High-Speed Magnetic Amplifier for Servo Systems   105-58-6-11/33

does not show the deficiencies characteristic for the ordinary magnetic amplifiers, viz. lagging does not exceed one frequency period of the supply-source and due to a corresponding selection of parameter, the reaction of the output of the circuit on the input is intensely weakened, which guarantees a sufficient directivity in the transfer of energy. 3) The lack of a phase-displacement between amperage and voltage in each circuit of the scheme at all time-intervals of the period attributes to the accurate operation of the scheme. 4) The lagging of the amplifier is only determined by the frequency of the supply-source and does not depend on other circuit parameters. A very small lag can be obtained by increasing the frequency without simultaneous reduction of the amplification-factor. 5) The method of calculation proposed here, is based on the condition that a conformity between the signal-source and the amplifier-input is guaranteed within the control range, whereas this conformity is disturbed within the operational range. This makes it possible to obtain sufficiently high amplification factors without disturbance of the signal-source operation by the e.m.f

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High-Speed Magnetic Amplifier for Servo Systems   105-58-6-11/33

induced into the control windings.
6) The calculation of the amplifier is simple and enable the constructor to find an adequate solution.
7) With cascading, the summary lagging of the amplifier increases by a half-period of the carrier-frequency per cascade.
8) The coefficient of amplification of the circuit is determined by the characteristics of the valves and of the core-material, as well as by the grade of manufacture of the latter.
9) The investigations given here do not comprise all cases of the application of this amplifier.
There are 5 figures and 6 references, 4 of which are Soviet.

SUBMITTED: April 11, 1957

1. Magnetic amplifiers--Design   2, Magnetic amaplifiers--Circuits
3. Servo systems--Equipment   4. Mathematics

Card 3/3

KUDRYAVTSEVA, G.I., aspirant

Fast magnetic amplifier. Trudy MEI   no.27:243-258 '58.

(Magnetic amplifiers)   (MIRA 13:4)

KUDRYAVTSEVA, G. I., Candidate Tech Sci (diss) -- "The theory and computation of a high-speed magnetic amplifier for follower systems". Moscow, 1959. 12 pp (Min Higher Educ USSR, Moscow Order of Lenin Power Engineering Inst), 150 copies (KL, No 24, 1959, 137)

KUDRYAVTSEVA, G. I.

Elektroprivod i avtomatizatsiya proizv_lennykh ustanovok; trudy soveshchaniya (Electric Drive and Automation in Industrial Systems; Transactions of the Conference) Moscow, Gosenergoizdat, 1960. 470 p. 11,000 copies printed.

General Eds.: I.I. Petrov, A.A. Sirotin, and N.G. Chilikin; Eds.: I.I. Sod, and L.F. Silayev; Tech. Ed.: L.F. Voronin, and G.Ye. Larionov.

PURPOSE: The collection of reports is intended for the scientific and technical personnel of scientific research institutes, plants and schools of higher education.

COVERAGE: The book is a collection of reports submitted by scientific workers at ... scientific institutes and schools of higher education at the third joint All-Union Conference on the Automation of Industrial Processes in Machine Building and Automated Electric Drives in Industry held in Moscow on May 12-16, 1959. The Conference was called by the Academy of Sciences USSR, the Gosplan SSSR (State Planning Commission USSR), the GNTK SSSR, the Gosudarstvennyy Komitet po avtomatizatsii i mashinostroyeniya (State Committee on Automation and Instruction Building) and the Natsional'nyy Komitet SSSR po avtomaticheskomu upravleniyu (USSR National Committee on Automatic Controls) and prepared by the Moskovsko-tekhnicheskiy komitet po avtomatizirovannomu elektroprivodu (Scientific and Technical Committee on Automated Electric Drives), the MEI (Moscow Institute of Energetics), the LPI (Institute of Automation and Telemechanics of the Academy of Sciences USSR, and the Institut po tekhnologii mashinostroy-...), the Institut mashinovedeniya AN SSSR (Committee on Technology of Machine Building of the Institute of Science of Machines of the Academy of Sciences USSR).

It was the purpose of the Editorial Board to arrange the reports in a way which would ensure a relatively systematic presentation of theoretical and practical problems relating to electric drives and automatic controls of industrial machines used in various branches of industry. Basic problems of automated electric drive machinery and their solution are outlined. The book also contains articles on electric contact automatic control systems. Considerable attention is paid to non-synthesis of linear and nonlinear automatic regulation and control systems. Reports already published in journals or official publications have been considerably abbreviated; those which have appeared in volume I of III IP transactions ... or in the journal "Elektrichestvo" are marked with an asterisk. No personalities are mentioned.

Reference accompany some of the reports.
PART I. GENERAL PROBLEMS CONCERNING THE THEORY AND PRACTICE OF ELECTRIC DRIVE AND AUTOMATION OF CONTROL

Butrimovich, M. M., Doctor of Technical Sciences, and I.I. Sarpova, Engineer. Synchronous Induction Machine and Prospects of Its Application   41

Gorvishnov, P.A., Docent, Candidate of Technical Sciences. High-Power Rotating Amplifiers   42

Tcharev, B.F., Docent, Candidate of Technical Sciences. Rotating Amplifiers with Longitudinal Field   47

Adin, V.I., Engineer. Rotating Amplifiers of Transverse Field with Radial Fields   49

Logvinov, I.N., Candidate of Technical Sciences. Motor-Amplifiers Combining a Magnetic Amplifier with an Electric Machine   50

Probotkine, B.A., and A.A. Mirorov, Engineers. Ways of Improving the Quick Operation of Step-by-Step Electric Motors   5

Arve, O.B., Professor, Doctor of Technical Sciences. Construction Problems of Modern Low-Voltage Equipment   58

Marphin, Ruud., and M.A. Mirmiskiy, Engineer. Interlocking Control with the Use of Standard Coils of Low-Current Equipment   53

Sidorenko, V.N., Candidate of Technical Sciences. Magnetic Amplifiers for Automatic Control Systems and the Regulation of Industrial Electric Drives   54

Hleman, A.A., Engineer, and I.S. Bogoritskiy, Docent, Candidate of Technical Sciences. Calculation of Single-Cycle Magnetic Amplifiers with Self-Magnetization   53

Beygelman, G.D., Engineer. Some Theoretical and Practical Problems Relating to High-Speed Magnetic Amplifiers for Investigation   45

Butakov, L.M., Engineer. Physical Simulation of Elevated-Frequency Electric Systems   46

Pulnan, P.N., Doctor of Technical Sciences. Improving Reliability and Accuracy of Long-Distance Transformer Transmissions   48

Berlition, V.G., Candidate of Technical Sciences. High-Efficiency Semi-conductor Amplifier for the Control of Electric Machine Excitation   46

ROKACHEVSKAYA, O.P.; VOLOKHINA, A.V.; KUDRYAVTSEVA, G.I.

Copolymerization of hexahydro-p-aminobenzoic acid lactam with
ε-caprolactam and ξ-enantholactam. Vysokom. soed. 7 no.6:
1092-1097 Je '65.
(MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

SHKORBATOV, G.L.; KUDRYAVTSEVA, G.S.

Changes in the heat- and cold-resistance of fish tissues as related to the temperature conditions of the environment. Dokl. AN SSSR 156 no. 2:452-454 My '64.   (MIRA 17:7)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo. Predstavleno akademikom Ye.N. Pavlovskim.

GLEZER, G.Ya.; VOL'FSON, N.I.; KUDRYAVTSEVA, G.Ya.

Method for obtaining cellular suspensions of human and animal tumors.   Trudy Len.khim.-farm.inst. no.13:133-141 '62.

(MIRA 15:10)

1. Laboratoriya eksperimental'noy onkologii Instituta onkologii AMN SSSR (zav. prof. L.M.Shabad) i kafedra anatomii i fiziologii Leningradskogo khimiko-farmatsevticheskogo instituta (zav. dotsent A.V.Loginov).

(ONCOLOGY--RESEARCH)

KUDRYAVTSEVA, I.D.; MINKINA, L.N.; SEMCHENKO, V.D.; POPOV, S.Ya.;
        SMIRNOV, V.A.

    Electrolytic iron plating in ammonium chloride electrolytes.
    Trudy NPI 146:55-59 '64.   (MIRA 18:11)

ACCESSION NR: AR4000490 - - --- - - .. S/0124/63/000/010/V008/V008

SOURCE: RZh. Mekhanika, Abs. 10V63

AUTHOR: Kudryavtseva, I. M.

TITLE: Temperature stresses in a bimetallic plate

CITED SOURCE: Sb. nauchn. tr. Vses. zaochn. mashinostroit' in-t, vy*p. 3, 1961, 25-35

TOPIC TAGS: bimetallic plate, temperature stress, two dimensional stress, circular plate, bimetallic circular plate, bimetallic plate temperature stress, circular bimetallic plate

TRANSLATION: The problem is solved of the planar (z, r) stressed state of a bimetallic circular plate, butt-welded without initial stresses and heated to a temperature $t = $ constant. The external plane of the plate is free. The curvilinear surface of the plate is rigidly clamped along the line of the weld $(z = 0, r = R)$. In the plane of the weld $(z = 0)$ the displacements and their derivatives along the normal z are identical for both plates. M. S. Poyarnitsyn

DATE ACQ: 14Oct63   SUB CODE: AP   ENCL: 00
Card   1/1

KUDRYAVTSKVA, I.V., referent, professor.

On residual stresses in statically loaded beams. Metalloved.1
obr.met. no.4: 59-60 0 '55.
       (Strains and stresses)(Girders)   (MLRA 9:3)

DYMARCHUK, N.P., kand. khim. nauk; KUDRYAVTSEVA, I.V., inzh.;
    MISHCHENKO, K.P., doktor khim. nauk; TALMUD, S.L., kand. khim. nauk

Thermodynamics of woodpulp interaction with water and aqueous
solutions of electrolytes. Report No.5: Comparing the "active"
surfaces and heat of interaction with water of unbleached pulp
and viscose cellulose obtained therefrom before and after
fractionization. Trudy LTITSBP no.10:57-64 '62.

                                        (MIRA 16:8)
        (Woodpulp)   (Heat of wetting)   (Electrolytes)

DZHAMALOV, S.A.; KUDRYAVTSEVA, K.A.

Applying the flow factor for the determination of a depression
curve. Trudy Geol.inst.Dag.fil. AN SSSR 2:252-255 '60.

(MIRA 15:12)

(Water, Underground)

KUDRYAVTSEVA, K.F.

USSR/Zooparasitology - Rodents and Insect-Vectors of Disease   G-2
        Pathogens.

Abs Jour   :   Ref Zhur - Biol., No 5, 1958, 19624

Author   :   Kudryavtseva, K.F.
Inst   :
Title   :   Preliminary Results of Investigation by Use of Traps of
               Woodchuck Burrows on Bogs of the Irgyz-Gai District.

Orig Pub   :   Tr. Sredne-Aziatsk. n.-i. Protivochum. In-ta, 1956,
               No 4, 109-165

Abstract   :   By use of flannel and gauze tapes (2 m in length), 35
               Oropsylla silantiewi, 315 Rhadinopsylla ventricosa and
               1024 ticks Ixodes crenulatus and Dermacentor marginatus
               were obtained from 765 entrances to woodchuck burrows.
               Migration of fleas (chiefly Rh. ventricosa) and ticks
               occurs toward the peripheral portion of the burrow.
               It is increased after the animal's death. However, the
               major part of O. silantiewi remain in the nest. The

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Urah, Ecoparasitology - Acarina and Insect-Vectors of Disease   C-1
            Pathogens.

Abs Jour   : Ref Zhur - Biol., No 5, 1958, 19604

            migrating ectoparasites served the author as an indirect
            indicator of the presence of a nest in a given burrow.

Card 2/2

SHVARTS, Ye.A.; KUDRYAVTSEVA, K.F.; GREBENYUK, R.V.

Fleas of the eastern Tien Shan. Izv. AN Kir. SSR. Ser. biol. nauk
2 no.7:101-117 '60.

(TIEN SHAN—FLEAS)   (MIRA 14:6)

KUDRYAVTSEVA, K.P.; ZHUKOVETS, M.S.; ARUTYUNOV, I.S.; NOGAYEV, B.N.;
SPITSYN, V.V.; RYAKINA, M.A.; NEKHAYEVA, G.G.; IKAYEV, N.V.;
AVRAMENKO, L.M.; TSOGOYEV, T.Kh., otv.red.; BAYMATOV, P.S.,
tekhn.red.

[Economy of the North Ossetian A.S.S.R.; statistics] Narodnoe
khoziaistvo Severo-Osetinskoi ASSR; statisticheskii sbornik.
Ordzhonikidze, 1958. 130 p.   (MIRA 12:10)

1. North Ossetian A.S.S.R. Statisticheskoye upravleniye.
2. Nachal'nik Statisticheskogo upravleniya Severo-Osetinskoy
ASSR (for TSogoyev).
                    (Ossetia--Statistics)

SUSAREV, M.; KUDRYAVTSEVA, L.

Determining the region in which the composition of a three-component
azeotrope is located in a concentration triangle. Izv. AN Est. SSR.
Ser. fiz.-mat. i tekh. nauk 12 no.2:212-217 '63.   (MIRA 16:10)

1. Academy of Sciences of the Estonian S.S.R., Institute of Chemistry.

KUDRYAVTSEVA, L.

Chuvash, A. S.S.R. - Bee Culture

Keeping bees in two-body hives in Chuvash. Pchelovodstvo, 29, No. 9, 1952

Unclassified.

SUSAREV, M.; KUDRYAVTSEVA, L.

Definition of the concentration region of the temperature
shift in a ternary azeotrope system. Izv. AN Est. SSR, Ser.
fiz.-mat. i tekh. nauk 12 no.3:312-319 '63.   (MIRA 16:11)

1. Institute of   Chemistry of the Academy of Sciences of
the Estonian S.S.R. and Leningrad State University.

EYZEN, Yu. [Eisen, J.]; KUDRYAVTSEVA, L., kand. khim. nauk; RANG, S., kand. khim. nauk; EYZEN, O. [Eisen, O.], kand. tekhn. nauk

Relative retention time of hydrocarbons in gas chromatographic analysis. Izv. AN Est. SSR. Ser. fiz.-mat. i tekh. nauk 13 no.3: 234-240 '64.   (MIRA 17:11)

1. Institut khimii AN Estonskoy SSR.

EYZEN. O. [Eisen, O.], kand.tekhn.nauk; KUDRYAVTSEVA, L., kand.khim.nauk;
RANG, S., kand.khim.nauk

Isomerization of olefin in chromatographic operations on silica
gel. Izv. AN Est. SSR. Ser. fiz.-mat. i tekh.nauk no.4:275-284
'64.

Study of adsorption chromatography on silica gel in group analysis
of liquid fuel. Ibid.:285-289   (MIRA 18:4)

1. Academy of Sciences of the Estonian S.S.R., Institute of
Chemistry.

KIRRET, O.; EYZEN, O. [Eisen, O.], kand.tekhn.nauk; KUDRYAVTSEVA, L., kand.
khim.nauk; RANG, S., kand.khim.nauk

Adsorptivity of some hydrocarbons in chromatographic operations
on silica gel. Izv. AN Est. SSR. Ser. fiz.-mat. i tekh.nauk
no.4:267-274 '64.   (MIRA 18:4)

1. Institut khimii AN Estonskoy SSR. 2. Chlen-korrespondent
AN Estonskoy SSR (for Kirret).

KUDRYAVTSEVA, Lidiya Aleksandrovna

[Underwater lavage of the large intestine as a therapeutic measure]
Subakval'nye promyvaniia tolstogo kishechnika kak lechebnyi metod.
Moskva, Medgiz, 1958. 106 p.   (MIRA 12:3)
(ENEMA)

KUDRYAVTSEVA, L. A.

"Determination of the Relative Values of Survace Energies" p. 139-145, in the book Research in the Physics Solids, Moscow, Izd-vo AN SSSR, 1957. 277 pp. Ed. Bol'shanina, M. A., Tomsk Universitet, Siberskiy fiziko-tekhnicheskiy institut.

Peronalties: Kuznetsov, V. D.; Rebinder, A.P.; Shreyner, L. A.; Loskutov, A. I.; Boyarskaya, Yu. S.; Maslov, Ye. N; Troitskiy, A. V.; Kachalov, N. N.; Kashcheyev, V. N.; and Fersman, A. Ye. Materials studied: monocrystals of alkali metal halides, There are 2 figures, 4 tables, and 11 Soviet references.

This collection of articles is meant for metallurgical physicists and for engineers of the metal-working industry. This book contains results of research in the field of failure and plastic deformation of materials, mainly of metals. Problems of cutting, abrasion, friction, and wear of solid materials (metals) are discussed.

KUDRYAVTSEVA, L.A., Cand Phys-Math Sci--(diss) "On the problem of
experimental determination of surface energy of crystals of halides
of alkaline metals." Tomsk,1958. 7 pp (Min of Higher Education USSR.
Tomsk State Inst im V.V. Kuybyshev), 100 copies (KL,30-58,122)

-/2-

KUDRYAVTSEVA, L.A.

AUTHOR: Savitskiy, K.V., Kudryavtseva, L.A.   32-9-23/43

TITLE: Investigation of the Influence Exercised by Various Factors upon
            Strength by the Method of Scratching (Vliyaniye razlichnykh fakto-
            rov na tverdost' po metodu tsarapaniya)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 9, pp.1104-1108 (USSR)

ABSTRACT: Here strength is investigated by the method of scratching by the
            modification of the outside temperature, consolidation as well as
            the temperature and velocity at, and with which scratches are
            caused. A nearly proportional relation between stress at the point
            and the square of the width of the scratch, which is exceeded only
            at very great stresses, is determined. It is shown that in the case
            of low stresses the strength determined by the method of scratching
            is insensitive to consolidation and grows with an increase of con-
            solidation in the case of sufficiently strong stress. Therefore,
            the causing of deep scratches cannot even be used for an approxi-
            mate evaluation of the true tearing resistance. The temperature
            during the experiment exercises essential influence upon the strength
            (which was determined according to the scratching method). This is
            the case not only at temperatures of real resting, but also at such
Card 1/2   temperatures as cause the reduction of plasticity at the cost of a

Investigation of the Influence Exercised by Various Factors upon Strength by the
Method of Scratching

32-9-23/43

modification of the state of the structure of the alloy. It is
shown that the velocity of scratching leads to a decrease of the
depth and width of the scratch. This influence is, however, greater
in the case of scratching depth than in the case of scratching
width. It is assumed that the reason for this is to be found in
the modification of the geometry of the scratching cone because
of its forming crusts. There are 4 figures, 2 tables, and 13 refe-
rences, 10 of which are Slavic.

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

AVAILABLE: Library of Congress

Card 2/2

10. 1100

3, 5/20

28404
S/169/61/000/007/055/104
A006/A101

AUTHOR: Kudryavtseva, L.A.

TITLE: Results of measuring, by means of a rocket, the vertical distribution of atmospheric ozone

PERIODICAL: Referativnyy zhurnal. Geofizika, no. 7, 1961, 23, abstract 7B150 ("Tr. Tsentr. aerol. observ.", 1960, no. 37, 24 - 29)

TEXT: The author presents results of measuring the vertical distribution of atmospheric ozone, carried out with the aid of a meteorological rocket on October 1, 1958. The measurements were made with the use of an automatic spectrograph with a servo-mechanism directing the slit continuously toward the Sun. The spectrograph was lifted at 19° declination of the Sun. Photographs were obtained of the solar spectra in the ultraviolet range taken at various altitudes up to 24 km. An analysis of the spectrograms resulted in plotting a curve for the vertical distribution of ozone in the 0 - 24 km layer. Calculations were made with the aid of the Buge formula and the method of consecutive approximations. Maximum ozone content was discovered in th 20 - 23 km layer; the

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28404

Results of measuring, ...

S/169/61/000/007/055/104
A006/A101

ozone density at this altitude was 17.5×10^{-3} cm/km (the Vigru coefficient of ozone absorption). The results obtained were compared with data of some ground measurements of the vertical ozone distribution.

G. Gushchin

[Abstracter's note: Complete translation]

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S/126/61/012/006/023/023
E193/E383

AUTHORS: Panin, V.Ye., Kudryavtseva, L.A., Sidorova, T.S.
and Bushnev, L.S.

TITLE: Intergranular internal adsorption in Cu-Al solid
solutions during quenching from elevated temperatures

PERIODICAL: Fizika metallov i metallovedeniye, v. 12, no. 6,
1961, 927 - 928

TEXT: Since solubility of Al in Cu above 565 °C decreases
with increasing temperature, it was postulated by
V.I. Arkharov (Ref. 1 - Trudy IFM AN SSSR, no.23, 1960, p.87)
that internal intergranular adsorption of Al may take place in
concentrated Cu-Al solid solutions at sufficiently high
temperatures, this phenomenon being associated with the
influence of a so-called "pre-precipitation" factor [Abstracter's
note: "pre-precipitation" is used instead of the term
"preparation to precipitation", which is the literal translation
of the term used in the original]. To check this hypothesis,
the present authors compared internal friction, etching

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Intergranular internal adsorption...E193/E383

S/126/61/012/006/023/023

characteristics, microhardness, lattice parameter and electrical resistance of Cu-Al alloys with 14.3 and 14.9 at.% Al, water-quenched from 900 °C or annealed (i.e. slowly cooled from high temperatures). The existence of granular adsorption was clearly indicated by the results of internal-friction measurements reproduced in a figure, where

Q^{-1} is plotted against the test temperature of Cu + 14.3 at.% Al (broken curve) and Cu + 14.9 at.% Al (continuous curve) alloys, Curves 1 and 2 relating to annealed, Curves 1' and 2' to quenched specimens. The sharp decrease in the magnitude of the internal-friction peak of quenched alloys is obviously due to increased concentration of Al atoms at the grain boundaries. This conclusion was confirmed by the results of other tests. Thus, whereas there was no difficulty in revealing the grain boundaries of annealed specimens by etching in concentrated HNO_3, the grain boundaries in quenched specimens

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Intergranular internal adsorption ...   E193/E383

could be revealed only by electrolytic etching. The difference between the microhardness in the interior of the grains and in the grain boundary regions was 29 kg/mm^2 for annealed and 43 kg/mm^2 for quenched specimens. Similarly, the lattice parameter (in the interior of the grains) was 3.6413 Å in annealed and 3.6406 Å in quenched Cu-Al alloying with 14.9 at.% Al. Finally, in contrast to specimens quenched from low (400 - 600 °C) temperatures, the electrical resistance of alloys quenched from 900 °C increased during subsequent heat treatment, provided it was carried out at sufficiently high temperatures and for a sufficiently long time. This increase was no doubt caused by the diffusion of Al atoms from the grain boundaries into the interior of the grains, which provided yet another proof of the authors' theory regarding the possibility of internal intergranular adsorption in alloys of systems such as Al-Cu or Cu-Zn, in which the solid solubility decreases with increasing temperature.

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Intergranular internal adsorption ...   S/126/61/012/006/023/023
                                          E193/E383

There are 1 figure and 8 Soviet-bloc references.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut
               (Siberian Physicotechnical Institute)

SUBMITTED: August 5, 1961

Figure:
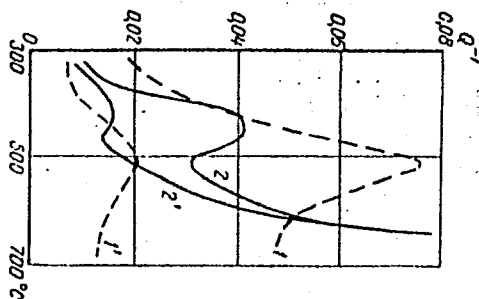
Card 4/4

S/139/62/000/003/012/021
E193/E383

AUTHORS: Kudryavtseva, L.A. and Panin, V.Ye.

TITLE: The temperature-dependence of internal friction of
             Cu-Al solid solutions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,
             no. 3, 1962, 93 - 98

TEXT: In undertaking the present investigation, the authors
were prompted by the lack of understanding of the nature of
transformations taking place in Cu-Al alloys and leading to
anomalous variation in the properties of these alloys on heating.
The main objective was to establish whether the alloys obeyed
laws typical of ordering alloys and, if so, how these laws were
affected by various factors such as thermal history of the alloy,
presence of impurities, etc. To this end internal-friction
measurements were carried out at temperatures between 18 and
700 °C on high-purity, vacuum-melted alloy containing 14.3 at.%
Al and on commercial-grade Al bronzes (14.9 at.% Al) which, among
other impurities, contained 0.025% phosphor. The results for the

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The temperature-dependence E193/E383

high-purity alloy are reproduced in Fig. 1, where the internal friction (Q^{-1}) is plotted against temperature (°C), curve 1 relating to homogenized material (6 hours at 900 °C, cooling at 50 °C/h to 600 °C, 3 hours at 600 °C, furnace-cooling to room temperature), curves 2-4 to specimens quenched from 500, 700 and 900 °C, respectively. Similar curves for the commercial-grade bronze are reproduced in Fig. 2. Several conclusions were reached.
1) The results obtained confirmed the view that the disorder-order transformation took place in the alloys studied.
2) The character of the temperature-dependence of internal friction of this alloy depended on its thermal history and the degree of its purity.
3) The internal-friction background increased with increasing quenching temperature, reached a maximum for a certain temperature T_o and then decreased again. Increasing the degree of purity of the alloy shifted T_o towards lower temperatures.

4) An additional internal-friction peak at 70 °C appeared in

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The temperature-dependence S/159/62/000/003/012/021
E193/E383

the alloy containing 0.025% P; this peak was attributed to the
diffusion of the impurity atoms.
5) Quenching from high temperatures brought about a sharp
decrease in the height of the internal-friction peak associated
with grain-boundary relaxation. This effect was reversible
and indicated that intergranular internal absorption might take
place in the alloy studied. There are 3 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: March 29, 1961

Card 3/4

S/659/62/008/000/021/028
I048/I248

AUTHORS: Panin, V.Ye., Zenkova, E.K., Fedin, V.P., and
Kudryavtseva, L.A.

TITLE: The problem of high-temperature diffusion transformations
in solid solutions

SOURCE: Akademiya nauk SSSR. Institut metallurgii, Issledovaniya
po zharoprochnym splavam. v.8. 1962. 161-168

TEXT: The alloys (Cu + 14.9% Al, Cu + 14.9% Al + 0.025% P, Cu +
14.9% Al, + 0.06% P, all percentages atomic) were homogenous solid
solutions up to 1030°C. The electric resistivity of the alloys (ρ),
measured at room temperature, was a function of the quenchin tem-
perature (T_q), reaching a maximum value of 10.48 and 11.02 microohm.
cm. for pure and P-containing alloys respectively at T_q=400-500°C.
The ρ of the alloys quenched in water was higher than that of the
alloys cooled in air. The hardness (H_v) - T_q relationship was simi-
lar to the ρ - T_q one, with $H_{v(max)}$ = 55 kg./sq.mm. for the pure

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I048/I248

The problem of high-temperature diffusion...

alloy quenched from 450° in water. This indicates that the increase
in ρ is not caused by excessiv vacancies in the alloy, and that the
P from the P-containing alloys combines with the vacancies reducing
their mobility. Both ρ and H_v in the alloys quenched from   700°C
are lower than in non-quenched specimens, indicating the existence
of a highly ordered structure in the alloys quenched from high-
temperatures. During annealing, ρ decreases with time at the an-
nealing temperature, the decrease in the pure alloys being much
larger than in the P-containing ones, i.e., the stability of the
quenched state is much higher in P-containing alloys. The energy of
activation of the diffusion processes increases with the P content
of the alloy and reaches 35 ± 3.7 kcal./mole in an alloy containing
0.06% P, which is almost twice the value for the pure Cu-Al alloy;
due to the decreased mobility of vacancies in the P-containing al-
loys. Diagrams show the effect of temperature on the electric re-
sistivity and internal friction in the alloys. In the friction

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S/659/62/008/000/021/028
I048/I248

The problem of high-temperature diffusion...

diagram for pure alloy maxima at 260°C and 520°C are associated with the motion of the constituent atoms, and with stress relaxation on the grain boundaries respectively. The internal friction in pure alloy specimens quenched from 700-900°C and in the alloys containing P is much lower than in the annealed pure alloy; this proves that the specimens quenched from high temperatures possess an ordered structure, and that the P from the P-containing alloys reduces the mobility of defects within the alloy. There are 3 figures.

Card 3/3

44833

S/560/62/000/014/004/011

A001/A101

3,5120

AUTHORS: Yakovleva, A. V., Kudryavtseva, L. A., Britayev, A. S., Gerasev,
V. F., Kachalov, V. P., Kuznetsov, A. P., Pavlenko, N. A.,
Iozenas, V. A.

TITLE: A spectrometric investigation of the ozone layer up to 60-km alti-
tude

SOURCE: Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli. no. 14, 1962,
57 - 68

TEXT: The vertical distribution of ozone can be determined from the scat-
tered ultraviolet radiation of the Sun, using reversal effect discovered by
Götz, or by direct measurements from the ground surface and from balloons or
rockets. In order to compare these indirect and direct methods, simultaneous
measurements of altitude ozone distribution with a spectrograph lifted by a
rocket and with a ground spectral equipment for observations of ultraviolet
light scattered from the sky zenith, were carried out in the USSR on June 15,
1960. A photoelectric spectrophotometer with double light decomposition in

Card 1/5

A spectrometric investigation of the...

S/560/62/000/014/004/011
A001/A101

quartz prisms was used for observations from the ground surface. The amount of ozone in various atmospheric layers, total amount and the altitude of the gravi- ty center of the ozone layer from these observations are shown in Table 1. The first ascent of a rocket for ozone measurements took place on July 19, 1955. It turned out that all ozone was concentrated in two layers: 13 - 26 km and 50 - 64 km, between which no ozone was detected. The second rise was on October 1, 1958, at a Sun's declination of 19°. The third attempt was made on June 15, 1960. A diffraction spectrograph provided with a tracking device was lifted on a geophysical rocket. The results of Soviet measurements are compared with American ones and presented graphically in Figure 5. Comparison between in- direct determinations and measurements from rockets is shown in Figure 6; the agreement between them was found to be satisfactory, but the final answer on their equivalence can be obtained only after further investigations with rock- ets. There are 6 figures and 3 tables.

SUBMITTED: December 12, 1961

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A spectrometric investigation of the...

S/560/62/000/014/004/011
A001/A101

Table 1. Concentration of ozone in various atmospheric layers according to data
of ground measurements on June 15, 1960

Altitude of layers, km	Content of ozone in the layer, cm	Content of ozone per 1 km, cm.km
0 - 12	0.0257	0.00214
12 - 24	0.1130	0.00942
24 - 36	0.1470	0.01225
36 - 42	0.0126	0.00210
42 - 48	0.00348	0.00058
48 - 54	0.000970	0.00016

Total content is 0.303 cm
The gravity center of the ozone layer is at 24 km.

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A spectrometric investigation of the...

S/560/62/000/014/004/011
A001/A101

Figure 5. Rocket measurements of
ozone vertical distribution
Legend: 1 - measurement of
October 10, 1946 (USA);
2 - April 2, 1948 (USA);
3 - June 14, 1949 (USA);
4 - October 1, 1958 (USSR);
5 - June 15, 1960 (USSR).
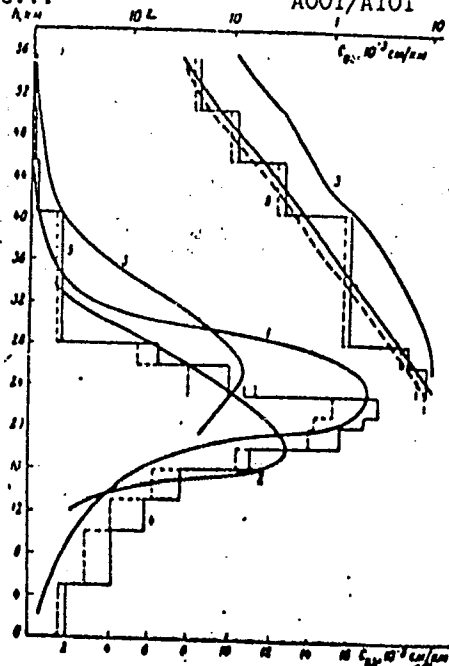
Card 4/5

A spectrometric investigation of the...

S/560/62/000/014/004/011
A001/A101

Figure 6. Comparison of data on ozone vertical distribution obtained in direct measurements from rockets and by calculations: a - measurements of April 2, 1948 (USA); b - measurements of June 15, 1960 (USSR)
Legend: 1 - calculation from the reversal effect; 2 - direct measurements.
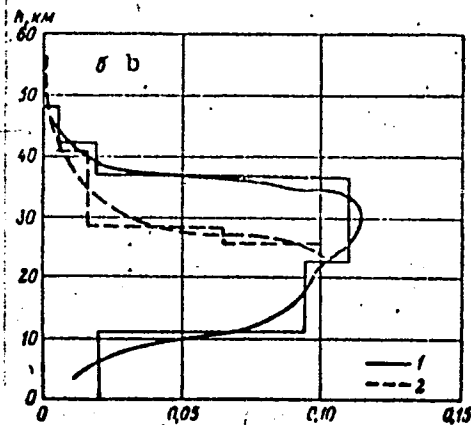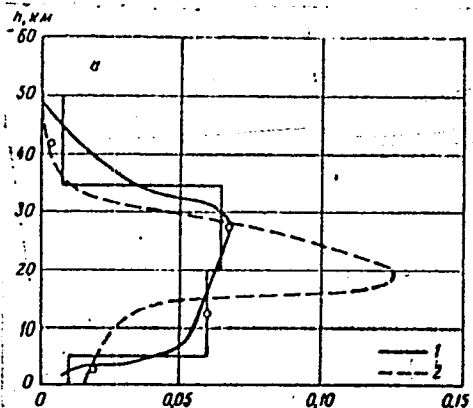
Card 5/5

PANIN, V.Ye.; KUDRYAVTSEVA, L.A.; SIDOROVA, T.S.; BUSHNEV, L.S.

Intercrystallite internal adsorption in Cu-Al solid solutions
during hardening from high temperatures. Fiz. met. i metalloved.
12 no.6:927-928 D '61.   (MIRA 16:11)

1. Sibirskiy fiziko-tekhnicheskiy institut.

KUORYAUTSEVA, L.A.

AUTHORS: B.S. Neporent, V.F. Belov, O.D. Dmitriyevskiy,   49-4-21/23
G.A. Zaytsev, V.G. Kastrov, M.S. Kiseleva,
L.A. Kudryavtseva, and I.V. Patalakhin.

TITLE: Experience gained in direct measurement of the distribution of the humidity of the atmosphere by means of the spectral method. (Opyt pryamogo izmereniya vysotnogo raspredeleniya vlazhnosti atmosfery spektral/nym metodom).

ABSTRACT: Some recent American Communications (Refs. 5-7) refer to investigating the spectrum of the Sun in the infrared range during flights in the upper layers of the atmosphere, in which observation of absorption bands of water vapours are mentioned and views are expressed on the possible concentrations of these vapours. In this papersthe results are described of the first attempts to determine directly the content of water vapour in the atmosphere by means of specially designed spectral apparatus. The operation of the instrument was described in detail by Neporent, B.S. et alii (Ref. 8); it consists of a step-wise vacuum monochromator with a diffraction lattice of 300 lines/mm
Card 1/4 of the zize 50 x 70 mm which subdivides the infrared range

49-4-21/23

Experience gained in direct measurement of the distribution of the humidity of the atmosphere by means of spectral method.

into five sections (1.24, 1.40, 1.50, 1.88, 2.2 μ), the wave lenths 1.40 and 1.88μ belong to the absorption bands of water vapour; utilization of two bands is provided for extending the range of the measured water concentrations. The Wave-lenghts 1.24, 1.50 and 2.2.μ fall between individual bands and serve fro determining the initial intensities in the bands 1.40 and 1.88μ by means of interpolation. The linear dispersion of the instrument equals 100 a/mm; the entry and exit slots are 1.5 mm wide. Illumination of the input slot is effected by means of a source with a circular emanating surface fitted with a dispersion plate of magnesium oxide. Experiments carried out at ground level showed that, in the operating range of the spectrum, the role of radiation scattered by the sky is insignificant. The measured radiation is modulated with a frequency of 850 c.p.s. using as a receiver of the radiation a cooled PbS photo resistance. After amplification, the signals are transmitted by radio to the ground. In addition to the basic signals transmitted in the operating position of the diffraction lattice (which is turned by means of a cam), calibrating signals are

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49-4-21/23

Experience gained in direct measurement of the distribution of
the humidity of the atmosphere by menas of the spectral method.

transmitted and also signals from the pressure gauge, etc.
the respective switching is effected by means of a
commutator which is coupled with the cam for scanning of
the spectrum. The full cycle of the instruments is 2.5. secs
and, therefore, the slow changes of the location of the
scattering plate of the light source relative to the Sun's
rays caused by random oscilations of the instrument
during free flight should not effect the results of
determination of the relative intensities of the adjacent
parts of the spectrum. The results are plotted in graphs.
Fig. 1 shows the calibration curve obtained on the basis
of the exponential law; Fig. 2 shows the graduation curve
obtained on the basis of the square root; Fig. 3, shows a
part of the absorption band of water vapour (1.4μ)
measured on the spectrometer with altitude scanning, whereby
the spectral width of the slot is shown at the boottom part
of this Figure. Fig. 4 shows the dependence of the
absorption function A on the altitude (up to 17 km) for
the band 1.4μ; Fig. 5 shows the dependence of the quantity
of water precipitating along the vertical on the height
Card 3/4 reached by the instrument; Fig. 6 shows the dependence of

49-4-21/23

Experience gained in direct measurement of the distribution of
the humidity of the atmosphere by means of the spectral method.

water concentration in the atmosphere on altitude, in
mm of water precipitated per 1 km of the layer. Althoughh
the obtained data require futthuer checking, they do
indicate the usefulness of the described method and
apparatus for such measurements. Increased accuracy and
sensitivity of the instrument for measuring low water
concentrations could be achieved by using more intensive
absorption bands.
There are six figures and 12 references, 4 of which are
Slavic.

SUBMITTED: November 13, 1956.

AVAILABLE: Library of Congress.

Card 4/4

KUDRYAVTSEYA, L. A.

AID P - 2495

Subject   :   USSR/Meteorology

Card 1/2   Pub. 71-a - 5/26

Authors   :   Kondrat'yev, K. Ya., and Kudryavtseva, L. A., Kands.
                Phys. and Math. Sci.

Title   :   On the albedo of the sea surface

Periodical :   Met. i Gidro., 3, 25-27, My-Je 1955

Abstract   :   The computation of the albedo of large bodies of water
                is usually made theoretically on the basis of the
                Fresnel formula. The article reports on experiments
                in calculating the albedo of the calm sea surface
                under a cloudless sky for diffused and total radiation
                disregarding the inverse diffusion factor by computing
                the height of the sun and the diffusion angle at any
                given moment. The authors maintain that this method
                is more accurate than a theoretical analysis according
                to the Fresnel formula. A table giving albedo data
                and a diagram showing the dependence of the albedo

Met. 1 Gidro., 3, 25-27, My-Je 1955

AID P 2495

Card 2/2   Pub. 71-a - 5/26

upon the height of the sun are presented. Two Russian references, 1939-and 1954.

Institution: None

Submitted :   No date

KUDRYAVTSEVA, L. A.

USSR/Physics

Card 1/1   Pub. 127 - 9/12

Authors   : Kondrat'ev, K. Ya.; Kudryavtseva, L. A.; and Manolova, M. P.

Title   : Distribution of the energetic (thermal) and light intensities of dispersed
              radiation of the atmosphere over the celestial vault

Periodical : Vest. Len. un. ser. mat. fiz. khim. 5, 119-128, May 1955

Abstract   : An experimental study of the distribution of the thermal (energetic) and
              light intensities of the atmosphere over the celestial vault is described.
              A pyranometer of Yanishevskiy was used for measuring the thermal intensity
              of dispersed radiation and the light intensity was measured with a photo-
              selenium element. Eight references: 1 German and 7 USSR (1936-1954).
              Graphs; tables.

Institution :   .....

Submitted   : April 19, 1955

NEPORENT, B.S.; BELOV, V.F.; DMITRIYEVSKIY, O.D.; ZAYTSEV, G.A.; KASTROV,V.G.;
  KISELEVA, M.S.; KUDRYAVTSEVA, L.A.; PATALAKHIN, I.V.

An attempt to measure the altitudinal distribution of atmospheric
moisture content by means of spectrum analysis.   Izv. AN SSSR.
Ser.geofiz. no.4:552-555 Ap.'57.   (MIRA 10:7)
                   (Moisture--Measurement)

24.7000

76001
SOV/70-4-5-23/36

AUTHORS: Vasil'yev, L. I., Zaring, K. L., Kudryavtseva, L. A.

TITLE: Multiple Slips in Zinc at Indoor Temperatures

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 5, pp 768-772 (USSR)

ABSTRACT: It has been known that zinc crystals deformed at indoor
               temperatures develop slip parallel to (0001), $[2\bar{1}\bar{1}0]$
               while at higher temperatures the slip takes place
               parallel to (01$\bar{1}$0), $[2\bar{1}\bar{1}0]$. In special cases of the
               crystal orientation with respect to the stress, slips have
               also been developed in (11$\bar{2}$2), $[\bar{1}\bar{1}23]$ and (01$\bar{1}$1), [?]
               directions. The authors, in deforming the specimens of
               polycrystalline zinc rods at indoor temperatures found
               that some grains slip in two different directions, i.e.,
               parallel to (0001), $[2\bar{1}\bar{1}0]$ and (01$\bar{1}$1), $[2\bar{1}\bar{1}0]$, or even
               in three directions. These cases are called multiple
               slips. Both slips take place in the direction of the
               shortest interatomic spacing $[2\bar{1}\bar{1}0]$. The specimens,
               50 mm long and 1.5 mm in diameter, 99.8% Zn or purer,
Card 1/4   were annealed at 140° C in oil bath for one hour, cooled

Multiple Slips in Zinc at Indoor Temperatures   76001
                                                       SOV/70-4-5-23/36

off, electropolished in the aqueous solution of ortho-
phosphoric acid, plastically deformed by stretching with
device UPR at the rate of 0.03% to 27%/min, and studied
under interference microscope MII-4. Larger grains had
clearer and more variegated slips. No grain was deformed
uniformly; some regions of a grain remained undeformed.
Some grains were broken into blocks circumscribed by
differing slip planes while other grains had one or two
sets of glide bands. Each set of kink bands showed
offsets of about the same height and form pointing to
their identical compositions of a similar number of
glide planes. The interplanar angle φ , between basal
(0001) and pyramidal (01$\overline{1}$1) slip planes proved in the
majority of cases to be close to its theoretical value
of 65°. The development of pyramidal slip planes in
polycrystalline specimens, while they remain suppressed
in single crystals, apparently is the effect of the
adjacent grains and of the extremely nonuniform deforma-
tion of the polycrystalline specimens. Under these
Card 2/4   conditions, the stress within some grains apparently

Multiple Slips in Zinc at Indoor Temperatures   76001
                                                   SOV/70-4-5-23/36

exceeds the critical point at which the pyramidal slip
planes begin to develop. Larger grains offer better
opportunity for the development of pyramidal slips,
since small grains can more easily be turned and released
of stresses. It is still not verified whether a rapid
deformation contributes to the development of pyramidal
slips. Additional slip planes were also observed in
polycrystalline specimens constituted of aluminum and
brass grains and near the grain boundaries of di- and
tricrystalline aluminum. There are 3 figures; and 12
references, 7 U.S., 2 Soviet, 1 U.K., and 1 Canadian.
The 5 most recent U.S. references are: Ojala, T.,
et al., J. Metals, 8, 10, 1344, 1956; Gilman, J. J.,
Acta Metallurgica, 3, 2, 209, 1955; Gilman, J. J.,
J. Metals, 8, 10, 1326, 1956; Boas, W., Ogilvie, G. J.,
Acta Metallurgica, 2, 5, 655, 1954; The U.K. reference
is: Bell, R. L., Cahn, R. W. Proc. Roy. Soc. A, 239, 1219,
Card 3/4   494, 1957.

Multiple Slips in Zinc at Indoor Temperatures   76001
                                                       SOV/70-4-5-23/36

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

SUBMITTED: May 20, 1959

Card 4/4

KUDRYAVTSEVA, L. A.; PANIN, V. Ye.

Temperature dependence of internal friction in Cu-Al solid
solutions. Izv. vys. uch. zav.; fiz. 3:93-98 '62.
(MIRA 15:10)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosu-
darstvennom universitete imeni Kuybysheva.

(Copper-aluminum alloys—Thermal properties)

PANIN, V.Ye.; ZENKOVA, E.K.; FEDIN, V.P.; KUDRYAVTSEVA, L.A.

Diffusion transformations in solid solutions at high temperatures.
Issl.po zharopr.splav. 8:161-168 '62.   (MIRA 16:6)
            (Copper-aluminum alloys--Metallography)
               (Metals at high temperatures)

SUKHOVAROV, V.F.; ALEKSANDROV, N.A.; KUDRYAVTSEVA, L.A.

Nature of the deformation aging of nickel. Fiz.met.i metalloved.
14 no.6:895-898 D '62.   (MIRA 16:2)

1. Sibirskiy fiziko-tekhnicheskiy institut.
                     (Nickel—Hardening)

S/126/63/015/003/017/025
E193/E383

AUTHORS: Kudryavtseva, L.A., Panova, L.M., Popov, L.Ye.
               and Sukhovarov, V.F.

TITLE: The effect of various atomic defects on the kinetics
               of formation of the K-state in nickel-molybdenum
               alloys

PERIODICAL: Fizika metallov i metallovedeniye, v. 15, no. 3,
               1963, 451 - 455

TEXT: The object of the present investigation was to eluci-
date the nature of the low-temperature stage of relaxation of
atomic defects in cold-worked nickel and its alloys. Experiments
were conducted on a Ni-10% Mo alloy chosen for this purpose,
because the formation of the K-state accompanied by a large
increase in resistivity took place in quenched specimens of this
material and because of the great difference in the atomic radii
of Ni and Mo, which made it possible to assume that the movement
of dislocated atoms would make little, if any, contribution to the
formation of the K-state. The variation in electrical resistivity
of cold-worked and quenched specimens during steplike, low-
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S/126/63/015/003/017/025
E193/E383

The effect of various ....

temperature annealing was studied and the temperature-dependence of the internal friction of cold-worked, annealed and quenched specimens was determined. The results of electrical resistivity measurements are reproduced in Fig. 1, where ρ ($\mu\Omega.cm$) is plotted against the annealing temperature of cold-worked (curve 1) and quenched (curve 2) specimens. It will be seen that the low-temperature stage of the formation of the K-state was clearly defined in the cold-worked specimen and not revealed at all in the quenched alloy. The graph reproduced in Fig. 2, where the acti-vation energy (U, kcal/mole) of the process is plotted against temperature ($^{\circ}$C) shows that the average value of U = 22 kcal/mole in the 50 - 150 $^{\circ}$C interval increased at the end of the low-temperature stage of the process, corresponding to the deflection point on the curve shown in Fig. 1. Since, as has been stated above, dislocated atoms in the Ni-Mo alloy should not make any significant contribution to the formation of the K-state, the low-temperature stage of this process should be associated with atomic defects of a different type. The nature of these defects can be inferred from the results of internal-friction measurements

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The effect of various ....

S/126/63/015/003/017/025
E193/E383

reproduced in Fig. 3, where $Q^{-1} \times 10^4$ is plotted against the temperature (°C) for specimens slowly cooled from 950 °C (curve 1), quenched from 950 °C (curve 2) and subject to cold plastic deformation (curve 3). It will be seen that internal friction of the cold-worked specimen had two peaks. It was postulated that the low-temperature peak at about 50 °C (i.e. the temperature at which the electrical resistivity of the cold-worked material increased during annealing) was associated with vacancy pairs. The peak at about 120 °C was attributed to the change in orientation of specific configurations of dislocated atoms observed earlier by Seeger at al (Phil. Mag., 1960, 5, 56) in pure nickel. There are 3 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut
                 (Siberian Physicotechnical Institute)

SUBMITTED: July 25, 1962

Card 3/4

VAVILOV, P.P.; KUDRYAVTSEVA, I.A.

Vasilii Nikolaevich Latkin and his diary on the trip to the
Pechora. Izv. Komi fil. Geog. ob-va SSSR no.7:70-75 '64.

(MIRA 18:5)

ZAV'YALOV, S.I.; GUNAR, V.I.; KUDRYAVTSEVA, L.F.

Chemistry of dihydroresorcinol. Report No. 6: New steps in the
synthesis of phenanthrene derivatives based on dihydroresorcinol.
Izv. AN SSSR.Otd. khim. nauk no.11:2009-2013 N '60.
                                        (MIRA 13:11)
1. Institut organicheskoy khimii im.N.D.Zelinskogo AN SSSR.
        (Phenanthrene) (Resorcinol)

ZAV'YALOV, S.I.; KONDRAT'YEVA, G.V.; KUDRYAVTSEVA, L.F.

New path in the synthesis of steroid compounds. Izv.AN SSSR Otd.
khim.nauk no.3:529-530 Mr '61.   (MIRA 14:4)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR.
                      (Steroids)

KONDRAT'YEVA, G.V.; KUDRYAVTSEVA, L.F.; ZAV'YALOV, S.I.

Synthesis of 2,6-dimethyl-2-cyano-5-(p-methoxyphenyl)-1-cyclohexanone. Zhur. ob. khim. 31 no. 11:3621-3626 N '61.
(MIRA 14:11)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.
(Cyclohexanone)

ZAV'YALOV, S.I.; KONDRAT'YEVA, G.V.; KUDRYAVTSEVA, L.F.

      β-Dicarbonyl compounds. Part 12: Carrying out the nucleophilic
reactions of dihydroresorcinol and its derivatives in solvents
of low polarity. Zhur. ob. khim. 31 no. 11:3695-3700 N '61.

                                             (MIRA 14:11)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo Akademii
nauk SSSR.
                               (Resorcinol)

KONDRAT'YEVA, G.V.; KUDRYAVTSEVA, L.F.; ZAV'YALOV, S.I.

Synthesis of trans-8-methyl-5-(p-methoxyphenyl)-1-hydrindanone.
Izv.AN SSSR.Otd.khim.nauk no.3:526-527 Mr '62.   (MIRA 15:3)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Indanone)

GUNAR, V.I.; KUDRYAVTSEVA, L.F.; ZAV'YALOV, S.I.

β-Dicarbonyl compounds. Report No.16: Alkylation of dipotassium derivatives of cyclic β-dicarbonyl compounds in liquid ammonia. Izv.AN SSSR.Otd.khim.nauk no.8:1431-1435 Ag '62.   (MIRA 15:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
            (Carbonyl compounds)   (Alkylation)

SMIYAN, Yu.P., veterinarnyy vrach; ZUBTSOVA, R.A.; KUDRYAVTSEVA, L.F.

Active and passive immunization of ducklings against viral hepatitis.
Veterinariia 41 no.3:40-42 Mr '64.   (MIRA 18:1)

1. Ukrainskaya respublikanskaya veterinarnaya laboratoriya Ministerstva
sel'skogo khozyaystva UkrSSR (for Smiyan). 2. Glavnyy veterinarnyy
vrach Gosudarstvennogo nauchno-kontrol'nogo instituta veterinarnykh
preparatov (for Zubtsova).

L 13512-63   EPF(c)/EPR/EWP(j)/EWT(m)/BDS   AFFTC/APGC/ASD   Pr-4/Pe-4
Pc-4   RM/IM/WW/MH   18

ACCESSION NR: AP3002774   S/0204/63/003/003/0343/0347   77

AUTHOR: Kudryavtseva, L. G.; Litmanovich, A. D.; Topchiyev, A. V.; Shtern, V. Ya.

TITLE: The fractionation of the methylmetacrylate copolymer with styrole

SOURCE: Neftekhimiya, v. 3, no. 3, 1963, 343-347

TOPIC TAGS: copolymer, fractionation methylmetacrylate, styrole, n-hexane, methanol, toluol, acetonitrile-toluol, n-hexane, styrole

ABSTRACT: The fractionation of methylmetacrylate copolymer with styrole in the two system solvent-precipitator which are essentially different in sensitivity to the composition of copolymer has been investigated. The two systems selected for the fractionation of copolymer of the composition Alpha = 0.23 where Alpha = milar composition of styrole links in the copolymer, were Eta-hexane plus metanol in the ratio 0.8 : 1 in toluol, and acetonitrile - toluol. The values of differential functions w (Eta) and integral function I (Eta) (where Eta is the characteristic viscosity) of the weight distribution of the original sample according to (Eta) are calculated from the fractionation data. The values W (Eta) and I (Eta) essentially depend on the character of

'Card 1/2

L 13512-63
ACCESSION NR: AP3002774

the solvent - precipitator system. In the system Eta - hexane plus methanol - toluol a assymetric curve w (Eta) was obtained corresponding to the expected molecular weight distribution of the initial copolymer. The system acetone - toluol has a bimodal curve w (Eta). These results agree with the theoretical calculations unimodal. Orig. art. has: 2 tables and 3 graphs.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR im. A. V. Topchiyeva (Institute of Petrochemical Synthesis AN SSSR)

SUBMITTED: 25Jan63   DATE ACQ: 23Jul63   ENCL: 00

SUB CODE: CH   NO REF SOV: 002   OTHER: 012

Card 2/2

DAVIDSON, A.M.; KUDRYAVTSEVA, L.G.

Investigating changes of the flame temperature in tubular kilns with the help of a modeling machine. Izv. vys. ucheb. zav.; tsvet. met. 8 no.5:89-94 '65.   (MIRA 18:10)

1. Severokavkazskiy gornometallurgicheskiy institut, kafedra obshchey metallurgii.

VOYTINSKIY, N.S., doktor tekhnicheskikh nauk; VERTEBNYY, P.I., redaktor;
SARMATSKAYA, G.I., redaktor; KUDRYAVTSEVA, L.K., tekhnicheskiy
redaktor

[Intra-plant transport in sawmills and lumber processing mills]
Vnutrizavodskoi transport na lesopil'nykh i derevoobrabatyvaiu-
shchikh predpriiatiiakh. Moskva, Goslesbumizdat, 1954. 522 p.
[Microfilm]   (MLRA 7:10)
        (Sawmills)

L 5172-66   EPA(s)-2/EWT(m)/EPF(n)-2/T/EWF(t)/EWP(b)   IJP(c)   JD/WW/
ACCESSION NR: AT5022450   JG/GS
                                    UR/0000/65/000/000/0001/0022

AUTHOR: Subbotin, V. I.;   Ushakov, P. A.;   Zhukov, A. V.;   Talanov,
V. D.;   Kudryavtseva, L. K.;   Sviridenko, Ye. Ya.;   Vasil'yeva, L. V.

TITLE: Investigation of the temperature distribution in core and
shield elements of BN-350 reactor by means of experimental models

SOURCE: Obninsk.   Fiziko-energeticheskiy institut.   Doklady, 1965.
Eksperimental'noye issledovaniye na modelyakh poley temperatury
teplovydelyayushchikh elementov aktivnoy zony i ekrana reaktora
BN-350, 1-22

TOPIC TAGS: nuclear power reactor, fast reactor, liquid metal
cooled reactor

ABSTRACT: The distribution of temperatures in various parts of a
350 Mw fast-neutron sodium-cooled reactor was investigated by means
of two special experimental models.   The first model consisting of
two loops was similar to the core of the BN-reactor while the second
model was arranged for investigation of heat transfer in the shield-
ing area.   Particular attention was given to the centrally and
peripherally located fuel elements that is to the fuel assemblies
submitted to different heat transfer conditions.   The core primary
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L 5172-66

ACCESSION NR: AT5022450

loop was cooled by sodium while a sodium-potassium compound was used
as coolant for the secondary core loop as well as for fuel elements
placed within lateral shields. The core model consisted of 37 tubes
of which 34 tubes were provided with special welded fins. The shield
model had an assembly of 19 tubes. A detailed description of the
experiments was given and the results were analyzed. The irregular-
ities in temperature distribution were graphically presented in 10
figures. It is proposed to resume the research on temperatures by
using new models because the evaluation of temperature ranges and
gradients on outer peripheral elements was not sufficiently reliable.
Introductory information is also given on BN-350 reactor as well as
on some heat transfer problems. Orig. art. has: 3 diagrams and
10 graphs.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: NP,

NO REF SOV: 000   OTHER: 000

Card 2/2

TKACHENKO, F.K., kand.tekhn.nauk; ZUBAREV, V.F., doktor tekhn.nauk;
    KUDRYAVTSEVA, L.N., inzh.

Mechanism of the formation of graphitization nuclei in
prehardened white cast iron. Mashinostroenie no.1:50-53 Ja-F
'62.   (MIRA 15:2)
                    (Cast iron—Metallography)

TKACHENKO, F.K., kand.tekhn.nauk; KUDRYAVTSEVA, L.N., inzh.

Effect of heat treatment on the graphitization of white cast iron. Mashinostroenie no.6:21-24 N-D '62.   (MIRA 16:2)

1. Zhdanovskiy metallurgicheskiy institut.
                        (Cast iron--Heat treatment)

TKACHENKO, F.K. (Zhdanov); Prinimala uchastiye KUDRYAVTSEVA, L.N.

Factors accelerating the graphitization of iron-carbon alloys. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.1:129-132 Ja-F '63.

(MIRA 16:3)

(Cast iron—Hardening)

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Liquid - vapor equilibrium in the systems chloroform - hexane and
acetone - chloroform. Zhur.prikl.khim. 36 no.6:1231-1237 Je '63.
(MIRA 16:8)
(Chloroform) (Hexane) (Acetone)

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Liquid - vapor equilibrium in the system acetone- chloroform -
hexane at temperatures 35, 45, 55° and pressure 760 mm. Hg.
Zhur. prikl. khim. 36 no.8:1710-1716 Ag '63.

Differential equation of the curves of multiple distributions
(constancy of the relative volatility) of two components of
a ternary system solution - ideal vapor.   1717-1721 .

(MIRA 16:11)

1. Leningradskiy gosudarstvennyy universitet.

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Liquid – vapor equilibrium in the system ethyl alcohol –
chloroform – hexane at temperatures of 55, 45, 35° and
pressures of 760 mm.Hg. Zhur. prikl. khim. 36 no.9:2025–
2030 D '63.   (MIRA 17:1)

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Differential equation of multiple distribution curves
(constance of relative volatility) of the two components
of a ternary system solution - ideal vapor. Zhur. prikl.
khim. 36 no.10:2239-2243 O '63.   (MIRA 17:1)

SUSAREV, M.P.; KUDRYAVTSEVA, L.S.; MATUSHKEVICH, E.A.

Concentration regions of the location and temperature shift of
ternary azeotropes. Zhur. fiz. khim. 37 no.12:2672-2677 D '63.

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

SUSAREV, M.P.; KUDRYAVTSEVA, L.S.

Concentration regions of location and temperature shift of ternary
azeotropes. Part 2. Zhur. fiz. khim. 38 no.1:47-51 Ja'64.
(MIRA 17:2)
1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Concentration regions of the location and temperature
displacement of ternary azeotropes. Part 3. Zhur. fiz. khim.
38 no.2:345-350 F '64.
(MIRA 17:8)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

L 13329-66   EWT(m)/EWP(t)/EWP(b)   IJP(c)   JD/JG

ACC NR: AP6002583   SOURCE CODE: UR/0286/65/000/023/0076/0076

INVENTOR: Kudryavtseva, L. V.; Morokhov, M. I.; Kharlomova, K. N.   *37*

ORG: none   *13*

TITLE: Method of plating titanium with platinum. Class 48, No. 176767 [announced by
All-Union Scientific Research and Design Institute of Chemical Machinery (Vse-
soyuznyy Nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashino-
stroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 76

TOPIC TAGS: titanium, ~~titanium plating~~ platinum, electroplating, metal heat treatment

ABSTRACT: This Author Certificate introduces a method for electrolytic plating of
titanium followed by heat treatment of the coating. To obtain high-quality plating,
the deposition is carried out in an electrolyte containing (g/l) 10—15 chlorplatinic
acid, 240—420 sodium nitrite, and 1.0 —1.5 ammonium hydroxide. At 60—70C, the pH
is 7.5— 8.0 and the d_K 2—10 a/dm^2.   [AZ]

SUB CODE: 13,11/ SUBM DATE: 08Jan63/ ATD PRESS: 4/58

Card 1/1 FW   UDC: 621.357.7:669.231.:669.295

L 6982-66   EPF(c)/EWP(s)/EWT(m)/EWP(i)/EWP(b)/EWA(d)/EWP(t)   IJP(c)   HJW/JD/JG/WB

ACC NR: AP5022657

SOURCE CODE: UR/0365/65/001/005/0500/0504

AUTHOR: Kudryavtseva, L. V.; Kharlamova, K. N.; Morkhov, M. I.

ORG: All-Union Research and Construction Institute of Chemical Machine-Building (Vsesoyuzniy nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya)

TITLE: The platinum plating of Ti and Ta electrodes in amino-nitrite electrolytes

SOURCE: Zashchita metallov, v. 1, no. 5, 1965, 500-504

TOPIC TAGS: titanium, tantalum, metal plating, platinum, electrolyte deposition

ABSTRACT: The deposition of platinum on Ti and Ta electrodes was investigated. The electrodes were made of BT-1 Ti and TH-3 Ta, and had dimensions of 1x3x100 mm. These were initially cleaned by degreasing and etching, and subsequently used as anodes in two different amino-nitrite electrolytes, coded I and II: I - Pt (in the form $H_2PtCl_6 \cdot 6H_2O$), 10 g/l; $NaNO_2$, 280 g/l; NH_4NO_3, 100 g/l; NH_4OH (in the form of a 10% solution), 50 g/l; and II - Pt (in the form $H_2PtCl_6 \cdot 6H_2O$), 10 g/l; $NaNO_2$, 100-280 g/l; NH_4OH (in the form of a 10% solution), 1-2%. During platinizing, the

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UDC: 621.357.7

L 6982-66
ACC NR: AP5022657

cathode current density for I and II varied from 2 to 10 amp/dm^2, and the tempera-
ture from 30 to 90°C. The following variables were studied for electrolytes I and
II: the internal stress in the coatings, cathodic potential during deposition, the
operative durability of the electrolytic solutions, current efficiency, and the po-
rosity and dispersive quality of the Pt coating. In general, electrolyte II per-
forms better - the optimum platinizing conditions are: temperature, 60-70°C; cur-
rent density, 2-10 amp/dm^2 for the platinizing of Ti and 203 amp/dm^2 for Ta. Curves
are given for internal stress (kg/cm^2) as a function of temperature of electroliza-
tion, and cathode current density. The change in potential with time is also shown
for Ti in electrolytes I and II, and for Ta in electrolyte II, both at 70°C and at a
current density of 2 amp/dm^2. Data on the dependence of cathodic potential during
platinization in II vs the duration of electrolization for different temperatures is
given for Ti. The cathodic potentials decrease with time up to a cut-off point
(usually about 2-3 min), while the curve is displaced downwards with increase in
temperature. The cathodic potential vs time curve for Ta is higher than that for Ti.
The strength of the cohesive Pt coating can be increased by a factor of twenty-five,
if the Ti and Ta electrodes are heat treated after platinization. The cohesive
strength of Ti changes little in the temperature range 100-700°C (1,2 hrs), but in
the interval 750-790°C (1,2 hrs) it increases from 0.3-1.4 kg/mm^2 to a maximum at

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ACC NR: AP5022657

790°C of 25.4 kg/mm^2; then it decreases gradually above 800°C. The above data is
for coating thicknesses of 5-7 µ, since thicker Pt coatings tend to crack readily.
Orig. art. has: 4 figures, 2 tables.

SUB CODE: GC,MM/ SUBM DATE: 25Mar65/ ORIG REF: 007/ OTH REF: 001

Card   3/3   лб

ISHLINSKIY, Aleksandr Yul'yevich, akademik; KUDRYAVTSEVA, L.V., red.
   izd-va; GOLUB', S.P., tekhn. red.

   [Mechanics of gyroscopic systems]Mekhanika giroskopicheskikh
   sistem. Moskva, Izd-vo Akad. nauk SSSR, 1963. 482 p.
                                                    (MIRA 16:2)
                    (Cyroscope)

PERLIN, I.L., doktor tekhn. nauk, prof., otv. red.; KUDRYAVTSEVA, L.V.,
        ved. red.; SUSHKOVA, L.A., tekhn. red.

        [Metalworking by pressure; drawing. Terminology] Obrabotka
        metallov davleniem; volochenie. Terminologiia. Moskva, Izd-
        vo Akad. nauk SSSR. 1962. 15 p. (Its; Sborniki rekomendue-
        mykh terminov, no.61)   (MIRA 16:3)

        1. Akademiya nauk SSSR. Komitet nauchno-tekhnicheskoy termi-
        nologii.
                (Drawing (Metalwork))—Terminology)

RAVICH, Mark.Bontsovich, prof.; doktor tekhn. nauk; KUDRYAVTSEVA, L.V., red.

[Simplified methods of heat-engineering calculations; heat engineering calculations on the generalized constants of combustion products] Uproshchennaia metodika teplotekhnicheskikh raschetov; teplotekhnicheskie raschety po obob-shchennym konstantam produktov goreniia. Izd.4., dop. Moskva, Izd-vo "Nauka," 1964. 365 p.   (MIRA 17:4)

TOKAR', Ye.G., inzhener; KUDRYAVTSEVA, L.Z.

The use of a fixed temperature thermoregulator in the wool
industry. Tekst.prom.16 no.4:36-38 Ap '56.   (MIRA 9:7)
(Dyes and dyeing--Wool) (Thermostat)

KUDRYAVTSEVA, M. D.

Kudryavtseva, M. D.

"Oxyhemometric Investigation of the Saturation by Oxygen of the Arterial
Blood of Children Afflicted with Whooping Cough." Leningrad Pediatrics
Medical Inst. Leningrad, 1955, (Dissertation for the Degree of Candidate
in Medical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

CHERNOVSKAYA, Ye.N.; PASTUKHOVA, N.M.; BUYNEVICH, A.G.; KUDRYAVTSEVA, M.E.;
    AUNIN'SH, E.A.; SIMONOV, A.I., red.; NEDOSHIVINA, T.G., red.

[Hydrochemical regime of the Baltic Sea] Gidrokhimicheskii
rezhim Baltiiskogo moria. Leningrad, Gidrometeoizdat, 1965.
167 p.   (MIRA 18:12)

MUKHAMEDOVA, L.A.; BAYBUROVA, M.Kh.; MALYSHKO, T.M.; KUDRYAVTSEVA, M.I.

Synthesis and properties of dialkylepoxyhexahydrophthalates.
Neftekhimiia 1 no.1:88-92 Ja-F '61.   (MIRA 15:2)

1. Institut organicheskoy khimii AN SSSR, Kazan'.
        (Esters)   (Phthalic acid)