DUDAR', Yu.A.

Atkins Botanical Garden in Cuba. Bot. zhur. 49 no.8:1227-1229 Ag '64. (MIRA 17:11)

1. Botanicheskiy sad, Stavropol'.

YUNATOV, A.A.; DUDAR', Yu.A.; LAPSHIN, M.M.

Organizing the 50th anniversary of the All-Union Botanical Society. Bot.zhur. 50 no.7:1043-1045 Jl '65. (MIRA 18:11)

1. Vsesoyuznoye botanicheskoye obshchestvo.

DuDARCHIK, V.N.

24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215

Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni D.I. Mendeleyeva

Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific Research Abstracts; Collection of Articles, No 2) Moscow, Standartgiz, 1958. 139 p. 1,000 copies printed.

Additional Sponsoring Agency: USSR. Komitet standartov, mer i izmeritel'nykh priborov.

Ed.: S. V. Rozhotina; Tech. Ed.: N. A. Kondrat'yeva.

PURPOSE: These reports are intended for scientists, researchers, and engineers engaged in developing standards, measures, and gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measurement and control. The reports were prepared by scientists of institutes of the Komitet standartov, mer i izmeritel'nykh priborov pri Sovete Ministrov SSSR (Commission on Standards, Measures, and Measuring Instruments under the USSR Council of Ministers). The participating institutes are: VNIIM - Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I. Mendeleyeva (All-Union Scientific Research Institute of Metrology imeni D.I. Mendeleyev) in Leningrad; Sverdlovsk branch of this institute; VNIIK - Vsesoyuznyy nauchno-issledovatel'skiy institut Komiteta standartov, mer i izmeritel'nykh priborov (All-Union Scientific Research Institute of the Commission on Standards, Measures, and Measuring Instruments), created from MGIMIP - Moskovskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Moscow State Institute of Measures and Measuring Instruments) October 1, 1955; VNIIFTRI - Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physicotechnical and Radio-engineering Measurements) in Moscow; KhGIMIP - Khar'kovskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Khar'kov State Institute of Measures and Measuring Instruments); and NGIMIP - Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Instruments). No personalities are mentioned. There are no references.

Card 2/27

SOV/32-24-10-49/70

AUTHORS: Dudarchik, V. N., Urazovskiy, S. S., Chernyavskiy, P. A.

TITLE: An Automatic Apparatus for Exactly Measuring the Viscosity of Liquids (Avtomaticheskiy pribor dlya tochnogo izmereniya vyazkosti zhidkostey)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 10, pp 1278-1279 (USSR)

ABSTRACT: An apparatus with an automatic timing of the flow of a liquid was constructed. The operation principle of the apparatus is based on the use of photoelectric pulses for starting and stopping the electric stop watch. The pulses are caused by the motion of the liquid meniscus and the interruption of a light beam caused thereby. The apparatus contains a somehow modified Ostval'd viscosimeter. A schematic representation of this apparatus is given. The viscosimeter and the optical part of the apparatus are housed in a thermostat, thus securing a temperature fixed accurately to 0,01°. The method of measurement employed for the viscosity is the same as with an ordinary viscosimeter. The apparatus is practically without inertia and gives good reproducible results with a precision which is only dependent upon the constancy of the temperature and the accuracy

Card 1/2

Exactly SOV/32-24-10-49/70

An Automatic Apparatus for Measuring the Viscosity of Liquids

of the stop watch. At a temperature held constant within 0,01° and a sensitivity of the stop watch of 0,01 seconds the measuring difference is not more than 0,03 seconds, which corresponds to hundredths of percents at a flow rate for the liquid of about 100 seconds. There is 1 figure.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina (Khar'kov Polytechnical Institute imeni V. I. Lenin)

Card 2/2

DUDARENKO, G.V.

17 (6, 12) SOV/16-60-4-21/47

AUTHOR: Cherkasova, P.A., Grebko, N.S., Dubakova, A.A., Denisova, I.Ya., Kats, F.S. and Dudarenko, G.V.

TITLE: Standard Botulinus Antiserum Type E

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 4, pp 84 - 87 (USSR)

ABSTRACT: The authors made a study of the standard botulinus antiserum type E (batch #16/2) prepared at the Khar'kovskiy Institut vaktsin i syvorotok imeni Mechnikova (Institute of Vaccine and Sera imeni Mechnikov, Khar'kov) and also of two other batches of antiserum - batch 205/1, also prepared by the same institute, and batch 16/1 prepared at the Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR (Institute of Epidemiology and Microbiology imeni Gamaleya of the AMN, USSR). A standard for the botulinus antiserum type E was worked out and the size of one antitoxic unit (AU) set at 0.03 mg of dry substance. An experimental toxin dose was determined and titration of antisera was recommended at 1/10 of this experimental dose (Le/10). It was found that the experimental dose of the three batches of toxins prepared on different nutrient media contained different amounts of MLD (minimum lethal dose). Two of the three toxin

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ASSOCIATION: Gosudarstvennyy kontrol'nyy institut meditsinskikh biologicheskikh preparatov imeni Tarasevicha (State Control Institute for Medical Biological Preparations imeni Tarasevich); Khar'kovskiy Institut vaktsin i syvorotok imeni Mechnikova (Institute of Vaccines and Sera imeni Mechnikov, Khar'kov)

SUBMITTED: September 24, 1958

Card 2/2

DUDARENKO, G.V.; CHERKAS, G.P.; SHCHELOKOVA, A.V.; RUMYANTSEVA, I.V.

Effectiveness of dry antigangrenous sera in topical use under experimental conditions. Nauch. osn. proizv. bakt. prep. 10:293-301 '61. (MIRA 18:7)

1. Khar'kovskiy institut vaktsin i syvorotok im. Mechnikova.

CHERTKOVA, F.A.; GRODKO, N.A.; USHAKOVA, A.A.; DENISOVA, I.YA.; KATS, F.M.; DUDARENKO, G.V.

Standard antibotulism serum type E. Zhur. mikrobiol. epid. i immun. 31 no. 4:84-87 Ap '60. (MIRA 13:10)

1. Iz Gosudarstvennogo kontrol'nogo instituta meditsinskikh biologicheskikh preparatov imeni Tarasevicha i Khar'kovskogo instituta vaktsin i syvorotok imeni Mechnikova.
(BOTULISM)

DUDARENKO, V.P.

Prevention and treatment of radiation reactions and lesions of the rectum with galascorbin. Vrach. delo no.6: 76-77 Je'63. (MIRA 16:9)

1. Kafedra meditsinskoy radiologii (zav. - prof. N.F.Lipkan) Kiyevskogo instituta usovershenstvovaniya vrachey.
(RECTUM--DISEASES) (RADIATION--PHYSIOLOGICAL EFFECT
(ASCORBIC ACID--THERAPEUTIC USE)

DUDARENKO, V.P.

Preventive use of galascorbin in radiotherapy. Vrach. delo no.8:129-130 Ag'63. (MIRA 16:9)

1. Kafedra meditsinskoy radiologii (zav. - prof. N.F.Lipkan) Kiyevskogo instituta usovershenstvovaniya vracheY.
(ASCORBIC ACID) (RADIOTHERAPY)

DUDAREV, A.

Small end-milling cutter. Mashinostroitel' no.12:21 D '61. (MIRA 14:12)

(Metal-cutting tools)

DUDAREV, Anatoliy Fedorovich; YARTSEV, M., red.; KUZNETSOVA, A., tekhn. red.

[Welding in enterprises of the construction industry] Svarka na predpriiatiiakh stroitel'noi industrii. Moskva, Mosk. rabochii, 1962. 43 p. (MIRA 16:6)
(Concrete reinforcement—Welding)

DUDAREV, A.N.

Magnetic properties of rocks and ores in the Altai-Sayan area.
Geol. i geofiz. no.1:117-122 '60. (MIRA 13:9)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
(Altai Mountains--Petrology)
(Sayan Mountains--Petrology)

S/169/62/000/010/010/071
D228/D307

AUTHOR: Dudarev, A.H.

TITLE: Relation between the porosity, volumetric weight, and iron content in rocks and ores of the Tashtagol'skoye iron ore deposit of Gornaya Shoriya

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1962, 12, abstract 10A79 (Geologiya i geofizika, no. 9, 1961, 101-105)

TEXT: An attempt is made to ascertain the value of the total porosity of ores and rocks of the Tashtagol'skoye deposit on the grounds of taking into account rock specific-gravity and density measurements. The question of the correlation between the rock density and the amount of soluble iron in a lump of ore is considered. The results of the work carried out showed that the porosity of magnetite ores and the magnetite-rich rocks ranges from 0 to 22%, 90% of the specimens having a porosity of not more than 10%.
[Abstracter's note: Complete translation]

Card 1/1

DUDAREV, A.N.

Changes in the specific gravity, heat capacity, and chemical activity of rocks during calcination. Geol.i geofiz. no.12: 125-128 '61. (MIRA 15:5)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(Petrology)

ACCESSION NR: AP4016495 S/0210/63/000/012/0143/0145

AUTHOR: Dudarev, A. N.

TITLE: High temperature transfer of material in porous bodies through the effect of an electrical field

SOURCE: Geologiya i geofizika, no. 12, 1963, 143-145

TOPIC TAGS: material transfer, high temperature transfer, porosity, porous medium, electrical field, zinc, silicate, fire clay, steady electrical field, gas transfer, sublimate

ABSTRACT: Work has been carried out on the mechanism of gaseous transfer of ore material (in porous bodies under the effect of an electrical field) in the laboratory of ore-field structures at the Institute of Geology and Geophysics, Siberian Department, AN SSSR under the direction of G. L. Pospelov. This paper presents the first results of these experiments. Tests were made on the transfer of zinc through coarse-grained silicate samples (porosity up to 40%, high permeability) and fine-grained fire clay (up to 50-60% porosity, low permeability).

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ACCESSION NR: AP4016495

The coarse-grained material gave the best results. Studies were made on the effect of local cooling on the transfer and deposition of the "sublimate," as well as on the effect of the electrical field. With local cooling, gas was observed to "precipitate" with a sharp frontal zone of deposition (of the zinc) and of alteration. The application of a steady electrical field to a sample was found to increase the transfer of zinc upward. In the absence of an electrical field, a downward drainage of zinc was observed. The electrical field may increase or decrease the transfer of zinc according to the charge on the material and to the current direction. In these experiments, metallic zinc was deposited in the porous medium. Orig. art. has: 1 figure.

ASSOCIATION: Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk (Institute of Geology and Geophysics, Siberian Department AN SSSR)

SUBMITTED: 20May63 DATE ACQ: 18Mar64 ENCL: 00

SUB CODE: PH, CH NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R000411420014-4"

DUDAREV, A.N.

Evaluation of the role of enclosing rocks in an ore formation. Geol. i geofiz. no.7:52-59 '65. (MIRA 18:9)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

BELOUSOV, A.F.; DUDAREV, A.N.

Practice in analyzing the rock density of ancient effusive-sedimentary complexes in the Gornyy Altai. Geol. i geofiz. no.10:34-44 '65. (MIRA 18:12)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk. Submitted January 10, 1964.

DUDAREV, A.N.

Significance of heat capacity in the evaluation of the role of enclosing rocks in mineralization. Geol.rud.mestorozh. 7 no.4:57-62 Jl-Ag '65. (MIRA 18:8)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

AUTHOR: Dudarev, B. P.

ORG: none

SOURCE CODE: UR/0000/66/000/000/0156/0157

TITLE: The importance of the adrenal and thyroid glands when adaptation to hypoxia is used as a means of increasing general resistance [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 156-157

TOPIC TAGS: thyroid gland, adrenal gland, hypoxia, biologic acceleration effect, acceleration tolerance, blood chemistry, adrenocorticotropic hormone, high altitude physiology, alpine acclimatization

ABSTRACT: An investigation was made to learn more about the role of the adrenal and thyroid glands in gradual alpine acclimatization (Mount El'brus) and in the cross-adaptive effect of alpine acclimatization on acceleration tolerance.

It is known that adrenalectomy in rats at sea level causes a drop in the erythrocyte and hemoglobin content of the circulating blood, and decreased tolerance (survival) of 4 min exposure to 40 units of acceleration. ACTH, cortisone, and desoxycorticosterone acetate restored the acceleration survival rate in adrenalectomized rats to normal values or above, but caused inconsistent changes in peripheral blood composition.

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ACC NR: AT6036553

Despite wide acceptance of the neurohumoral theory of hematopoiesis regulation, which attributes a leading role to the thyroid and adrenals, animals adrenalectomized after acclimatization are able to adapt to hypoxia with increased erythrocyte and hemoglogin counts, and show considerable cross-adaptive increase in acceleration tolerance. Pressure-chamber training of adrenalectomized rats had similar effects.

The role of thyroid in the regulation of hematopoiesis is well established: hypothyroidism or extirpation of the thyroid results in irreversible bone marrow hypoplasia which is not amenable to treatment with hypoxia.

Data collected on expeditions to Mount El' brus show thyroidectomized rats to be capable of active acclimatization. Erythrocyte counts and hemoglobin counts increased in the experimental animals almost as much as in the intact controls (though O_2 requirement remained low), and their tolerance of acceleration also increased considerably. In both thyroidectomized and control animals, the increases in erythrocyte count and hemoglobin were greatest in the animals with the lowest initial levels and exposed to the severest conditions of oxygen insufficiency.

It is concluded that the role of the hormone link in hematopoiesis regulation decreases during acclimatization to alpine conditions. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

L 38962-66

ACC NR: AP6020034 (A) SOURCE CODE: UR/0066/66/000/002/0032/0036

AUTHOR: Piskarev, A. I. (Candidate of technical sciences); Luk'yanitsa, L. G.; Ushkalova, L. V.; Dudarev, G. V.; Ogurechnikova, N. V.; Fominova, V. P.; Sangaylene, M. Yu.

ORG: [Piskarev, Luk'yanitsa, Ushkalova, Ogurechnikova, Dudarev] All-Union Scientific-Research Institute of the Refrigeration Industry (Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy promyshlennosti); [Fominova, Sangayleno] Klaypeda Branch, Central Design and Technological Bureau (Klaypedskiy filial Tsentral'nogo proyektno-konstruktorskogo i tekhnologicheskogo byuro)

TITLE: Investingations on the storage of North Sea herring in refrigerated sea water. I. Technological investigations

SOURCE: Kholodil'naya tekhnika, no. 2, 1966, 32-36

TOPIC TAGS: food, refrigeration, food preservation, fishing ship, sea water

ABSTRACT: The purpose of these investigations was to elicit the technological advantages of storing fish in refrigerated sea water in comparison with storage in ice and the effect of additions to the water of high-polymer compounds on the physicochemical indexes and quality of the fish. During the cruise of an experimental fishing boat two experiments were set up:

Card 1/2 UDC: 637.56.004.4:551.463/.464

L 38962-66

ACC NR: AP6020034

the first was on the storage of herring in refrigerated sea water and in ice and the second on the storage of herring in refrigerated sea water with the addition of carboxymethyl cellulose (CMC), which counters swelling and extraction of nitrogenous substances, in a quantity of 0.6% wt. Large herring measuring 23—25 cm were used in the first experiment and average-sized (18—20 cm) for the second experiment. Two hours after the start of cooling the sea water the temperature of the herring dropped to -1C and was later held during the entire experiment at the level from -1.2 to -1.5C, the temperature of the water during the entire experiment being maintained at 0.1—0.2C above the cryoscopic point of the herring. The investigation revealed that the main defect of herring when stored in refrigerated sea water was oxidation of the fat. As a result of this the large herring of the fall catch can be stored in a good condition for no more than 3 days. If the herring are stored for a longer time it is necessary to introduce additatives inhibiting the oxidative rancidity of the fat. To prevent the formation of cracks the herring should be stored at a temperature close to the cryoscopic point but not below it since freezing impairs the structure of the muscle tissue. The addition to sea water of CMC in a small concentration (1.6%) does not promote a decrease of swelling. Further investigations of the use of larger concentrations of CMC are needed. It is also pointed out that when herring is stored in sea water for 3 days it is not necessary to change the water, which appreciably simplifies storage. Orig. art. has: 1 table and 3 figures.

SUB CODE: 06/ SUBM DATE: 00/ ORIG REF: 003/ OTH REF: 004

Card 2/2

5(4)

AUTHOR: Dudarev, I. M. SOV/76-32-11-6/32

TITLE: ~~Polarization and~~ Throwing Power in Acid Copper Electrolytes (Polyarizatsiya i rasseivayushchaya sposobnost' v mednokislykh elektrolitakh)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 11, pp 2500-2506 (USSR)

ABSTRACT: It may be assumed that in the case of a sufficient decrease of the $CuSO_4$ concentration and increase of the H_2SO_4 concentration the throwing power of acid copper electrolytes will considerably increase (Refs 3,4 and 5,6). In the present paper experimental investigations as to the changes of the polarization and the throwing power are carried out in order to find the composition of that electrolyte which has a sufficiently good throwing power. The concentrations of $CuSO_4$ were modified from 12.5 to 100 g/l, and those of H_2SO_4 from 25 to 200 g/l. A potentiometer PPTV-1, served for the measurement of the polarization. A glass lamella, metallized on one side, was used as cathode. The eleq-

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SOV/76-32-11-6/32

Polarization and Throwing Power in Acid Copper Electrolytes

trolyte had a temperature of 20 ± 0.5°C. After the precipitation the copper layer was separated from the glass and its thickness was measured by means of a vertical optimeter IKV-1. A decrease in $CuSO_4$ concentration and an increase in H_2SO_4 concentration led to a more uniform distribution of the precipitate as well as to a considerable increase of the cathode polarization. There exists an almost linear dependence of the logarithm of polarizability on the logarithm of the activity of the Cu^{2+} ions. The agreement of theoretical and experimental values caused the author to maintain that the polarization in acid copper solutions can be observed from the standpoint of the diffusion kinetics. The magnitude

$$\frac{1}{q} \cdot \frac{\Delta\varphi}{\Delta i}$$

may be regarded as characterizing parameter for the throwing power of these electrolytes. An electrolyte of the composition 0.05 M $CuSO_4$ + 2.0 M H_2SO_4 is with respect to its throwing power equal to a copper cyanide electrolyte. There are 11 figures, 2 tables, and 9 references, 6 of which are Soviet.

Card 2/3

DUDAREV, I. R.

DUDAREV, I. R.: "Investigation of the screw-press method of hulling moistened wheat". Odessa, 1955. Min Higher Education USSR. Odessa Technological Inst imeni I. V. Stalin. (Dissertations for the degree of Candidate of Technical Science.)

SO: Knishnaya Letopis' No. 50 10 December 1955. Moscow.

DUDAREV, I.R.; KALISHEVICH, I.V.; KOTLYAR, L.I.

Technoligical investigations of huskers of moist wheat. Izv.vys. ucheb.zav.;pishch.tekh. 1:71-79 '61. (MIRA 14:3)

1. Odesskiy tekhnologicheskiy institut imeni I.V. Stalina, Kafedra tekhnologicheskogo oborudovaniya i kafedra tekhnologii mukomol'no-krupyanogo i kombikormovogo proizvodstva.
(Mills and mill-work)
(Wheat)

BANIT, Ye.A.; VAYNBERG, A.A.; DUDAREV, I.R.

Principle of the operation of a centrifugal flowmeter. Izv. vys. ucheb. zav.; pishch. tekh. no. 2:104-107 '61. (MIRA 14:5)

1. Odesskiy tekhnologicheskiy institut imeni I.V. Stalina. Kafedra tekhnologicheskogo oborudovaniya.
(Flowmeters)

DUDAREV, I.R., kand.tekhn.nauk; GEORGI, N.V., inzh.

Semiautomatic pneumatic nail-driving machine. Mekh.i avtom. proizv. 16 no.7:43-44 Jl '62. (MIRA 15:8)
(Power tools)

GEORGI, N.V.; DUDAREV, I.R.; KOTLYAR, L.I.

Effect of ultrasonic waves on the resistance to impact of wheat grains during washing with water. Izv. vys. ucheb. zav.; pishch. tekh. no.2:55-63 '63. (MIRA 16:5)

1. Odesskiy tekhnologicheskiy institut imeni Lomonosova, kafedra tekhnologicheskogo oborudovaniya.
(Grain—Cleaning) (Wheat—Testing)
(Ultrasonic waves—Industrial applications)

KOTLYAR, L.I.; GAL'PERIN, G.D.; DUDAREV, I.R.; LEVIN, S.M.

Grain-processing machinery. Izv.vys.ucheb.zav.; pishch.tekh. no.1:171-172 '64. (MIRA 17:4)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R000411420014-4"

"Organization of veterinary service in Vilnius."

Veterinariya, Vol. 37, No. 5, 1960, p. 18

Chief, Vil'nyus City Vet Hospital

SELYUCHENKO, A.; DUDAREV, K.N.; BEDERIN, I.M.

Information and news. Veterinariia 38 no.3:93-96 Mr '61 (MIRA 18:1)

DUDAREV, K.N.; SHEVELEV, A.G.

Work of meat, milk, and food control stations in Vilnius.
Veterinariia 39 no.8:55-57 Ag '62. (MIRA 17:12)

DUDAREV, K. S.

INjury of the hearing organ by lightning. Cest. oto-rin. 14, No 5, 1952.

DUDAREV, K.S.

Using N.N.Burdenko's method in treating fractures of the petrous pyramid complicated by otorrhea. Vest.oto-rin. 15 no.6:80-81 N-D '53. (MLRA 7:1)

1. Iz otdeleniya bolezney ukha, gorla i nosa Michurinskoy gorodskoy bol'nitsy. (Ear--Diseases) (Temporal bone--Fracture)

DUDAREV, K.S.

Impairment of the hearing apparatus in pregnancy toxicosis. Vest. oto-rin. 18 no.5:98-99 S-O '56. (MLRA 9:11)

1. Iz otdeleniya bolezney ukha, gorla i nosa gorodskoy bol'nitsy Michurinska.

(OTITIS, etiol. and pathogen.
pregn. toxicosis, causing hearing disord.)
(HEARING DISORDERS, etiol. and pathogen.
otitis in pregn. toxicosis)
(PREGNANCY TOXEMIAS, compl.
otitis with hearing disord.)

DUDAREV, K.S.

DUDAREV, K.S.

Treating primary retropharyngeal abscess by aspiration followed by penicillin injection. Vest.oto-rin. 19 no.6:95 N-D '57 (MIRA 11:3)

1. Iz otdeleniya bolezney ukha, gorla i nosa 1-y gorodskoy bol'nitsy Michurinska.
(PENICILLIN) (PHARYNX--ABSCESS)

DUDAREV, K.S., zasluzhennyy vrach RSFSR

Observations on thrombosis of the cavernous sinus complicated by meningitis. Vest.otorin. 22 no.5:68-69 S-O '60.
(MIRA 13:11)

1. Iz otdeleniya bolezney ukha, gorla i nosa 1-y Michurinskoy gorodskoy bol'nitsy.
(MENINGITIS) (CAVERNOUS SINUS—DISEASES)

DUDAREV, L.Ye., insh.

Automatic control of phase insulation in the circuits of disconnected mine motors. Izv.vys.ucheb.zav.; gor.zhur. no.1: 87-95 '59. (MIRA 13:1)

1. Donetskiy industrial'nyy institut. Rekomendovana kafedroy gornozavodskoy elektrotekhniki.
(Electricity in mining)

DUDARNV, L.Ye., insh.; ZHELIKHOVSKIY, Kh.M., insh.

Transient processes in R.U.V.-2 leakage relay circuit diagrams. Nauch. dokl. vys. shkoly; gor. dele no.1:145-150 '59. (MIRA 12:5)

1.Predstavlena kafedroy gornozavodskoy elektrotekhniki Donetskogo industrial'nogo instituta im. N.S. Khrushcheva.
(Electric currents, Leakage)

DUDAREV, L.Ye., insh.; SAVCHENKO, V.M., insh.

Semigraphical method for calculating currents in the branches of a single half-wave rectifier network with a shunting rectifying element. Vest. elektroprom. 32 no.12:69-72 '61. (MIRA 14:12)

(Electric current rectifiers)

DUDAREV, L.Ye., inzh.

Magnetic starters for small mine engines. Ugol'.prom. no.4:67-69 Jl-Ag '62. (MIRA 15:8)

1. Donetskiy politekhnicheskiy institut.
(Electric motors--Starting devices)

DUDAREV, L.Ye., kand.tekhn.nauk; POGODIN, M.K., inzh.

Contactor with arc suppression for 660 volt networks. Izv.vys.ucheb. zav.;gor.zhur. 7 no.7:140-143 '64. (MIRA 17:10)

1. Donetskiy politekhnicheskiy institut.

DUDAREV, L.Ye., inzh.

Raising the efficiency of arc quenchers of magnetic starters in 660 volt networks. Ugol' 38 no.1:35-37 Ja '63. (MIRA 18:3)

1. Donetskiy politekhnicheskiy institut.

DUDAREV, M.A.

M.A. Dudarev, Lesomelioratively pitomnik [Forest Melioration Tree Nurseries], Sel'khozgiz, 12 sheets.

Manual for growing the planting material of tree, hrub, and fruit-bearing species in the forest melioration nursery.

Intended for workers at forest melioration nurseries.

SO: U-6472, 15 Nov 1954

PLYASHCHENKO, S.I., dotsent; DUDAREV, M.A., mladshiy nauchnyy sotrudnik; KOMAROVSKIY, V.G.

Case of mass poisoning of suckling piglets by ergot. Veterinariia 40 no.9:59 S '63. (MIRA 17:1)

1. Belorusskiy nauchno-issledovatel'skiy institut zhivotnovodstva (for Plyashchenko, Dudarev). 2. Glavnyy veterinarnyy vrach sovkhoza "Pedoles'ye", Gomel'skoy oblasti (for Komarovskiy).

31995
S/142/61/004/004/016/018
E192/E382

9,1000

AUTHORS: Men', A.V., Zhuk, I.N. and Dudarev, N.I.

TITLE: Multiprobe measuring line with a contactless switch

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 4, no. 4, 1961, 494 - 496

TEXT: The instrument described was designed and built at the IRE AN UkrSSR (Institute of Radio-electronics of the AS UkrSSR) and has an operating bandwidth ranging from 10-40 Mc/s. Constructionally, it is in the form of two separate units: the radial frequency unit and a mechanical system. The mechanical system comprises a multiprobe line, a high-frequency capacitative switch, a capacitative current probe and collector and a synchronous drive motor operating at 1 500 r.p.m. The line of the system is in the form of a coaxial cable, type PK-6 (RK-6), having an impedance of 52 Ω and a length of 10 m; it is wound helically on a toroid. The electrical unit of the device consists of four circuits: a signal generator; an amplifier; a synchronous time-base and an indicator (output) circuit. The design principle of the instrument is illustrated in Fig. 1.

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31995
S/142/61/004/004/016/018
E192/E382

Multiprobe measuring line ....

The signals from the HF generator 1 , which has a wide operating range, are applied to the input of the long-line 2 , which is terminated by the measured load. Weakly-coupled, screened probes are inserted into the line at equal intervals. The HF oscillations picked-up by the probes via the HF capacitative switch 3 , the pick-up and the cylindrical collector 4 (which is driven by the synchronous electric motor) are applied successively to the input of the measuring amplifier 5 . The HF signal of the generator is modulated by a low-frequency F_M and the amplifier 7 , which is terminated by a nonresonant detector, is tuned to this frequency. During uniform rotation of the switch pulse signals are produced at the output of the amplifier and these are applied to the vertical plates of the cathode-ray indicator tube 6 . Simultaneously, a trigger time-base waveform is applied to the horizontal plates of the tube from the amplifier 7 ; the time-base is triggered by the signal received from the first segment of the switch, which is produced by a special auxiliary generator 8 , whose operating

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31995
S/142/61/004/004/016/018
E192/E382

Multiprobe measuring line ....

frequency lies outside the operating range of the instrument. In this way, a screen of the indicator tube shows the distribution of the HF voltage along the line, the picture being in the form of a series of pulses. The envelope of these pulses determines the phase and modulus of the reflection coefficient of the measured load. If the signals appearing at the output of the HF switch are detected directly, the instrument can be used to measure the power standing-wave ratio. On the other hand, if an auxiliary non-modulated HF signal of a large amplitude is applied to the input detector, the voltage standing-wave ratio is measured. The instrument has been tested over a long period of time and it was found extremely useful in the adjustment of various types of antenna systems, matching devices, matching of feeders, input circuits of the receivers, filters, etc. There are 2 figures and 2 references: 1 Soviet-bloc and 1 English - Ref. 2 - Lester Zukerman, Electronics, 1959, 32, no. 12, 64.

4

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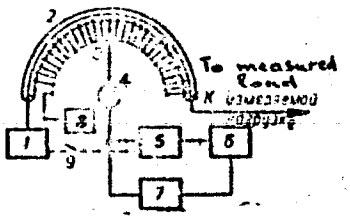
31995
S/142/61/004/004/016/018
E192/E382

Multiprobe measuring line ....

ASSOCIATION: Uchenyy sovet IRE AN UkrSSR (Scientific Council of the IRE AS UkrSSR)

SUBMITTED: October 15, 1960

Fig. 1:



Card 4/4

DUDAREV, P

DMITRIYEV, I. (Tomsk); FILIPPOVA, V.; KOROLEVA, V.; LAPIN, A. (Shostka, Sumskaya oblast'); DUDAREV, P. (Riga); SHCHERBINA, Ya. (L'vov); MAL'TSEV, G. (Petrovsk, Saratovskaya oblast').

They fulfill their duty. Posh. delo 3 no.7:22-23 Jl '57.
(Fire prevention) (MLRA 10:8)

DUDAREV, T.

VELIKOPOL'SKIY, I.; DUDAREV, T.; ROZHKOV, V.

Pay more attention to the practical work of students. Muk.-elev. prom. 24 no.1:29 Ja '58. (MIRA 11:2)

1. Byvshiye uchashchiyesya Omskogo mukomol'no-elevatornogo tekhnikuma.

(Grain milling—Study and teaching)

DUDAREV, T.V., insh.; ROZOV, N.A., insh.

Experimental road pavements made of locally obtained materials.
Avt.dor. 21 no.11:9-10 N '58. (MIRA 11:12)
(Pavements--Testing)

ZHITNYY, P.; DUDAREV, V.; OGARKOV, V.; KOPELYANSKIY, V.; NOVIKOV, K.

Exchange of experience. Avt.transp. 42 no.3:55-56 Mr '64. (MIRA 17:4)

GAPUNIK, M.L.; DUDAREV, V.A.; SPIVAK, E.I.

Operation of heating furnaces of a medium sheet mill. Stal' 22 no.2:176-178 F '62. (MIRA 15:2)

1. Zavod "Amurstal'" i TSentroenergochemet.
(Rolling mills)
(Furnaces, Heating)

DUDAREV, V.P. [Dudariev, V.P.]

Effect of adrenalectomy in white rats adapted to hypoxia on their resistance to radial acceleration. Fiziol. zhur. [Ukr.] 10 no.2:274-277 Mr-Ap '64. (MIRA 18:7)

1. Institut fiziologii im. Bogomol'tsa AN UkrSSR, Kiyev.

L 04581-67 EWT(1) SCTB DD

ACC NR: AP6033149 SOURCE CODE: UR/0238/66/012/005/0593/0600

AUTHOR: Dudaryev, V. P.--Dudarev, V. P.

27
B

ORG: none

TITLE: Changes in external respiration and peripheral blood in rats under the influence of transverse accelerations

SOURCE: Fiziolohichnyy zhurnal, v. 12, no. 5, 1966, 593-600

TOPIC TAGS: biologic acceleration effect, animal experiment, rat, alpine acclimatization, hematology, respiratory system

ABSTRACT: White rats were subjected to 10—40 G transverse accelerations in the back-chest direction. With increasing acceleration their breathing rate decreased and breathing became somewhat deeper. These changes were more pronounced under lowered pressure conditions (corresponding to an altitude of 2000—6000 m) and respiratory arrest occurred sooner. Changes in peripheral blood were also observed to depend on acceleration magnitude and on the length of the period after acceleration. In the first few minutes after acceleration, erythrocyte content increased and the amount of hemoglobin increased, but both indices later dropped below initial levels. Slight neutropenia was also observed in centrifuged animals (without displacement of neutrophil nuclei to the left), together with lymphocytosis and eosinopenia. Administration of ACTH and cortisone to experimental animals considerably increased their

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L 04581-67

ACC NR: AP6033149

resistance to radial accelerations without substantially affecting red blood cells. It was concluded that alpine acclimatization, which is accompanied by increased erythrocyte and hemoglobin levels, helps increase resistance to accelerations. Orig. art. has: 2 tables and 3 figures.

SUB CODE: 06/ SUBM DATE: 06Sep65/ ORIG REF: 015/ OTH REF: 004/ ATD PRESS: 5100

Card 2/2 vmb

GOL'DER, G.A. [translator]; DUDAREV, V.Ya. [translator]; SOLOV'YEV, S.P. [translator]; ZHDANOV, G.S., red.; LARIN, S.I., red.; BELEVA, M.A., tekhn. red.

[Annihilation of positrons in solids] Annigiliatsiia pozitronov v tverdykh telakh; sbornik statei. Moskva, Izd-vo inostr. lit-ry, 1960. 228 p. (MIRA 15:3)
(Positrons)

S/120/60/000/004/016/028
E032/E414

AUTHOR: Dudarev, V.Ya.

TITLE: Measurement of the Thickness of Thin Deposits on Thick Plates

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.123-126

TEXT: Two methods are described for measuring the thickness of thin deposits on thick plates. The first method is illustrated in Fig.1. It is assumed that a part of the surface of the thick plate is available for reflection of X-rays. The intensity of the reflected X-ray beam is given by

$$I = I_0 \exp\left[-\mu d(\operatorname{cosec}\alpha + \operatorname{cosec}\beta)\right] \qquad (1)$$

where I_0 is the intensity of the reflected beam in the absence of the thin deposit, α is the angle of incidence, β is the angle of reflection, μ is the linear absorption coefficient at the given wavelength λ, and d is the thickness of the deposit. If I_0 is measured by reflecting the X-ray beam from the thick plate, then the intensity of the beam reflected from the portion covered by the thin deposit can be calculated from the above formula.

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S/120/60/000/004/016/028
E032/E414

Measurement of the Thickness of Thin Deposits on Thick Plates

In the second method, X-rays reflected from an "infinitely" thick deposit are compared with those reflected from various types on a thin deposit whose thickness does not exceed a certain maximum value. The aim of these methods was to devise a procedure for determining the distribution of thickness over the length of a specimen, which would be suitable for continuous recording either on a paper chart or on film. In the final instrument, which is illustrated in Fig.2 and is a slightly modified version of the device described by Friedman and Birks (Ref.2), the detector is an ionization chamber and the range of thicknesses which can be covered lies between tenths of a micron and a few hundredths of microns. The accuracy of the instrument is said to be better than ± 10%. There are 2 figures, 1 table and 5 references: 3 Soviet and 2 non-Soviet.

ASSOCIATION: Fizicheskiy fakul'tet MGU
(Division of Physics, Moscow State University)

SUBMITTED: June 23, 1959

Card 2/3

S/120/60/000/004/016/028
E032/E414

Measurement of the Thickness of Thin Deposits on Thick Plates

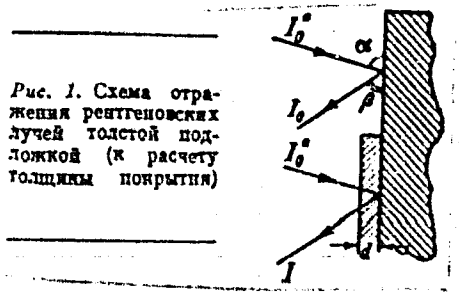

Рис. 1. Схема отражения рентгеновских лучей толстой подложкой (к расчету толщины покрытия)

Fig.1.

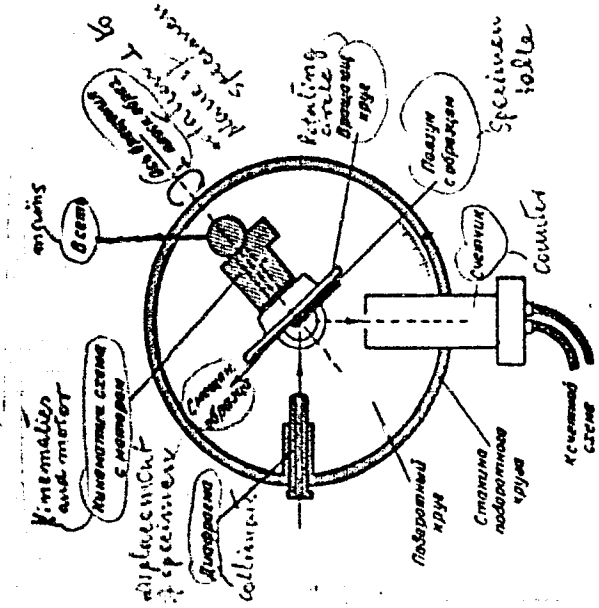

Рис. 2. Схема прибора для измерения распределения толщин покрытия по длине образца методом монохроматической регистрации интенсивности рентгеновых лучей

Card 3/3

S/089/62/013/004/009/011
B102/B108

AUTHORS: Dudarev, V. Ya., Zhdanov, G. S., Alekseyev, B. A.

TITLE: X-ray diffraction study of precipitates produced by bombarding some metals with ions of other metals

PERIODICAL: Atomnaya energiya, v. 13, no. 4, 1962, 382 - 383 .

TEXT: The ions of a metal are sputtered by bombardment with ions of some 10 kev, each of which strikes out about 10 ions of the target. In an effort to find the most convenient way of separating accumulated isotopes from the resulting precipitates, copper was bombarded with Sn^+, Zr^+, and Mg^+ ions of ~30 kev in a vacuum of ~10^{-6} mm Hg and Al was bombarded with Zr^+. The precipitates were analyzed. (1) Cu + Sn: X-ray diffraction studies of the bronze precipitates showed that they resembled a Cu-Sn alloy whose composition varies in the layer thickness, even though their crystal was that of copper. In the lower layers the tin content was 2.5 at% and on the surface it was about 1.8 at%. (2) Cu + Zr: This double-layer precipitate, too, was an alloy with an average zirconium content of 5.29%. The precipitate displayed lines which could not be attributed with certainty either to

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Cu_2Zr or Cu_3Zr. It is assumed that these lines come from other compounds. (3) Cu + Zr: Again an alloy. (4) Al + Zr: Chemical analysis showed that these precipitates too were alloys containing 18.09% by weight of Zr. All the alloys mentioned are heterogeneous, i. e., containing intermetallic compounds as well as the solid solution. The higher concentration of the bombarded metal near the backing is due to the temperature dependence of the sputtering coefficient.

SUBMITTED: December 14, 1961

PANIN, V. Ye.; FADIN, V. P.; DUDAREV, Ye. F.

Variation of the electric resistance of Cu-Al solid solutions during heat treatment. Izv. vys. ucheb. zav.; fiz. no.6:48-51 '61. (MIRA 16:1)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitet imeni Kuybysheva.

(Copper-aluminum alloys—Electric properties)
(Metals at high temperatures)

45006

S/139/62/000/006/008/032
E193/E383

AUTHORS: Panin, V.Ye., Fadin, V.P. and Dudarev, Ye.F.

TITLE: On the problem of the nature of the changes of electrical resistivity of Cu-Al solid solutions during heat-treatment

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no. 6, 1962, 48 - 51

TEXT: According to Coles' theory, the electrical resistivity ρ of nonferromagnetic alloys at a given temperature T is given approximately by:

$$\rho = F(P_A + P_T) \qquad (1)$$

where P_A and P_T are scattering disturbances due, respectively, to atomic and thermal disordering and F is a function of the degree of freedom of the conduction electrons. For an alloy quenched from a temperature T_3 and for $T = 0\ ^{\circ}K$, Eq. (1) becomes:

$$\rho_0^{T_3} = F^{T_3} \cdot P_A^{T_3} \qquad (2);$$

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here, ρ_0 is the residual resistance and the index T_3 indicates the temperature from which the alloy has been quenched. Combining Eq. (2) with the equation for the temperature coefficient of electrical resistivity:

$$\alpha^{T_3} = (\partial\rho/\partial T)^{T_3} ,$$

it can be shown that:

$$\alpha^{T_3} = K^{T_3} F^{T_3} \qquad (4) ,$$

where $k^{T_3} = \partial P_T^{T_3} / \partial T$. Since it is easy to show that the relative variation in k^{T_3} is equal to the relative variation in Young's modulus, the variation in the latter property as a function of the degree of order in a Cu-Al alloy was studied. Experimental work was carried out on two alloys: a high-purity Cu+14.3 at.% Al alloy and a technical-grade Cu+14.9 at.% Al material, both preliminarily annealed by holding for 2 h at 750 °C and cooling at 50 °C/h. The Young modulus was determined by measuring the natural vibration frequency of specimens quenched from various

On the problem of ....

S/139/62/000/006/008/032
E193/E383

temperatures T_3. To determine $P_A^{T_3}$ and F^{T_3} from Eqs. (2) and (4), ρ of the specimens was measured at 293 and 80 °K; a straight line $\rho = a + bT$ was then obtained for each specimen which, on extrapolating to $T = 0$ °K, gave the value of ρ_0; the slope of these curves gave the average value of $\alpha^{T_3} = (\partial\rho/\partial T)$. The results are reproduced graphically. The Young modulus (E, kg/mm^2) of the Cu+14.3 at.% Al alloy is plotted in Fig. 1 against the quenching temperature (T_3, °C). In Fig. 2, $P_A^{T_3}$ (lefthand scale, curves 3, 4) and F^{T_3} (righthand scale, curves 1, 2) are similarly plotted against the quenching temperature (T_3, °C) of pure (curves 1, 3) and technical-grade (curves 2, 4) alloys. Conclusions: 1) the changes in the electrical resistivity accompanying the variation in the degree of order in Cu-Al alloys are associated mainly with configurational redistribution of atoms, the changes in the structure of the Brillouin zones playing a much lesser part. 2) In common with the variation in other properties during the order-disorder transformation, the E/T_3 curve has a minimum. 3) The change brought about in

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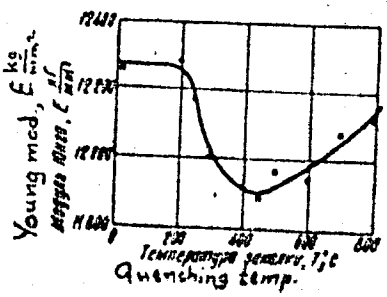
On the problem of S/139/62/000/006/008/032
E193/E383

the forces of atomic interaction by the order-disorder transformation in the Cu-Al alloys is very small, not exceeding 3%, for alloys quenched from 450 °C. There are 2 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva (Siberian Physicotechnical Institute of Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED: January 23, 1962



Card 4/4

Fig. 1:

S/126/62/013/006/008/018
E193/E383

AUTHORS: Panin, V.Ye., Fadin, V.P. and Dudarev, Ye.F.

TITLE: The effect of the quenching temperature on the kinetics of ordering in Cu-Al solid solutions

PERIODICAL: Fizika metallov i metallovedeniye, v. 13, no. 6, 1962, 886 - 893

TEXT: It has already been established that the electrical resistivity ρ of annealed Al-Cu alloys changes after quenching; at first, as the quenching temperature T_k increases ρ also increases, reaching a maximum at $T_k = 400\ ^{o}C$, and then decreases again to a value which after quenching from sufficiently high T_k may be lower than that of the annealed material. This anomalous behaviour indicates that Cu-Al alloys quenched from high temperatures are in a complex structural state, the nature of which has not yet been elucidated. The object of the present investigation was to study the effect of T_k on the kinetics of ordering of quenched specimens during subsequent heating. To this

Card 1/4

end, wire specimens (1 mm in diameter) of a Cu-Al alloy containing 14.3 at.% Al were quenched from 320, 600 and 900 °C and then either aged isothermally at various temperatures or heated up to 300 °C at heating rates of 0.6 and 6 °C per minute, electrical-resistance measurements being used to follow the resultant structural changes. The effect of T_k on the kinetics of ordering is clearly demonstrated in Fig. 1, where ρ ($\mu\Omega$cm) of various specimens is plotted against the ageing time (hours) at 1 - 130 °C, 2 - 150 °C, 3 - 180 °C, 4 - 200 °C, 1' - 60 °C, 2' - 90 °C, 3' - 100 °C and 4' - 130 °C, curves 1, 2, 3 and 4 relating to alloys quenched from 320 °C and 1', 2', 3' and 4' to alloys quenched from 600 °C; the broken horizontal line indicates the value of ρ of the annealed material. The activation energy for ordering was calculated to be about 21 kcal/mole for specimens quenched from 320 °C and 16.7 kcal/mole for those quenched from 600 °C. This difference was attributed to the fact that whereas ordering in specimens quenched from high temperatures is governed mainly by the high concentration of quenched-in vacancies, ordering in material quenched from

relatively low temperatures depends mainly on thermal vacancies. Increasing the value of T_k above 400 °C had practically no effect on the activation energy which, for specimens quenched from 900 °C, was about 16.7 kcal/mole. The rate of isothermal ordering of specimens quenched from 900 °C was also similar to that of specimens quenched from 600 °C; in this case, however, it was observed that side-by-side with ordering, which caused a decrease in ρ, another process leading to an increase in ρ took place. Although the nature of this second process cannot yet be explained, it indicates that changes other than order-disorder transformation take place in the alloy studied when it is heated to and quenched from temperatures equal to or greater than 900 °C; the fact that the alloy after this treatment becomes more difficult to age and that the difference in hardness between the material of the grains and the grain-boundary regions increases would indicate that redistribtuion of Al atoms takes place under these conditions. The results of isothermal studies were confirmed by the results of experiments in which quenched specimens were heated at a constant rate through a range of temperatures. In

this case, however, it was found that the rate of ordering depended also on the rate of heating. On increasing the rate of heating, the temperature at which ordering began was shifted towards higher values. The results of the present investigation indicate clearly the importance of selecting the correct quenching temperature in studies of the disorder-order transformations and, particularly, of avoiding too high quenching temperatures. There are 3 figures and 1 table.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete (Siberian Physico-technical Institute of Tomsk State University)

SUBMITTED: July 19, 1961

S/126/62/014/001/004/018
E193/E383

AUTHORS: Fadin, V.P., Panin, V.Ye. and Dudarev, Ye.F.

TITLE: A study of the nature of the change of state of Cu-Al solid solutions during heat-treatment

PERIODICAL: Fizika metallov i metallovedeniye, v. 14, no. 1, 1962, 35 - 40

TEXT: In spite of extensive studies on this subject, the nature of the solid-state transformations in Cu-Al alloys has not yet been fully elucidated. Although the majority of workers associate these changes with the variation of short-range order in alloys of this type, it has been postulated that excess vacancies also play an important part in these phenomena, the problem being complicated by the fact that in alloys of compositions near to the solid-solubility limits, secondary processes, associated with changes in the solid-solubility limit, may take place - hence the present investigation, in which the changes taking place in a Cu - 14.3 at.% Al alloy were studied with the aid of electrical-resistivity and specific-gravity measurements. All the test pieces were given

Card 1/04

preliminary vacuum heat-treatment, consisting of 2 h at 750 °C followed by cooling at a rate of 50 °C/h. In the first series of experiments the kinetics of disorder-order transformation were studied on specimens which, after quenching from 600 °C (to ensure formation of excess vacancies) had been held for 1 h at 100 °C which, according to the present authors, was sufficient to bring the alloy to the state of equilibrium. The results are reproduced in Fig. 1, where the electrical resistivity (, μΩcm) is plotted against time (min) at 130, 150, 180, 200, 250 and 300 °C (curves 1-6, respectively); curve 7 represents the kinetics of the order-disorder transformation in specimens ordered by quenching from 320 °C and then aged at 200 °C. The results of the next series of experiments are reproduced in Fig. 2, where the change in (, μΩcm) is plotted against the quenching temperature (T_{300}, °C), curves 1 and 2 relating, respectively, to annealed specimens and specimens ordered by the special treatment described above. Since it has been

postulated that the ascendance of the $\rho = f(T_{...})$ curve above 200 °C is associated with the presence of quenched-in vacancies, the increase in due to this factor was determined. This necessitated determination of the energy of formation of the vacancies ΔH_f, whose value of 17.4 kcal/mole was calculated from the slope of the $\ln(v_o) = f(1/T_{30K})$ curve, where v_o is the rate of change in . The results are plotted in Fig. 2, where curve 3 represents the increase in due to the presence of quenched-in vacancies. The results of the resistivity measurements were confirmed by the results of density determination. Some of these are reproduced in Fig. 4, where the relative change in density ($\Delta d/d_o$, lefthand scale, curve 1) and the increase in the lattice parameter ($\Delta a \times 10^6$ Å, righthand scale, curve 3) are plotted against T_{30K} (°C); curve 2 represents the change in density of the alloy due to formation of quenched-in vacancies. The general conclusion

A study of S/126/62/014/001/004/018
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reached was that several phenomena may occur in Cu-Al solid solutions at high temperatures; order-disorder transformations, changes in the concentration of vacancies, migration of Al atoms from the interior of the grains to the grain boundaries in specimens quenched from high temperatures, and processes associated with the variation in the solid-solubility limit. The latter factor does not operate in Cu - 15 at.% Al alloys and if the high quenching temperature is excluded it can be stated that the main causes of changes observed in the alloy studied at high temperatures are order-disorder transformation, the part played by excess vacancies being negligible. There are 4 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy nauchno-issledovatel'skiy institut (Siberian Physico-technical Scientific Research Institute)

SUBMITTED: November 4, 1961

Card 4/4

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R000411420014-4"

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R000411420014-4"

PANIN, V.Ye.; DUDAREV, Ye.F.; SIDOROVA, T.S.; BOL'SHANINA, M.A.

Suzuki atmospheres and their contribution to the hardening of hard alloys. Fiz. met. i metalloved. 16 no.4:574-582 O '63. (MIRA 16:12)

1. Sibirskiy fiziko-tekhnicheskiy institut.

PANIN, V.Ye.; DUDAREV, Ye.F.; BOL'SHANINA, M.A.

Suzuki atmospheres in brass and aluminum bronze. Dokl. AN SSSR 152 no.1:92-95 S '63. (MIRA 16:9)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete im. V.V.Kuybysheva. Predstavleno akademikom G.V.Kurdyumovym.
(Brass--Metallurgy) (Aluminum bronze--Metallurgy)

A[illegible]048863

[illegible] Dudarev, Ye. P. Vol'shanin[illegible]

[illegible]ovens and their importance in [illegible]

[illegible] seven pe[illegible] [illegible] and alloys. Mo[illegible]

[illegible] metal str[illegible]

[illegible] equilibrium equations, the author [illegible] [illegible] energy. Fig. [illegible]

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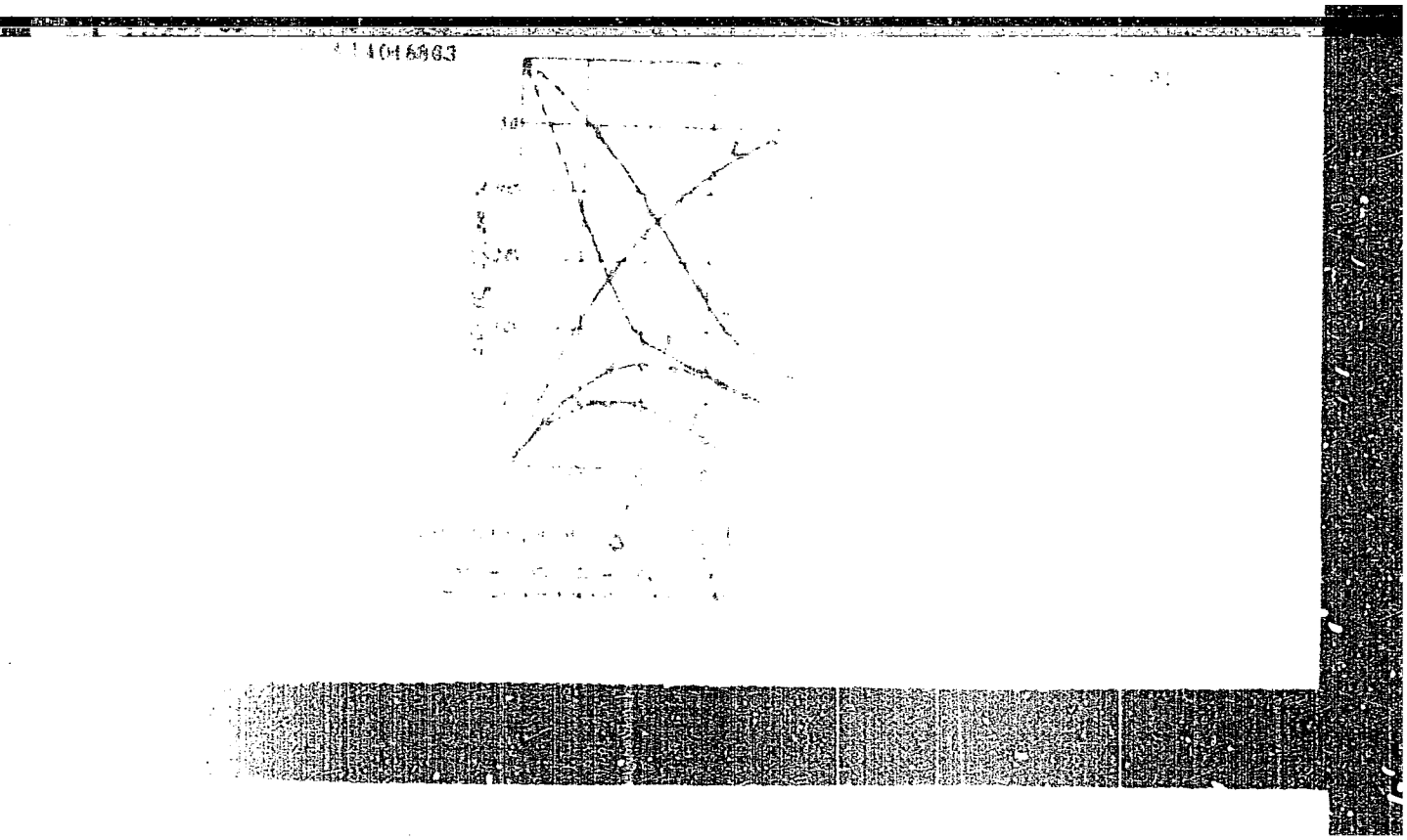
OTHER: 005



DUDAREV, Ye.F.; PANIN, V.Ye.

Suzuki atmospheres in the series of copper solid solutions. Fiz. met. i metalloved. 17 no.4:578-583 Ap '64. (MIRA 17:8)

1. Sibirskiy fiziko-tekhnicheskiy institut.

DUDAREV, Ye.F.; PANIN, V.Ye.; NIKITINA, N.V.

Temperature dependence of impurity concentration in Suzuki atmospheres in a number of solid solutions. Fiz. met. i metalloved. 17 no.6:924-930 Je '64. (MIRA 17:8)

1. Sibirskiy fiziko-tekhnicheskiy institut.

DUDAREV, Ye.F.; PANIN, V.Ye.; SIDOROVA, T.S.

Nature of the yield strength of copper-base solid solutions. Fiz. met. i metalloved. 18 no.2:288-293 Ag '64. (MIRA 18:8)

1. Sibirskiy fiziko-tekhnicheskiy institut.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R000411420014-4"

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DUDAREV, Ye.F.; PANIN, V.Ye.; BUSHNEV, L.S.; RUDCHENKO, V.V.; SIDOROVA, T.S.

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