated ternary compounds which form considerably slower than the binary compound Al_3Fe. This provides a real possibility of slowing down appreciably the diffusion process. As starting materials high purity (99.5%) nickel and aluminium (99.99%) were used, the purity of

Card 1/2

POTEMKIN, A.YA.

E-4

USSR/Solid State Physics - Structure of Alloys and Other Systems

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 951

Author : Petrov, D.A., Potemkin, A.Ya.

Inst : -

Title : Investigation of Alloys of the System Ag-Mn-Al.

Orig Pub : Zh. neorgan. khimii, 1957, 2, No 7, 1552-1565

Abstract : Using physico-chemical analysis methods, the diagram of state was plotted for the Ag-corner of the system Ag-Mn-Al up to 10% Al and up to 30% Mn. The liquidus surface consists of three fields of primary crystallization of phases α, β, and Mn. There exists three nonvariant equilibriums in the Ag-corner of the Ag-Mn-Al system. The saturation limits of the α-solid solution in a silver base are determined approximately, and the distribution of the phase regions at temperatures of 700, 600, 400, 200 and 20° is given. The properties of the alloys of silver with

Card 1/2

ACCESSION NR: AP4013096

heat treatment, the stresses reversed their sign and increased sharply in absolute value. Distending stresseswere then active in the center and not along the edges (as before the treatment), with compressive stresses in effect along the periphery. The authors claim that the reason for the acute reduction in lifetime is to be sought in the influence of external factors during thermal treatment (that is, the diffusion of recombination-active admixtures from the surface to the inner part of the crystal). In order to determine the influence of surface contamination during various technological operations on the thermal stability of the electrical properties of silicon, the thermal stability was studied in zone-purified silicon subjected to incision and polishing with subsequent etching and boiling in deionized water. The thermal treatment was carried out under the same conditions as prevailed in the first series of experiments. The ingots were cooled rapidly (150 deg/min) and slowly (10 deg/min). The results of this treatment at 1200C for 30 min are given in a table for specific resistance and lifetime. From this table it is clear that, after the thermal treatment, the specific resistance of monocrystals 2, 3 and 5 changed negligibly, while the lifetime fell from tens and hundreds of microseconds to values less than ten. In ingots 5 and 7, lifetime after the treatment sank to values beneath the threshold of sensitivity of the test equipment. The authors establish that, regardless of the rate of cooling, thermal treatment of monocrystals immediately after their production in a device for zonal smelting without a crucible does not lead to any sharp reduction in the lifetime of

Card 3/4

POTEMKIN, A.YA.

137-58-5-10449

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 223 (USSR)

AUTHORS: Layner, D.I., Potemkin, A.Ya.

TITLE: The Effect of Increasing Complexity in a Chemical Compound upon the Rate of the Reactive Diffusion Process (Vliyaniye uslozhneniy khimicheskogo soyedineniya na skorost' protsessa reaktivnoy diffuzii)

PERIODICAL: Tr. Gos. n.-i. i proyektn. in-ta po obrabotke tsvetn. met., 1957, Nr 16, pp 31-35

ABSTRACT: An investigation is made of the processes occurring in the annealing of Armco Fe clad by AB 000 aluminum with the following additions: 1% Si, 1% Mn, 1% Co, 1% Si + 1% Mn, 1% Si + 1% Co. Annealing was in the 600-640°C interval with holding times of from 1 sec to 30 min, followed by visual examination of the surface and microscopic analysis of cross sections of the specimens. It was found that the additions investigated form the following sequence in terms of their effect as inhibitors of the process of reactive diffusion: Co, Mn, Si, Si+Mn, and Si+Co. The greatest thickness of diffusion layer is observed in a specimen clad by pure Al, and the smallest in cladding by Al+Co+Si. The

Card 1/2

The Effect of Increasing (cont.)

effect observed is related to the fact that the Co and Mn additions enter into the composition of the $Al_xSi_yFe_z$ phase, complicating its structure and thus inhibiting its formation. Introduction of Co and Si probably results in forming a compound $Al_xSi_yFe_zCo_u$. The role of Mn in alloys containing Si is reduced to complicating the solid solution with the $Al_xSi_yFe_z$ phase as base. Additions of Co and Mn to Al not containing Si are ineffective because ternary chemical compounds apparently do not come into being in three-component systems of Al-Mn-Fe and Al-Co-Fe.

L. M.

1. Iron--Heat treatment 2. Chemical compounds--Analysis 3. Iron--Diffusion
4. Diffusion--Inhibition

Card 2/2

POTEMKIN, A. Ya.

137-58-4-7026

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 104 (USSR)

AUTHORS: Layner, D. I., Potemkin, A. Ya.

TITLE: Optimal Thickness of a Cladding Layer in Aluminum-clad Nickel (Ob optimal'noy tolshchine plakiruyushchego sloya v alyuminirovannom nikele)

PERIODICAL: Tr. Gos. n.-i. i proyektn. in-ta po obrabotke tsvetn. met., 1957, Nr 16, pp 36-38

ABSTRACT: Some results of a study of the effect of the thickness of the cladding layer of the Al on the production of soft aluminum-clad bright Ni, and on the service characteristics of vacuum-tube anodes are presented.

S. G.

1. Electroplating--Thickness 3. Anodes--Characteristics

Card 1/1

Petrov, D.A.

137-58-4-8136

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 253 (USSR)

AUTHORS: Petrov, D.A., Potemkin, A.Ya.

TITLE: An Investigation of the Silver-manganese-aluminum Phase Diagram (Issledovaniye diagrammy sostoyaniya sistemy serebro-marganets-alyuminiy)

PERIODICAL: Tr. Gos. n.-i. i proyektn. in-ta po obrabotke tsvetn. met., 1957, Nr 16, pp 47-68

ABSTRACT: The alloys were prepared of 99.98% pure Ag, electrolytic ME1 Mn and AV1 Al (99.9% Al) by smelting in corundum crucibles under a layer of $BaCl_2$. The Al and Mn were introduced into the Ag as alloying elements of the Ag with 15% Al and with 20% Mn. Thermal analysis was on a recording Kurnakov pyrometer. Microstructure, hardness, and resistivity were studied in the molten state and after quenching from 800, 700, 600, 400, and 200°C, and also after annealing and thermal analysis. In the presence of other phases, the α' phase was revealed by the following reagents: 1) a dilute mixture of sulfuric and chromic acids, and 2) a 1% solution of potassium permanganate, acidified by concentrated H_2SO_4. The Mn-Al alloys were etched by dilute HF.

Card 1/2

137-58-4-8136

An Investigation of the Silver-manganese-aluminum Phase Diagram

Hardness was measured on an Amsler press and a Vickers apparatus. Resistivity was measured at 20° by means of a Thomson bridge. Cross sections were plotted for 95, 92, and 90% Ag, and isothermic cross sections of the Ag corner for 700, 600, 400, 200, and 20°. A phase diagram for the Ag corner for up to 10% Al and up to 30% Mn was plotted. The liquidus plane consists of 3 fields of primary crystallization of the α, β, and Mn phases. Three invariant equilibria exist in the Ag corner: liquid Mn $\alpha \rightleftarrows \beta$ at about 800°; α + Mn + $\beta \rightleftarrows \gamma$ at about 640° and α + Mn + $\gamma \rightleftarrows \beta$ at about 451°. Typical limits of saturation of the ternary solid Ag-based α solution were determined, and the distribution of the phase regions is given. The temperature of formation of Ag_3Al in the Al-Ag system was found to be equal to 455°. Bibliography: 18 references.

A. F.

1. Aluminum-manganese-silver alloys--Phase studies

Card 2/2

137-58-4-8095

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4 p 247 (USSR)

AUTHORS Petrov D.A., Potemkin, A.Ya.

TITLE An Investigation of the Physicochemical Nature of Silmanal and the Reasons for its Ferromagnetic Properties (Issledovaniye fiziko-khimicheskoy prirody splava sil'manal i prichiny yego ferromagnitnykh svoystv)

PERIODICAL: Tr. Gos. n.-i. proyektn. in-ta po obrabotke tsvetn. met., 1957, Nr 16 pp 69-81

ABSTRACT: A study of the physicochemical nature of Silmanal (S) (86.9% Ag, 8.8% Mn and 4.3% Al) was made, and the reasons for its ferromagnetic properties were determined. Specimens were magnetized to saturation by an electromagnet yielding a field of about 20,000 oersteds in its 40-mm gap. The residual induction B_r and coercive force H_c were measured. It was established that two phases constitute structural constituents of S alloy in the solid state: a ternary solid solution of Mn and Al in Ag (the α phase) and a solid solution of Al in Mn. Crystals of the second phase were visible in all the microphotographs against the background of the α phase. This contradicts Potter's data (Potter.

Card 1/2

An Investigation of the Physicochemical (cont.)

H., Phil. Mag., 1931, Vol 12, p 255) on the homogeneous structure of S although the X-rays failed to reveal the second phase, as had also been Potter's experience. A study of the stability of the α phase and of its mechanical and electrical properties resulted in S being classified as an aging alloy. The effect of aging on the magnetic properties of S was studied by means of specimens quenched in water from 800° and aged at 250° for from 1 to 146 hours. Maximums for hardness, H_c, and B_r are attained at different times during aging. It is assumed that the aging of S is accompanied by decomposition of the α phase with precipitation of very fine crystals of a ferromagnetic phase constituting a solid solution of Al in Mn. It is most probable that the second phase is precipitated from the nonmagnetic base metal of S in the form of single-domain ferromagnetic particles. The effect of various heat treatment regimes upon the magnetic properties of S was studied. It was established that the alloy is nonmagnetic in the quenched condition, but weakly magnetic in the annealed. The maximum magnetic properties are attained as the result of quenching from 800° and subsequent aging at about 250°. H_c attains 6100 oersteds after 40 hours of tempering at 250°.
Bibliography: 9 references.

Card 2/2 S.S.

1. Aluminum-manganese-silver alloys--Magnetic properties --Analysis 2. Ferromagnetic materials--Magnetic properties 3. Ferromagnetic materials--Phase studies 4. Ferromagnetic materials--Chemical analysis 5. Ferromagnetic materials --Physical properties

78-3-4-3/38

AUTHORS: Smiryagin, A. P., Potemkin, A. Ya., Martynyuk, R. P.

TITLE: Investigation of the Phase Diagram Nickel-Molybdenum-Chromium (Issledovaniye diagrammy sostoyaniya nikel'-molibden-khrom)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 4, pp. 853-859 (USSR)

ABSTRACT: The nickel corner in the phase diagram of the system Ni-Mo-Cr (up to 40% molybdenum and up to 40% chromium) was investigated using the thermal and microscopic analysis.
Eight polythermal sections of the nickel corner in the phase diagram nickel-molybdenum-chromium were constructed. The phase composition and the hardness of the alloys were investigated at temperatures of 1270°, 1200°, 950°, 800° and 700°C. The saturation limit of the ternary solid solution of the basis of nickel was determined at temperatures of 700°, 800°, 950° and 1000°C.
It was shown that with a drop of temperature the solubility of molybdenum and chromium in nickel decreases markedly. Also the sectional diagrams with a constant content of 4%, 8,5%, 3,5% and 20% of chromium were constructed.

Card 1/2

Card 2/2

5(4)
AUTHORS: Potemkin, A. Ya., Potapov, V. I., Petrov, D. A. SOV/20-127-6-31/51

TITLE: A Contribution to the Study of Copper Ion Mobility in Germanium

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 6, pp 1256-1258 (USSR)

ABSTRACT: In the beginning the insufficient and partly contradictory data about the state of the Cu-atom in Ge are mentioned (Refs 1-4). Therefore the mobility (electrodiffusion) of the Cu-ion in n-germanium at 500-680° was investigated. The plane surface of a sample, that was cut out of a Ge-monocrystal was electrolytically covered by a copper coat of 10 μ thickness. In vacuum (10^{-3} to 10^{-4} torr) the sample was inserted into a circuit (ammeter type M-340, rheostat and rectifier type VSA-6M) of 0.5-1 v/cm and 4-10 a. After disconnection and cooling the potential line at the intersection plane of the sample was measured. As shown by figure 1 this line proceeds linear for samples without copper, whereas for copper-coated samples the linearity is disturbed at the edges by the diffusion of Cu-ions.

Card 1/2

A Contribution to the Study of Copper Ion Mobility in Germanium SOV/20-127-6-31/51

The effect of the thermal and electric diffusion is unidirectional at the negative charged copper plane, but is opposite directed at the positive charged one. Hence a different depth of penetration at the surfaces follows, and the electrodiffusion rate of the copper ions, which were negative charged in the case under review, was determined according to this difference (Table 1). Figure 2 represents the dependence of the diffusion on temperature. Measuring results, which disagree with the data given by C. S. Fuller and J. D. Struthers (Ref 5), are due to the different temperature ranges in which the measurements were made. The scientists mentioned used temperatures above 700°, where the Cu-ions are positively charged. The authors thank L. S. Milevskiy for advice and V. S. Zemskov for Ge-monocrystals made available to them. There are 1 figure, 2 tables, and 5 references, 2 of which are Soviet.

ASSOCIATION: Institut metallurgii im.A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences, USSR)

PRESENTED: April 20, 1959, by I. P. Bardin, Academician

SUBMITTED: April 20, 1959

Card 2/2

83002
S/181/60/002/008/021/045
B006/B063

24.1700

AUTHORS: Potemkin, A. Ya., Potapov, V. I.

TITLE: The Problem of Investigation of Copper - Antimony Interaction in Germanium

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 8, pp. 1846 - 1848

TEXT: A preceding paper has shown (Ref. 1) that the two latter elements of the system Ge - Cu - Sb enter into chemical reaction if their concentrations exceed the limit of solubility in solid germanium and the atomic ratio is Cu:Sb ≃ 2:1. Cu_2Sb is formed, which crystallizes tetragonally and has six atoms per unit cell. At lower concentrations, the state of impurities has not yet been examined (again with Cu and Sb being present simultaneously). The present paper is a contribution to this problem. The authors studied the behavior of copper in pure and Sb-doped single crystals of germanium. They determined the mobility of the impurity ions at elevated temperatures by a method previously described. The samples were prepared from two series of n-type Ge single

Card 1/3

83002

The Problem of Investigation of Copper - Antimony Interaction in Germanium

S/181/60/002/008/021/045
B006/B063

crystals: 1) pure germanium of a resistivity of 10 - 30 ohm.cm at room temperature (carrier concentration of up to $10^{14}cm^{-3}$); 2) sb-doped germanium (impurity concentration of up to 10^{17} atoms/cm^3). All samples had a dislocation density of 10^2-$10^3 cm^{-2}$. They were cut perpendicular to the direction of growth of the single crystal (111) in order to render the impurity distribution along the sample as uniform as possible. The experiments were made on a special apparatus under 10^{-3} - 10^{-4} torr. The samples were isothermally tempered by sending a current of 4-10 a at 0.45 - 0.8 v/cm through them. The potential distribution along the samples was measured, and the mobility was determined accordingly. The experiments showed that both in pure and Sb-doped Ge between 540° and 650°C and/or 600° and 625°C a pure drift (shift by X_e) of the copper ions occurred toward the positive electrode in the electric field. The ionic mobility $\mu = X_e/E\tau$, where E denotes the field in the sample, and τ the time for which the sample is placed in the field. The diffusion coefficient is determined from the relation $D = \mu kT/q$. Experimental data are compiled in Tables 1 and 2. The experiments prove that a

Card 2/3

36442
S/137/62/000/003/108/191
A060/A101

19.1200

AUTHORS: Potemkin, A. Ya., Kuznetsova, Ye. S.

TITLE: Study of the phase constitution of alloys in the system Ge-Cu-Sb

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 9, abstract 3I57 ("Tr. In-ta metallurgii AN SSSR", 1961, no. 8, 135-142)

TEXT: Ge (99.99%). vacuum Cu (99.99%), and metallic Sb (99.98%) were taken as the starting materials. The alloys were smelted in evacuated quartz ampoules in the resistance furnace ТГ-3 (TG-3). The stirring of the melt was carried out by shaking the ampoules. The alloys were annealed in evacuated ampoules at 500°C for 350 hours, and then some of them were hardened in water, and the other part was cooled down to 300°C, soaked for 200 hours, and thereupon partly hardened in water and partly furnace-cooled. The investigation was carried out by the method of microscopic analysis. The following sections were studied: isoconcentrates at 80% Ge and 60% Ge, the radial section to 49% Sb, 51% Cu, and the section from 26% Ge, 73.5% Cu to 49% Sb, 51% Cu. It was found that in the solid state at temperatures up to 500°C the Ge is in equilibrium with the γ-phase on the base of the chemical compound Cu_2Sb. In the Cu vertex

Card 1/2

POTEMKIN, A., kand.fiz.-matem.nauk, ispolnyayushchiy obyazannosti dotsenta

Improve the maintenance of marine radar stations. Mor.flot 23 no. 12:20-22 D '63. (MIRA 17:5)

1. Kafedra "Tekhnicheskiye sredstva sudovozhdeniya" Odesskogo vysshego inzhenernogo morekhodnogo uchilishcha.

DOBROVENSKIY, V.V.; POTEMKIN, A.Ya.

Effect of heat treatment at 1200° C on changes in the resistivity and lifetime of minority charge carriers in the volume of a single crystal of silicon. Fiz. met. i metalloved. 17 no.1:83-87 Ja '64.
(MIRA 17:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy proyektnyy institut redkometallicheskoy promyshlennosti.

S/120/62/000/005/035/036
E194/E535

24.7050

AUTHORS: Potemkin, A.Ya. and Pashintsev, Yu.I.

TITLE: A universal device for applying strain and heat treatment to semiconductors

PERIODICAL: Pribory i tekhnika eksperimenta, no.5, 1962, 196-197.

TEXT: Apparatus was required in which the influenoe of dislocation and heat treatment on the properties of semiconductors could be studied. An apparatus is described and diagrammatically illustrated which can test a sample of 20 x 3 x 3 mm in bending and torsion at temperatures up to 1300°C. The maximum rate of heating is 100°C/min with a 2 kW heater, the temperature error is ± 5°C. The equipment is built of pure graphite (for the heaters) and quartz with tantalum screens to ensure that the semiconductor is not contaminated. Evacuation is effected by a vacuum and a backing pump. A program controller is used to set up and maintain the required thermal conditions, its schematic circuit diagram is given. There are 3 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti

Card 1/2

A universal device for applying ... S/120/62/000/005/035/036
E194/E535

(State Scientific Research and Design Institute of the Rare Metal Industry)

SUBMITTED: December 22, 1961

VC

Card 2/2

POTEMKIN, Dmitriy Mikhaylovich; SHORIN, V.I., inzh., retsenzent; GABOVA, D.M., red.; TRISHINA, L.A., tekhn. red.

[Development and improvement of warp-knitting machines] Razvitie i usovershenstvovanie osnovovyazal'nykh mashin. Moskva, Mostekhizdat, 1963. 98 p. (MIRA 16:6)
(Knitting machines)

POTEMKIN, D.M., kand. tekhn. nauk; KOVARSKIY, A.V., inzh.

[Development of the design of knitting machines] Razvitie konstruktsii trikotazhnykh mashin. Moskva, AN SSSR, 1965. 128 p. (MIRA 18:5)

POTEMKIN, D.M.

SIMIN, Solomon Khononovich, kandidat tekhnicheskikh nauk; TORMOZOVA, L.I., redaktor; POTEMKIN, D.M., kandidat tekhnicheskikh nauk, retsenzent; MEDVEDEVA, L.A., tekhnicheskiy redaktor

[High-speed warp knitting machines] Bystrokhodnye osnovoviazal'nye mashiny. Moskva, Gos.nauchno-tekhn. izd-vo Ministerstva tekstil'noi promyshl., 1955. 158 p. (MIRA 9:3)
(Warping machines)

YESIPENKO, Vladimir Naymovich, inzh.; POTEMKIN, Dmitriy Mikhaylovich, kand. tekhn.nauk; ZAGARINSKAYA, T.A., retsenzent; LIPKOV, I.A., nauchnyy red.; MINAYEVA, T.M., red.; KNAKHIN, M.T., tekhn.red.

[Cardigan stitch and reversible machines and the technology of weaving outer garments] Fangovye i oborotnye mashiny i tekhnologiia verkhnego trikotazha. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl., 1958. 408 p. (MIRA 11:5)
(Knitting machines)

POTEMKIN, D.M.

Ustroistvo, montazh i naladka dvukh-
sistemnogo kruglochulochnogo avtomata (Construction,
assembly, and adjustment of two-system automatic
circular-stocking machines). Moskva, Gizlegprom, 1953. 72 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 5, August 1954

POTEMKIN, D. M.

POTEMKIN, D.M.; SHALOV, I.I., retsenzent; GUTCHINA, N.Ya., redaktor.

[Design, installation and setting up of double-system circular hosiery machines] Ustroistvo, montazh i nakladka dvukhsistemnogo kruglochulochnogo avtomata. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva promyshlennykh tovarov shirokogo potrebleniia SSSR, 1953. 69 p. (MLRA 7:8)
(Knitting machines)

POTEMKIN, D.M., kandidat tekhnicheskikh nauk.

Ways of improving a high-speed, warp-knitting machine. Leg. prom. 14 no.11:15-21 N '54. (MLRA 7:12)
(Knitting machines)

[illegible], D. M.

Knitting - Machines

[illegible] knitting machines., Leg. prom., no. 2, 1953

9. Monthly List of Russian Accessions, Library of Congress, March 1953, 2Uncl.

MIKHAYLOV, Mikhail Ivanovich, POTEMKIN, Fedor Vasil'yevich, BOGOLYUBOV, N.D. red.; NAUMOV, K.M., tekhn.red.

[First independent actions of the industrial proletariat in Great Britain, France and Germany] Pervye samostoiatel'nye vystupleniia promyshlennogo proletariata v Anglii, Frantsii i Germanii. Moskva, Vysshaia partiinaia shkola pri TSK KPSS, 1958. 66 p. (MIRA 11:9)
(Great Britain--Labor and laboring classes)
(France--Labor and laboring classes)
(Germany--Labor and laboring classes)

POTEMKIN, Fedor Vasil'yevich; MIKAYLOV, Mikhail Ivanovich; BOGOLYUBOV, N.D., redaktor; HAUMOV, K.M., tekhnicheskiy redaktor.

[Workers's and national liberation movements during the revolutions of 1848-1849] Rabochee i natsional'no-osvoboditel'noe dvizhenie vo vremia revoliutsii 1848-1849 godov. Moskva, Vysshaia partiinaia shkola pri TsK KPSS, 1957. 102 p. (MLRA 10:6)
(Europe--Labor and laboring classes)

POTEMKIN, G.,

Demographic consequences of wars. Biul.SNO LGU no.1:123-148 '58. (MIRA 13:6)

(War--Casualties (Statistics, etc.)
(Demography)

POTEMKIN, G.A.; BAZHENOV, V.A.

Scientific bases for climatic testing of articles and materials. Standartizatsiia 29 no.7:23-25 Jl '65. (MIRA 18:11)

POTEMKIN, G.A.

Standardization and reliability. Standartizatsiia 29 no.5:
13-16 My '65. (MIRA 19:1)

POTEMKIN, G. A. ; NIKISHOV, A. S. ; RIMK, L.P.; YAROV, I. A. ; LIVSHITS, D. Kh.

Engrs.

The testing of samples under variable temperatures & pressures

Vest Mash p. 28, Sep 51

POTEMKIN, G.A.

Standards for new equipment. Standartizatsiia 29 no.9: 1-3 S '65. (MIRA 18:12)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta standartizatsii.

NAZAROVA, Z.N.; POTEMKIN, G.F.

Chemistry of 5-substituted furans. Part 21: Synthesis of furan sulfur compounds. Zhur.ob.khim. 34 no.1:157-161 Ja '64. (MIRA 17:3)

1. Rostovskiy-na-Donu gosudarstvennyy universitet. Zhur.ob.khim. 34 no.1:157-161 Ja '64.

NAZAROVA, Z.N.; POTEMKIN, G.F.

Synthesis of sulfides of the furan series. Zhur. org. khim. 1 no.9:1709-1710 S '65. (MIRA 18:12)

1. Submitted March 26, 1965.

POTEMKIN, G. F., and SIDHOVA, Ye. V.

"Investigating the Alkaloids Aconitum Talassicum M. P.p, "Dokl. AN UzSSR, No 2, pp 21-23, 1954

Isolated talatizamine, talatizine, and a third alkaloid (not named) from the roots and stem of the above plant. Lists physical properties and stoichiometric formulas of the alkaloids. (RZhKhim, No 22, 1954)

Sum No. 681, 7 Oct 55

POTEMKIN, G.F.

62 Alkaloids of Aconitum talassicum. S. Yu. Yunusov, E. V. Sichkova, and G. P. Potemkin. *Zhur. Obshchel Khim.* 24, 2237–42(1954); cf. *C.A.* 42, 7040*f*.—The $CHCl_3$ ext. of the crude alkaloid mixt. obtained from 22.9 kg. of dried plant leaves and stems was refluxed 5 hrs. with 10% H_2SO_4, cooled, extd. with Et_2O, filtered, and treated with NH_4OH. The pptd. material was extd. with $CHCl_3$ and the ext. evapd. and rubbed with MeOH giving 71.2 g. talatisamine (I), with further amts. recovered from the soln. the total yield was 93.1 g. The Et_2O ext. yielded veratric acid, m. 180–1°. Fractional pptn. of the residual mixt. of alkaloids from 10% H_2SO_4 by gradual addn. of NH_4OH, followed by treatment with cold C_6H_6, gave 10.97 g. I and 4.07 g. talatisine. I, m. 145–6° (from MeOH), is $C_{24}H_{39}O_5N$; *HBr salt-2H₂O*, m. 78–80° (from EtOAc); *HI salt-3H₂O*, m. 67.5–8.5°, $[\alpha]_D$ −12.8° (H_2O) [anhyd. salt, decomp. 130°, $[\alpha]_D$ −14.8° (H_2O)]; *mono-Ac deriv.*, m. 97–8°, forms on standing with Ac_2O; AcCl yields the *di-Ac deriv.*, m. 127–9°, $[\alpha]_D$ −5.05° (MeOH); hydrolysis of this with alc. NaOH gave the original alkaloid. I.MeI m. 220–1°. Oxidation of I with $KMnO_4$-H_2SO_4 gave AcH. Thus I can be represented by $C_{19}H_{31}(NEt)(OH)_2(OMe)_3$. *Talatisine*, m. 246–7°, $[\alpha]_D$ 36.5° (cf. Konovalova and Orekhov, *C.A.* 34, 5450⁹), has 1 double bond as shown by absorption of 1 mole H over PtO_2. G. M. Kosolapoff

Chem. Inst. AS UzbSSR

(2)

POTEMKIN, I., inzh.-konstruktor

New method of centering ships on the jamb cradles of platform slipways. Mech.transp. 19 no.9:44-45 S '60. (MIRA 13:9)

1. Kiliyskiy sudoremontnyy zavod.
(Ships--Maintenance and repair)

KUZENKOV, A.F.; POTEMKIN, I.G.

Some results of aerological observations by means of radar aboard the ship "IU.M.Shokal'skii. Meteor. i gidrol. no.7: 46-49 Jl '62. (MIRA 15:6)
(Radar meteorology)

ACCESSION NR: AT4033564 S/2922/63/009/000/0145/0153

AUTHOR: Gorelik, A. G.; Kostarev, V. V.; Potemkin, I. G.; Chernikov, A. A.

TITLE: Increasing the sensitivity of the receiver of an aerological radar set

SOURCE: Vsesoyuznoye nauchnoye meteorologicheskoye soveshchaniye. 1st, Leningrad, 1961. Pribory* i metody* nablyudeniy (Instruments and methods of observation); trudy* soveshchaniya, v. 9, Leningrad, Gidrometeoizdat, 1963, 145-153

TOPIC TAGS: meteorology, aerology, meteorological instrument, meteorological radar, signal-to-noise ratio, radar sensitivity

ABSTRACT: The use of ordinary radar apparatus in aerology for observation of many meteorological objects is impossible because of inadequate sensitivity. The signal reflected from the object often is so weak that it is lost in the instrument noise. The authors therefore have devised a signal accumulator which improves the signal-to-noise ratio at the output of the receiver of an ordinary centimeter-range radar set. The signal accumulator makes it possible to detect a weak radar echo, determine the coordinates of its source and obtain data on the strength of the reflected signal. A simplified block diagram of the detection of a weak signal by use of this device is shown in Fig. 1 of the Enclosure. The amplitude characteristics and gain of the signal accumulator are described. A very detailed

Card 1/3

ACCESSION NR: AT4033564

circuit diagram accompanies a text which fully describes the components and operation of the device. Orig. art. has: 18 formulas and 4 figures.

ASSOCIATION: Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory)

SUBMITTED: 00	DATE ACQ: 16Apr64	ENCL: 01
SUB CODE: ES, EC	NO REF SOV: 003	OTHER: 000

Card 2/3

L 42948-65 EEO-2/EWT(1)/FCC/EEC(t)/EED-2 Pm-4/Pn-4/Pac-4/Pi-4/Pj-4/
Pk-4/Pl-4 GW/WR

ACCESSION NR: AT5008982 UR/2789/64/000/057/0067/0071

AUTHOR: Potemkin, I. G.

TITLE: Adaptor for the automation of radar observations

SOURCE: Tsentral'naya aerologicheskaya observatoriya. Trudy, no. 57, 1964. Radiolokatsionnyye metody aerologicheskikh nablyudeniy (Radar methods of aerological observation), 67-71

TOPIC TAGS: weather control, hail prevention, cumulonimbus radar scanning, radar observation automation, atmospheric sounding, meteorological radar, radar instrumentation, cloud seeding

ABSTRACT: The author notes that radar is presently being used to observe the evolution of cumulo-nimbus clouds during their natural development and to check the results of active attempts at cloud seeding for the purpose of averting hail. The documentary and objective nature of radar-derived information constitutes an unquestionable advantage of this method; however, if errors are committed in establishing the proper regime or in logging the observations during the operational phase of the radar facilities, these advantages can be all but cancelled out. Hence the need for the development of devices which will automate both the ob-

Card 1/3

L 42948-65

ACCESSION NR: AT5008982

servation process and the recording of the results. In 1962, in the radar laboratory of the Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory), an adaptor was developed which permits the execution of vertical cuts; this constituted the basic method in observations conducted during feasibility studies of hail prevention in the region of the Samsar Valley. The mechanism was tested at the end of the 1962 season. The present article contains a brief description of this adaptor, which can be employed in radar operations carried out with equipment similar to the ARS-3 unit (the ARS-3 is described as a meteorological radar set). Designed for joint operation with this, or an analogous, radar unit, the device provides automatic station operation with simultaneous recording of observational results in the case of vertical sections, and semi-automatic operation for horizontal sections. The adaptor consists of a programming unit, control panel, and photo-recorder, designed in the form of individual components, and also of driving (actuating) electrical motors and data-units for fixed antenna positions. The author describes the principle of operation of the ensemble and presents a basic diagram schematically illustrating the control arrangement for both the antenna and the camera

Card 2/3

L 42948-65
ACCESSION NR: AT5008982

shutter, together with the more relevant technical specifications of this circuitry. Two figures are given in the text showing examples of horizontal and vertical scans of cumulo-nimbus clouds on different dates and with different angles of elevation and shutter attenuation values. The camera used was a KS-50 motion-picture camera modified for frame-by-frame photography. Orig. art. has: 2 figures.

ASSOCIATION: Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory)

SUBMITTED: 00 ENCL: 00 SUB CODE: DC, ES

NO REF SOV: 000 OTHER: 000

Card 3/3

POTEMKIN, I.S.; KHALILI, R.O.

Readout amplifier and shaping device for the semicurrent of a ferrite storage system. Trudy MEI no.41:121-134 '62. (MIRA 16:7)

(Electronic computers)

POTEMKIN, Konstantin Dmitriyevich; VLADIMIROV, Yu.V., red.izd-va; DOBUZHINSKAYA, L.V., tekhn. red.

[Heat treatment and drawing of high-strength wire]Termicheskaia obrabotka i volochenie vysokoprochnoi provoloki. Moskva, Metallurgizdat, 1963. 119 p. (MIRA 16:4)
(Wire drawing) (Annealing of metals)

POTEMKIN, K. D., Cand Tech Sci -- (diss) "Structure and properties of high-strength wire,and production methods." Moscow, 1960. 19 pp; (Main Administration of Scientific Research and Design Organizations under Gosplan USSR, Central Scientific Research Inst of Ferrous Metallurgy im I. P. Bardin); 110 copies; price not given; (KL, 18-60, 152)

POTEMKIN, K.D.

The effect of different factors on the patenting speed.

SPECIAL STEELS AND ALLOYS (SPETSIAL'NYYE STALI I SPLAVY), Collection of Studies, Issue 27, 240 pages, published by the State Scientific and Technical Publishing House for Ferrous and Non-Ferrous Metallurgy, Moscow, USSR, 1962.

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Effect of various factors on the speed of patenting. Sbor.trud. TSNIICHM no.27:211-239 '62. (MIRA 15:8)
(Wire industry) (Annealing of metals)

SOV/133-58-7-25/27

AUTHOR: Potemkin, K.D.

TITLE: Strengthening of Wire Made from Patented Billets of Carbon Steel (Uprochneniye uglerodistoy provoloki iz patentirovannoy zagotovki)

PERIODICAL: Stal', 1958, Nr 7, pp 654 - 659 (USSR)

ABSTRACT: As existing formulae for calculating the increase in the yield strength on drawing give unsatisfactory results, an investigation of the problem was carried out. Three types of steels were used for the investigation. Their chemical composition - Table 1; diameter of patented billets, their mean yield strength and the degree of their reduction - Table 2; the influence of various factors on the increase in the yield strength of drawn wire - Tables 3, 4 and 5. It was found that the rate of increase in the yield strength of drawn wire increases with increasing carbon content in steel, diameter of the billet, partial and total reduction. An 0.1% increase in the carbon content increases the yield strength of drawn wire as an increase in the diameter of patented billet by 4 mm, or an increase of partial reduction by 10%. On the basis of these findings and experimental results, a number of formulae were derived for the determination of the change in the yield strength. Of these,

Card1/2

Strengthening of Wire Made from Patented Billets of Carbon Steel

Formula (4) gives results which agree, more closely to the actual data within a wide range of variation of factors influencing the yield strength of wire and is recommended for use when developing the technology of the production of wire. The usual view on the relationship between work-hardening and decrease in plastic properties of metal is not valid to plastic deformation of steel with a sorbitic structure. There are 7 tables, 5 figures and 6 references, 5 of which are Soviet and 1 French.

ASSOCIATION: TsNIIChM

Card 2/2 1. Steel wire--Production 2. Steel wire--Processing 3. Steel wire--Test results

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Reduction of ferric oxide with carbon monoxide. Zhur. prikl. khim. 36 no.12:2579-2583 D'63. (MIRA 17:2)

POTEMKIN, K.N.; GREBNEV, S.K. Prinimali uchastiye: KIRSANOV, A.K.; BACHEVER, R.V.; IL'CHENKO, R.L.; POLESHKO, Ye.S.; KISTINA, A.I.

Quantitative determination of magnetite by a gravimetric magnetic method. Zhur. prikl. khim. 36 no.5: 981-988 My '63. (MIRA 16:8)

(Magnetite) (Magetochemistry)

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Formation of wüstite during low-temperature reduction of hematite and magnetite. Izv. AN SSSR Met. i gor. delo no.3 (MIRA 17:7)
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Magnetochemical phase analysis of iron oxides obtained by the reduction of α-Fe_2O_3 with methane and carbon. Zhur. prikl. khim. 36 no.8:1697-1702 Ag '63. (MIRA 16:11)

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Magnetic properties of the system iron oxide - ferric oxide.
Izv. AN SSSR. Otd. tekh. nauk Met. i topl. no.2:27-31 Mr-Ap
'62. (MIRA 15:4)
(Iron oxides--Magnetic properties)

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Investigation of saline clays and soils by the method of dilution. K. N. Potemkin and P. T. Danil'chenko. *Trudy Krym. Filiala, Akad. Nauk S.S.S.R.* 4, No. 1, 45–53 (1953).—Sol. chloride and water content of moist saline clays and soils can be detd. indirectly by diln. with H_2O 2 or more times, centrifuging, and detg. the chloride content of the resulting solns. The method gives low results for Ca owing to adsorption on the clay. The chloride content found for 6 samples of Crimean solonchak or solonetz soils agreed with that detd. by leaching the soil until no chloride was found in the leachate. Ronald G. Menzel

AG

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(Metals, Rare and minor) (Placer deposits)