

Physical Metallurgy and Technology of Heat Treatment

841

Kirpichnikov, K.S., Candidate of Technical Sciences, Docent. Rapid Annealing of Semifinished Articles Cold-formed from D16 and AV (AK5) Aluminum-Alloy. Sheet

17

The author describes the results of applying new regimes of rapid annealing for heat-treated aluminum alloys. In addition, he outlines the principles of designing equipment for rapid annealing.

Vishnyakov, D.Ya.; Figel'man, M.A., Engineer; Trifonova, O.L., Engineer. Some Properties of EI659 Medium-Alloy Steel

34

The author studies the effect of the degree of plastic deformation and the rate of cooling on the properties of this steel, tested at various temperatures. This type of steel contains small to moderate amounts of chromium, nickel, tungsten, and vanadium. There are 4 references, all Soviet.

Vishnyakov, D.Ya.; Vinit'skiy, A.G., Candidate of Technical Sciences. A Study of the Wear Resistance of Carbon Steels

43

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Author's conclusions: 1. Carbon steels with a laminated pearlitic structure are more wear-resistant than steels with a granular pearlitic structure. 2. An increase in the amount of laminar pearlite results in a drop in the rate of wear, especially in hypoeutectoid steels. There are 4 references, all Soviet.

Vishnyakov, D.Ya.; Vinit'skiy, A.G. Effect of Structure on the Wear Resistance of Iron-Chromium-Carbon Alloys 50

Author's conclusions (in part): 1. An increase in the quantity of special carbides in annealed and hardened chrome steels increases their wear resistance. 2. A given quantity of cubic crystals of chromium carbide imparts greater wear resistance than the same quantity of trigonal carbides, other conditions being equal. 3. The relationship between wear resistance, hardness, and certain other mechanical properties of annealed chrome steels can be observed only within the limits of identical structures. There are 3 references, all Soviet.

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Livanov, V.A., Candidate of Technical Sciences; Vozdvizhenskiy, V.M.,
Candidate of Technical Sciences. Recrystallization of Aluminum-Manganese
Alloys

65

The authors study the recrystallization process of aluminum-manganese alloys as affected by the amount of manganese in solid solution, the quantity and distribution of dispersed phases, and nonuniformity of chemical composition and structure. There are 18 references, of which 8 are Soviet, 8 English, and 2 German.

Livanov, V.A.; Vozdvizhenskiy, V.M. Effect of Addition Elements on the
Solubility of Manganese in Aluminum

84

The authors study the effect of small amounts of iron, silicon, and titanium on the solubility of manganese in aluminum. There are 15 references, of which 3 are Soviet, 8 English, and 4 German.

Vishnyakov, D.Ya.; Sovalova, A.A., Candidate of Technical Sciences, Docent;
Smirnova, K.A. Mechanical Properties of Steels at Low Temperatures

100

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Results are given of an investigation of the effect of the composition and heat treatment of certain alloy structural steels on the cold brittleness of the steels at sub-zero temperatures. There are 3 references, all Soviet.

Sovalova, A.A.; Kornilova, Z.I., Engineer. Scale Resistance of Certain Nickel-Base Alloys

107

The authors compare the scale resistance of three nickel-base alloys at various temperatures with that of an iron-base aircraft-construction alloy.

Neustruyev, A.A., Candidate of Technical Sciences. Heat Exchange in Continuous Convection Furnaces

113

Neustruyev compares uniflow and counterflow furnaces of the above type and concludes that preference should be given to the counter-flow variety. There are 6 references, all Soviet.

Neustruyev, A.A., Candidate of Technical Sciences. Special Features of Heating Elongated Items of Aluminum Alloys in Convection Furnaces

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The author discusses the special problems connected with the heat treatment, especially hardening, of elongated aluminum-alloy semi-finished products (shapes, pipes, sheet, etc.), particularly such problems as maintaining constant temperature and the achievement of rapid and uniform heating. There are 5 references, of which 4 are Soviet and 1 is German.

Livanov, V.A.; Yelagin, V.I., Candidate of Technical Sciences. Investigation of AMg6 Heat-resistant Alloy with Additions of Iron and Nickel 138

The author's investigation shows that small additions of iron (0.08-0.92%) and nickel (0.17-0.72%) do not improve the mechanical properties of AMg6 alloy (Al + 6% Mg) at elevated temperatures. There are 7 references, of which 5 are Soviet, 1 is English, and 1 German.

Livanov, V.A.; Yelagin, V.I. The Extrusion Effect at Elevated Temperatures 143

An investigation of the "extrusion effect" (increased strength as a result of the extrusion process) in aluminum-magnesium alloys with additions of chromium and manganese (together and separately) shows

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Physical Metallurgy and Technology of Heat Treatment 841

that these alloys retain their increased strength even after cold drawing. It is further shown that the extrusion effect is preserved at elevated temperatures (300° C) and is observed both in the short-time strength test and in the long-time hardness test. There are 10 references, of which 8 are Soviet and 2 German.

Petrov, D.A., Professor, Doctor of Technical Sciences; Bukhanova, A.A., Candidate of Technical Sciences. Change in Shape and Recrystallization of Crystalline Substances During Solution and Growth in the Solid Phase 161
The authors investigate the changes in crystalline structure which occur during the annealing of various alloys.

Kolachev, B.A., Candidate of Technical Sciences. The Effect of Chromium, Manganese, and Iron on the Natural Aging of Aluminum-Copper Alloys 172
Results are given of an investigation of the effect of chromium, manganese, and iron on the aging of aluminum alloys containing 4 percent of copper. There are 9 references, of which 4 are Soviet, 3 German, and 2 English.

AVAILABLE: Library of Congress

Card 8/8

GO/mas
11-28-58

FIGEL'MAN, M.A.; SHREYDER, A.V.

Hydrogen brittleness of steel in cathode processing. Zhur. prikl.
khim. 31 no.8:1184-1193 Ag '58. (MIRA 11:10)
(Steel--Brittleness)

VISHNYAKOV, D.Ya., prof., doktor tekhn.nauk; FIGEL'MAN, M.A., kand.
tekhn.nauk; HUTSKOVA, S.V., inzh.

Properties of 10Kh12NVMFA heat-resistant steel. Trudy MATI no.43:
25-37 '60. (MIRA 13:7)

(Steel alloys)
(Heat-resistant alloys)

S/129/60/000/012/005/013
E193/E283

AUTHOR: Figel'man, M. A., Candidate of Technical Sciences
TITLE: Electro-Deposited Coatings on Constructional Steels
PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
1960, No. 12, pp. 21-25

TEXT: The object of the present investigation was to study the effect of electro-deposited zinc and cadmium coatings (applied singly or together) on the mechanical properties of steels 38XA (38KhA), 30XΓCA (30KhGSA), 18XHBA (18KhNVA) and 1X18H9T (1Kh18N9T). The standard test pieces, hardened and tempered, were zinc-plated in a cyanide electrolyte, the same type of electrolyte having been used for cadmium plating. The composite coatings were applied by first depositing a 3 micron thick cadmium coating and then a 3 micron thick layer of zinc. The thickness of zinc and cadmium coatings, when applied singly, was 6 microns. The mechanical tests included tensile tests and impact tests, carried out at room and elevated temperatures (200-700°C), as well as creep tests at high temperatures. It was established that cadmium or cadmium + zinc coatings, considerably reduce the ductility of steels studied at



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S/129/60/000/012/005/013
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Electro-Deposited Coatings on Constructional Steels

temperatures above 200°C. The effect of zinc coating is much less pronounced. None of the coatings studied affects the impact strength of steel. The sensitivity of steel to the action of zinc or cadmium coating is independent of the mechanical properties of the steel, as determined by the conditions of preliminary heat treatment. Steel 1Kh18N9T is sensitive only to the presence of a composite zinc + cadmium coating. A. P. Svetlovidov and V. N. Zav'yalov participated in this work. There are 4 figures, 2 tables and 2 references; 1 Soviet and 1 non-Soviet. ✓

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23011

1.1700 4016, 1416, 1413

S/536/60/000/043/002/011
E193/E483

AUTHORS: Vishnyakov, D.Ya., Doctor of Technical Sciences,
Professor, Figel'man, M.A., Candidate of Technical
Sciences and Rutskova, S.V., Engineer

TITLE: Properties of the Heat-Resistant Steel 10X12HBMΦA
(1OKh12NVMFA)

PERIODICAL: Moscow. Aviatsionnyy tekhnologicheskiy institut.
Trudy. No.43. 1960, pp.25-37. Termicheskaya obrabotka
i svoystva stali i legkikh splavov

TEXT: The object of the present investigation was to study the
effect of mechanical and thermal treatment on the properties of
steel 1OKh12NVMFA which is a material combining relatively good
corrosion resistance with high strength at room and elevated
temperatures. (The composition of this steel is such that it
contains no free ferrite; since the strengthening alloying
additions, i.e. W, Mo and V, increase the range of the α-phase,
steels of this type contain no more than 12 to 15% Cr and 2% Ni.)
The experiments were conducted on strip (2 mm thick), possessing
the following properties: U.T.S. (σ_b) = 67 kg/mm²;
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Properties of the Heat-Resistant ... S/536/60/000/043/002/011
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0.2 proof stress ($\sigma_{0.2}$) = 47.3 kg/mm²; elongation (δ) = 19.2%; depth of indentation in the Erichsen test = 11.4 mm; number of bending reversals through 180° = 9. The tensile tests were conducted on test pieces cut from the strip in the direction of rolling. The high-temperature properties were determined by short-time tensile tests, carried out at a rate of strain of 0.1 ℓ /min, where ℓ is the gauge length of the test piece. In the heat treatment experiments, the specimens were hardened by oil- or air-quenching; they were cooled in air after tempering. The fatigue tests were carried out on a machine operating at 1400 to 1500 rev/min, the duration of each test being 10⁷ cycles. The results can be summarized as follows. (1) The optimum heat treatment of the steel studied consists in heating it to 900 to 1000°C, quenching in air or oil, and tempering at 500 to 530°C. The mechanical properties of steel, heat treated in this way, are: σ_b = 115 kg/mm²; $\sigma_{0.2}$ = 105 kg/mm²; δ = 10%; Rc (Rockwell hardness) = 40. Secondary hardening takes place during tempering at 450 to 500°C but the plasticity of steel is not affected by this change. (2) The effect of temperature on the properties of steel 10Kh12NVMFA is illustrated in Fig.3, where δ and σ_b are

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Properties of the Heat-Resistant ... S/536/60/000/043/002/011
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plotted against the test temperature ($^{\circ}\text{C}$), the continuous and broken curves relating to (a) hardened and tempered and (b) annealed specimens, respectively. (3) The steel under investigation work-hardens quite rapidly, its σ_b increasing to 100 kg/mm^2 and its δ decreasing to 3.5% after 50% cold deformation in flat rolling, the mechanical properties of the steel at high temperatures (up to 600°C) being similarly affected. Full heat treatment (quenching from 900°C and 2 h tempering at 530°C) completely removes the effects of cold plastic deformation. (4) The effects of plastic deformation caused by various fabrication processes can be removed by intermittent annealing at 600 to 700°C . Annealing at higher temperatures is not possible because the steel is liable to harden even when cooled in air. (5) Steel 10Kh12NMFA is susceptible to stress-corrosion cracking. This was shown by the results of metallographic examination and mechanical tests conducted on specimens, preliminarily heat treated or mechanically polished, and then immersed for 10 min to 10 h in a 50% HCl solution containing 1% of selenium dioxide. (6) Steel 10Kh12NMFA has good fatigue properties at temperatures of up to 500°C . This is illustrated in Fig.6, where the endurance limit (σ_{-1} , kg/mm^2)

X

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Properties of the Heat-Resistant ... S/536/60/000/043/002/011
E193/E483 X

of hardened and tempered specimens is plotted against the test temperature ($^{\circ}\text{C}$). Acknowledgments are expressed to Engineer V.N.Zav'yalov, who participated in this work. There are 6 figures and 4 tables.

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31561
S/081/61/000/022/042/076
B102/B101

AUTHORS: Shreyder, A. V., Figel'man, M. A.

TITLE: Investigation of the hydrogen embrittlement of steel in electroplating

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 293 - 294, abstract 22K145 (Tr. Vseros. n-i. khim. in-ta prom-sti mestn. podchineniya, no. 10, 1960, 33 - 85)

TEXT: The influence of cathodic polarization conditions in acid and alkaline solutions on the hydrogen embrittlement (HE) of carbon steel is pointed out. The kinetics of hydrogen adsorption and the HE of steel were studied. The stimulating action of cyanides and sulfides on hydrogen adsorption in cathodic polarization of steel in alkaline solutions was verified. Reduction of hydrogenation in cathodic treatment of tempered metal in acid media is achieved by adding CrO_3 to the electrolyte. X

Additions to alkaline electrolytes do not reduce HE considerably. The strongest tendency to HE displays cold-deformed steel without subsequent annealing. This proves the predominant influence of the metal stress on Card 1/4

Investigation of the hydrogen...

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S/081/61/000/022/042/076
B102/B101

the amount of HE. The increase in brittleness in electroplating is due to the presence of internal stresses in the deposits and to the hydrogen adsorption of the steel backing. The deposition of thin layers is accompanied by an increase in brittleness exceeding that of thick ones. The increase in brittleness is reduced with increasing thickness of the deposit. An intensification of the electrodeposition process may, on one hand, intensify the increase in brittleness due to decrease in current yield when the plating process is accelerated, and on the other - reduce the growth in brittleness due to a more rapid formation of deposit, serving as a barrier for the hydrogen penetration into the metal. Plating in cyanide electrolytes (zinc, cadmium, copper plating) is accompanied by considerably higher hydrogen adsorption than in acid ones. In acid baths the current yield is increased and cyanides intensifying hydrogen adsorption are absent. Nickel-plating leads to an increase in brittleness of tempered metal stronger than that of quenched metal. This is due to the predominant influence of stresses in the deposit. Any changes in chromium plating method, thickness of Cr deposit, dechroming conditions (anodic etching of chromium), interruptions of the current in chrome-plating have different effects on the brittleness of quenched and tempered steels. In

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B102/B101

chrome-plating of tempered steels this is explained by a connection between increase in brittleness and the presence of internal stresses in the deposit - and for quenched steels it is assumed to be mainly due to hydrogenation of the backing. Electroplating results in a decrease of the fatigue limit, especially for quenched steel coated with nickel, then with chromium, zinc, and copper. The main effect on the recovery of plastic properties of steel after cathodic degreasing displays the temperature of the liquid medium in which dehydrogenation takes place; the effect of anodic aging is negligible. Electrolytic degreasing and dipping change the brittleness of steel in different directions which arises in subsequent metalplating in dependence on various factors, among which the structure of the basic metal is the most important one. Also shape and thickness of metal coatings and the conditions of electro-deposition have an influence: thin Cu and Ni backings reduce the brittleness arising in subsequent chrome-plating; thick Cu backings may intensify brittleness. Addition of oxidizers (CrO_3 , KMnO_4) to acid solutions is little effective with respect to a decrease in brittleness in electrolytic cathodic treatment of quenched metal, but reduces the increase in brittleness in etching (dip) without current. Increase of
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X

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B102/B101

current yield, current reversal, and stirring do not reduce the brittleness of quenched steel, but reduce that of tempered steel. Aging restores the plastic properties only of parts which were subjected to cathodic treatment without galvanic deposition; after polarization in alkali, plasticity is restored more rapidly and more completely in aging than after polarization in acids. Aging of steel parts with deposits may also lead to an increase in brittleness. [Abstracter's note: Complete translation.]

X

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VISHNYAKOV, D.Ya., doktor tekhn.nauk, prof.; FIGEL'MAN, M.A., kand.tekhn.
nauk; NAZAROV, G.I., inzh.

Isothermal treatment of 13Kh12NVFMA steel. Trudy MATI no.50:42-51
'61. (MIRA 14:10)

(Steel--Heat treatment)

BELYAYEV, A.D. [Bieliaiev, A.D.]; FIGEL'SKI, T.R. [Fihel's'ki, T.R.]

Trapping centers of minority current carriers in plastically
deformed germanium. Ukr. fiz. zhur. 8 no.10:1179-1181 0 '63.
(MIRA 17:1)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

FIGEN'SKI, T.R.; BELYAYEV, A.D.

Capture of nonequilibrium current carriers in plastically deformed germanium. Fiz. tver. tela 6 no.7:2146-2154 JI '64.

(MIRA 17:10)

1. Institut poluprovodnikov AN UkrSSR, Kiev.

FIGIEL, J.

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND GROUPS

Extrusion of Aluminium Alloys. J. Figiel (*Hutnik*, 1948, 15, (7/8), 322-327).—(In Polish). Equipment for the extrusion of aluminium alloys and other metals is described.—W. J. W.

3RD AND 4TH GROUPS

ASB-35A METALLURGICAL LITERATURE CLASSIFICATION

TECHNICAL SUBJECTS

1ST AND 2ND GROUPS

3RD AND 4TH GROUPS

5TH AND 6TH GROUPS

7TH AND 8TH GROUPS

9TH AND 10TH GROUPS

11TH AND 12TH GROUPS

13TH AND 14TH GROUPS

15TH AND 16TH GROUPS

17TH AND 18TH GROUPS

19TH AND 20TH GROUPS

21ST AND 22ND GROUPS

23RD AND 24TH GROUPS

25TH AND 26TH GROUPS

27TH AND 28TH GROUPS

29TH AND 30TH GROUPS

31ST AND 32ND GROUPS

33RD AND 34TH GROUPS

35TH AND 36TH GROUPS

37TH AND 38TH GROUPS

39TH AND 40TH GROUPS

41ST AND 42ND GROUPS

43RD AND 44TH GROUPS

45TH AND 46TH GROUPS

47TH AND 48TH GROUPS

49TH AND 50TH GROUPS

51ST AND 52ND GROUPS

53RD AND 54TH GROUPS

55TH AND 56TH GROUPS

57TH AND 58TH GROUPS

59TH AND 60TH GROUPS

61ST AND 62ND GROUPS

63RD AND 64TH GROUPS

65TH AND 66TH GROUPS

67TH AND 68TH GROUPS

69TH AND 70TH GROUPS

71ST AND 72ND GROUPS

73RD AND 74TH GROUPS

75TH AND 76TH GROUPS

77TH AND 78TH GROUPS

79TH AND 80TH GROUPS

81ST AND 82ND GROUPS

83RD AND 84TH GROUPS

85TH AND 86TH GROUPS

87TH AND 88TH GROUPS

89TH AND 90TH GROUPS

91ST AND 92ND GROUPS

93RD AND 94TH GROUPS

95TH AND 96TH GROUPS

97TH AND 98TH GROUPS

99TH AND 100TH GROUPS

FIGURE J

Technology of the Extrusion of Aluminum Alloys.
(In Polish.) Jan Figiel. *Hutnik*, v. 17, Mar-Apr. 1950.
p. 49-53.

Discusses the effects of chemical composition and microstructure on the above. Derives equations expressing the relationship of extrusion pressure to extrusion resistance. Charts extrusion resistance vs. temperature for 4 Al alloys.

458.55 A METALLURGICAL LITERATURE CLASSIFICATION

13000 1133100

OPEN MATERIALS INDEX

1200-11331000-0000

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

FIGIEL, Jan, mgr., inz.

Lower Silesia magnesites. Przegl techn 81 no.18: 26-27 '60.

ACCESSION NR: AP4041721

S/0181/64/006/007/2146/2154

AUTHORS: Figel'ski, T. R.; Belyayev, A. D.

TITLE: Capture of non-equilibrium carriers in plastically deformed germanium

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 2146-2154

TOPIC TAGS: dislocation effect, crystal imperfection, plastic deformation, germanium, recombination

ABSTRACT: In order to establish whether structural defects, and particularly dislocations, can serve as traps for the capture of non-equilibrium holes at low temperatures, a systematic investigation was made of capture in n-Ge in which excess dislocations were produced by plastic deformation. The results indicate that the trap concentration increases with decreasing temperature. The dislocation traps are capable of causing nonlinear photoconductivity

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ACCESSION NR: AP4041721

effects. The principal results of the research were reported by the authors elsewhere (UFZh v. 8, 1179, 1963). The article describes the preparation of the specimens and the preliminary measurements, and relates how the presence of traps due to plastic deformation was demonstrated. It is shown that in addition to serving as the main traps with which the observed of long-time photoconductivity relaxation is associated, the dislocations act simultaneously as recombination centers. In deformed specimens they determine the lifetimes of electron-hole pairs. At considerable deformation, when the dislocation density exceeds 10^7 cm^{-2} , the capture of minority carriers (holes) is observed already at room temperature. It is concluded that the similarity between the capture phenomena in the deformed and initial specimens indicates that the traps have the same nature in both cases. "The authors thank Academician of AN UkrSSR V. Ye. Lashkarev, Ye. G. Miselyuk, and P. I. Baranskiy for interest and useful discussions." Orig. art. has: 5 figures and 6 formulas.

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ACCESSION NR: AP4041721

ASSOCIATION: Institut poluprovodnikov AN UkrSSR, Kiev (Institute
of Semiconductors, AN UkrSSR)

SUBMITTED: 20Jun63

ENCL: 00

SUB CODE: SS

NR REF SOV: 005

OTHER: 011

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FIGIELSKI, T.

✓ A possible explanation of strong photovoltaic effects in
 PbS layers. T. Figielski (Inst. Fizyki P.A.N., Warsaw).
Bull. acad. polon. sci., Sér. sci., math., astron. et phys. 7,
 170-81(1959)(in English).—The photovoltaic effect of
 several v. in PbS (Starkiewicz, *et al.*, *C.A.* 40, 5634⁴; Ber-
 lagn, *et al.*, *C.A.* 50, 1464d) may be accounted for by a photo-
 voltaic effect at intercryst. boundaries nonsym. illuminated,
 such as that discussed for Ge (P. and Sosnowski, *Cong.*,
 // *intern. phys. état solide et appl. à l'électronique et telecommsuns.*,
 Brussels, 1958). J. Stecki

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B011/B059

24.7700 (1035,1043,1143)

AUTHOR: Figielski, T.

TITLE: Electronic Processes at Intercrystalline Barriers in Germanium

PERIODICAL: Acta Physica Polonica, 1960, Vol. 19, No.6, pp. 607 - 630

TEXT: The author studied basic electronic effects occurring on grain boundaries (GB) of n-type germanium in the presence of injected minority carriers. The samples were cut from polycrystalline Ge ingots and had one plane of lineage each. In measuring the diffusion length, photo-e.m.f., and photoconductivity, the samples were illuminated at a point of 60μ minimum diameter. Twin crystals were used in determining the diffusion curves by the Haynes-Morton method. Three cases were investigated:

1) the collector at some distance from the GB and the light spot moving perpendicular to the plane of lineage; 2) the collector near the GB and the light spot moving along the plane of lineage; 3) both collector and light spot far from the GB. Two kinds of diffusion curves were found for different GB. GB of the first kind are characterized by enhanced .

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Electronic Processes at Intercrystalline
Barriers in Germanium

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recombination. GB of the second kind have no recombinative activity, but exhibit an intense photovoltaic effect and photoconductivity. The latter indicates current gain in the GB. X-ray studies support the assumption that GB of the first kind are related to simple small-angle lineages, whereas GB of the second kind are representative of lineages of wide angles. In the following discussion, GB is assumed to contain a number of acceptor-type quantum levels. The local negative charges resulting from electrons produce a potential barrier in the region of lineage. The electron current passing through the barrier is treated in analogy to the diode theory of the barrier layer. The hole current passing through GB is computed as in the case of n-p junction. The author concluded that GB can affect non-equilibrium carriers in two ways. In the case of a low barrier, recombination on GB predominates (GB of the first kind, with a dislocation structure being assumed). GB of the second kind shows a "feed-in-feed-out" effect consisting in the immediate expulsion of a hole from the barrier region for every incoming surplus hole. For this kind of GB, an n-p⁺-n structure (corresponding to a high potential barrier) is assumed. The author thanks Professor Doctor L. Sosnowski and M. Jastrzebska for discussions and assistance, Doctor J. Auleytner and M. Lefeld-Sosnowska for the X-ray studies, and W. Giriat for growing
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Electronic Processes at Intercrystalline
Barriers in Germanium

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B011/BC59

the crystals. There are 19 figures and 17 references: 1 Belgian, 1 Polish,
1 British, 4 German, and 8 US.

ASSOCIATION: Institute of Physics, Polish Academy of Sciences, Warszawa
(Institute of Physics, Polish Academy of Sciences, Warsaw)

SUBMITTED: February 1, 1960

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FIGIELSKI, T.

Conference on the physics of semiconductors, held in Exeter July 16-20,
1962. Postepy fizyki 14 no.1:117-118 '63.

POLAND

FIGIELSKI, Tadeusz; KUSNIERZ, Ryszard

Institute of Physics, Polish Academy of Sciences (Instytut Fizyki
PAN), Warsaw (for both)

Warsaw, Przegląd elektroniki, No 11, November 1965, pp 525-527

"Device for the contactless measurement of the resistivity
of semiconductor materials."

L 39039-66

ACC NR: AP6018288

SOURCE CODE: PO/0053/65/000/011/0525/0527

AUTHOR: Figielski, Tadeusz; Kusnierz, Ryszard

39
E

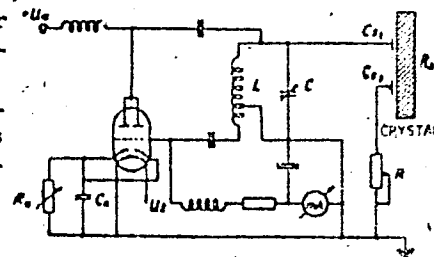
ORG: Institute of Physics, PAN, Warsaw (Instytut fizyki PAN)

TITLE: A device for measuring the resistivity of semiconductor materials without direct contact ^{qm}

SOURCE: Przegląd elektroniki, no. 11, 1965, 525-527

TOPIC TAGS: resistivity, semiconducting material, coupling circuit, electronic measurement, polycrystal, semiconductor crystal, *HF OSCILLATOR*

ABSTRACT: The authors describe a noncontact method for determining the resistivity of semiconductors by capacitive coupling of the crystal to the tank circuit of a high-frequency oscillator. The circuit of the measurement oscillator is shown in the figure. The crystal is connected in parallel to the capacitor C in the oscillator tank circuit through coupling capacitors C_{S1} and C_{S2}. The electrodes are two metal plates or tapes clamped to the crystal surface through a layer of



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L 3900-01

ACC NR: AP6018288

dielectric foil. The coupling capacitance is set up between the electrodes and the crystal. The circuit is a modified Meissner oscillator operating at high grid currents. The measurements frequency is about 4.5 Mc. The grid current is measured by a milliammeter connected in series with an hf choke. The grid current I_s measured as a function of frequency (or capacitance of C) has a number of extrema. The oscillator frequency is selected to operate on one of the extremum values of I_s . Curves are given showing I_s as a function of the interelectrode resistance of the crystal R_x for various effective coupling capacitances. These curves show a characteristic minimum which increases with coupling capacitance. The region of considerable change in I_s extends over values of R_x ranging from 10 Ω to 100 K Ω when the coupling capacitance is of the order of several dozen μf . This range may be used for determining the unknown value of R_x from measurements of the grid current. A variable resistor $R=0-5$ K Ω is connected in series with the coupling capacitance and the resistance of the crystal. This resistance may be adjusted to give the minimum grid current when the resistance R_x is too low. The cathode potentiometer is adjusted for zero setting. The electrodes are made in the form of rollers from sheets of brass foil measuring about 20x8 mm. Resistivities from about 10 $\Omega\cdot\text{cm}$ to 10 K $\Omega\cdot\text{cm}$ may be measured and this range may be extended to 100 K $\Omega\cdot\text{cm}$ by changing the oscillator frequency. The accuracy of the measurement

Card 2/3

L 3907-16

ACC NR: AP6018288

varies from 10 to 20% depending on the resistance. The instrument may also be used for measuring the average resistivity of polycrystalline materials. Orig. art. has: 4 figures.

SUB CODE: 09/ SUBM DATE: none

Card 3/3 MLP

FIGIN, N., inzhener

A book that is useful and necessary. ("Transportation Statistics."
E.P. Lebedev. Reviewed by N. Figin). Rech. transp. 14 no.5:3 of cover
My '55. (MLRA 8:7)
(Lebedev, E.P.) (Transportation--Statistics)

FIGLIN, I.Z., inzhener.

Assembly line in the Daitrov excavator factory. Stroi. i dor.
mashinostr. 1 no. 4:34-35 Ap '56. (MIRA 10:1)
(Daitrov--Excavating machinery)

VASSERMAN, O.S.; RUMYANTSEV, V.A.; FIGLIN, I.Z.

Increasing the performance of trench chain excavators. Stroi. i dor.
mashinostr. no.4:4-5 Ap '58. (MIRA 11:4)
(Excavating machinery)

FIGLIN, I.Z., inzh.

Conference on digging trenches in frozen ground. Stroi.i dor.mashi-
nostr. 5 no.3:35 Mr '60. (MIRA 13:6)
(Excavating machinery--Cold weather operations)

VOROBTSOV, I.P., inzh.; FIGLIN, I.Z., inzh.

ETR-131 wheel-type excavator. Stroi. i dor. mash. 6 no.5:8-9
My '61. (MIRA 14:6)

(Excavating machinery)

RUMYANTSEV, V.A.; MOROZOV, Ye.M.; FIGLIN, I.Z.; FILIPPOV, A.G.;
VAYNSON, A.A., kand. tekhn. nauk, retsenzent;
SAVEL'YEV, Ye.Ya., red.izd-va; UVAROVA, A.F., tekhn.red.

[Chain and bucket trenching excavators] Tsepnye transheinye
ekskavatory. Moskva, Mashgiz, 1963. 129 p. (MIRA 16:12)
(Trench digging machines)

LAPFO, L.L., inzh.; RUMYANTSEV, V.A., inzh.; FIGLIN, I.Z., inzh.

The ETU-354 excavator with a bucketless working element. Stroi.
i dor. mash. 10 no.4:10-11 Ap '65. (MIRA 18:5)

FIGLIN, L.I.

Effect of the school schedule on fatigue in first grade students.
Trudy LSGMI 31:41-60 '56. (MIRA 12:8)

1. Kafedra shkol'noy gigiyeny Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav.kafedroy - prof. A.Ya.Gutkin).

(SCHOOL HEALTH,

eff. of daily schedule on fatigue in first grade students (Rus))

(FATIGUE,

same)

LEVIN, V.M.; FIGLIN, L.I.

Characteristics of the physical development, state of health, living conditions, and education of students at metal trade schools in Leningrad in 1954. Trudy LSGMI 31:112-128 '56.
(MIRA 12:8)

1. Kafedra shkol'noy gigiyeny Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav.kafedroy - prof. A.Ya. Gutkin) i Institut truda i professional'nykh zabolevaniy (dir. - kand.med.nauk Z.K.Grigor'yev).

(SCHOOL HEALTH,

phys. develop., health, living cond. & educ.
in metallurgic trade schools (Rus))

FIGLIN, L.I.

Utilization of the carbon dioxide content of the air in child institutions as a sanitation index. Trudy ISGMI 31:154-159 '56. (MIRA 12:8)

1. Kafedra shkol'noy gigiyeny Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav.kafedroy - prof. A.Ya. Gutkin).

(CARBON DIOXIDE, determination,
in air in child. institutions (Rus))

FRANK, L. I.

"Effect of the school day procedure on pupils' fatigue."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

GLAUER, G.A., assistant; LEBEDEVA, N.T., dotsent; NIKOLAYEV, A.N.,
assistant; PREEBRAZIENSKAYA, N.N., assistant; RODINA, A.P.,
assistant; RUDAL'TSEVA, N.H., assistant; FIGLIN, L.I., dotsent;
KHRAMTSOVA, A.D., assistant

"Handbook for school physicians" by M.D. Bol'shakova and others.
Reviewed by G.A. Glauer and others. Gig. i san. 25 no. 5:117-120
My '60. (MIRA 13:10)

(SCHOOL HYGIENE) (BOL'SHAKOVA, M.D.)

ACC NR: AR60L4597

SOURCE CODE: UR/0274/65/000/012/A007/A003

AUTHOR: Figlin, T. L.

28
B

TITLE: Distortion of a frequency-modulated signal with a modulation index less than one due to transmission through a linear circuit

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 12A61

REF SOURCE: Tr. Uchebn. in-tov svyazi, vyp. 25, 1965, 77-84

TOPIC TAGS: signal distortion, frequency modulation, frequency characteristic

ABSTRACT: An approximation method is described for calculating the phase angle function in order to estimate the frequency and nonlinear distortions of an FM signal with a modulation index less than one. It is shown that the dependence of frequency distortion on frequency is close to the static frequency characteristic $k(\omega - \omega_0)$. When great accuracy is not required, the frequency distortions of an FM signal with a small modulation index can be determined directly from the frequency characteristic as is done in the case of AM. Nonlinear distortions are characterized by the harmonic coefficients

$$k_3 = 3 \frac{\Phi_3}{\Phi_1}, k_5 = 5 \frac{\Phi_5}{\Phi_1}$$

etc, where Φ is the phase of the corresponding harmonic which can be calculated with an accuracy of 10%. An example is given of an investigation of the dependence of distortions on the parameters of the IF amplifier of the receiver (band width and coupling parameter). 3 illustrations, bibliography of 7 citations. L. S. [Translation of abstract]

SUB CODE: 17, 09

UDC: 621.391.83

Card 1/1

ACC NR: AR6026479

SOURCE CODE: UR/0274/66/000/004/A010/A010

AUTHOR: Figlin, T. L.

TITLE: Calculating the FM-signal distortion due to a linear circuit

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 4A65

REF SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 26, 1965, 47-52

TOPIC TAGS: ~~FM-signal~~, signal distortion, frequency modulation

ABSTRACT: An approximate method is suggested for calculating the FM-signal distortion with an average modulation index of 0.9--5 and with any transfer constant of the linear circuit. The FM is assumed to obey the harmonic law. The calculation procedure is explained in detail, and an example is given of finding cross distortion arising in a single-stage IF amplifier of a stereo receiver with a critical coupling between its circuits. A satisfactory accuracy can be ensured with this method if the addends' amplitudes are held at 0.0005 or higher. One figure. Bibliography of 7 titles.

L. S. [Translation of abstract]

SUB CODE: 09

Card 1/1

UDC: 621.391.14:621.376.3

BESKROVNIY, L.D., inzh.; KORSAKOVA, T.M., inzh.; LEBEDEV, N.V., inzh.;
PETROVA, Ye.P., inzh.; RUTKOVSKAYA, R.F., inzh.; ~~FIGMAN, G.Ya.,~~
inzh.; SHTIVEL', O.B., inzh.; ISEYEVA, R.Kh., red.izd.-va;
SALAZKOV, N.P., tekhn. red.

[City streets and roads; their construction] Gorodskie ulitsy
i dorogi; konstruktsii. Moskva, Izd-vo M-va kommun.khoz.
RSFSR, 1963. 25 p. (MIRA 16:8)

1. Russia (1917- R.S.F.S.R.) Upravleniye blagoustroistva go-
rodov RSFSR.

(Streets) (Road construction)

FIGNER, Avraam Il'ich; ANTIK, I.V., nauchn. red.; GUSEVA, L.F.,
red.

[Technology of the manufacture of electron-tubes; survey
of foreign patents] Tekhnologiya izgotovleniia elektr-
vakuumnykh priborov; obzor inostrannykh patentov. In-
skva, TSentr. nauchno-issl. in-t patentnoi informatsii i
tekhniko-ekonom. issledovani, 1964. 25 p.

(MIRA 18:7)

VINITSKIY, A.M., kand.tekhn.nauk ; FIGOTIN, L.I., inzh.

Automatic programmed temperature control in autoclaves. Mekh.1
avtom.proizv. 17 no.1:14-15 Ja '63. (MIRA 1612)
(Thermostat)

Name: FIGLOVSKAYA, Lyubov' Ivanovna
Dissertation: The creative work of Yakub Kolas
Degree: Doc Philological Sci
Affiliation: Inst of Literature and Art, Acad Sci
Belorussian SSR
Defense Date, Place: 15 Jun 56, Council of Inst of World
Literature imeni Gor'kiy, Acad Sci
USSR
Certification Date: 16 Mar 57
Source: BMVO 13/57

FIGLOVSKIY, V. F.

USSR/ Engineering - Fixtures

Card 1/1 Pub. 128 - 11/23

Authors : Ablyaskin, I. N.; Figlovskiy, V. F.; and Busov, L.S.

Title : A fixture used in preparing pipes for nickel plating

Periodical : Vest. masl. 2, 50 - 51, Feb 1955

Abstract : A new type of fixture used on screw-cutting lathes for the preparation of pipes for nickel plating is described. Drawings depicting the structure and installation of the above mentioned fixture are presented, together with technical specifications. Drawings.

Institution:

Submitted:

FIGNER, I. I.

28(1):25(1) PHASE I BOOK EXPLOITATION SOV/2831

Mekhanizatsiya i avtomatizatsiya trudozemskikh protsessov i litseynykh protsessov (Mechanization and Automation of Labor-consuming Processes in Foundry Practice) Moscow, Mashiz, 1959. 226 p. Errata slip inserted. 4,000 copies printed.

Reviewer: K. N. Skobnikov, Candidate of Technical Sciences; Ed. (Title page); G. I. Koblyanskiy (Revised); Ed. (Inside book); A. N. Sokolov, Candidate of Technical Sciences; Tech. Editor; I. I. Figner, Candidate of Technical Sciences; Literature on the Technology of Machinery Manufacture (Leningrad: Mashinostroyeniye, 1957). I. P. Kuzov, Engineer.

PURPOSE: The book is intended for technical personnel in foundries and enterprises engaged in the mechanization and automation of industrial processes. It may also be used by students of institutions of higher technical education.

COVERAGE: The book deals with recent achievements in the mechanization and automation of time- and labor-consuming operations in foundries. Specific instances of mechanized and automated operations of foundry processes are described. The material presented in this book is divided into six parts, dealing with the following subjects: molding materials, solid and ceramic casting, shakeout of molds, finishing of castings, of technical papers and methods, each part contains a number of technical papers prepared by the authors. The application of automation ranges from the preparation of molds and cores to the mechanization and streamlining of specialized casting methods, such as investment casting and the use of shell molds. There are numerous diagrams showing automated and mechanized installations in foundries. Most of the material is based on experiments and work done at the "Fransy Alkay" Plant. Some of the methods described appear to be in the experimental stage at that plant. The technical papers published in this book were originally presented at a technical conference in this book were published in the industry in October, 1957. No personalities are mentioned.

Yegorov, B. P. Constructions of New Molding Machines	68
Plamer, I. I. Installation for Modifying Cast Iron With Mag- nesium Under Pressure	113
Durlo, Ye. A. Redesign of Control Mechanisms for Electric-arc Furnaces	118
Volynskiy, V. M. Hydroblast Installation for Cleaning Castings	154
Zaslavskiy, N. Ye. Hydroblast Cleaning of Castings	162
Ginsburg, A. D. Overall Mechanization of Steel-casting Cleaning Shops	167
Poliberg, Z. A. Mechanization and Automation of Investment Casting	176
Belousov, K. M. Recent Non-Soviet Achievements in the Automation and Mechanization of Die Casting	188
Lupiyev, I. I., M. F. Borovskiy, G. P. Nikitich, A. I. Zaytseva and S. I. Poshchenko. Mechanization of the Production of Small High-precision Castings in Pressed Bakelite-base Shell Molds	202
Ginsburg, A. D. Semiautomatic Machine for Making Shell Molds	210

VENIKOV, V.A.; TELESHEV, B.L.; CHERNIKHOV, A.M.; IOKHVIDOV, E.S.;
GLAZUNOV, A.A. ; FEDOSENKO, R.Ya.; FIGNER, L.M. ; LERMAN,
D.N.; MEL'NIKOV, N.A.

I.S.Bessmertnyi; on his 60th birthday. Elektrichestvo no.10:
93 0 '63. (MIRA 16:11)

FIGURE, N. N.

What is the lead and how to calibrate it when firing on tank and armored vehicles
Moskva, Gos. izd-vo tekhn, - teoret. lit-ry, 1943. 18 p. (50-44472)
UF628.F5

FIGOL', D. I.

"Metodika nauchnoy propagandy v kul'turno-massovoy i nauchno-prosvetitel'noy rabote muzeyev (na opyte Ukrainskogo gosudarstvennogo muzeya etnografii i khudozhestvennogo promysla vo L'vove)."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences, Moscow, 3-10 Aug 64.

FIGORSKI, J.

"Characteristics of blocking systems with alternating current."

p. 246 (Przegląd Kolejowy Elektrotechniczny) Vol. 9, no. 11, Nov. 1957
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

FIGOTIN, L.I.

127-58-7-11/20

AUTHOR: Gol'din, M.L., Krivchikov, A.P., Marinin, N.S., and Figotin, L.I., Engineers

TITLE: Gamma-Relay for Ore-Mining Equipment (Gamma-rele dlya gornorudnogo oborudovaniya)

PERIODICAL: Gornyy zhurnal, 1958, Nr 7, pp 60-61 (USSR)

ABSTRACT: The Khar'kovskiy zavod kontrol'no-izmeritel'nykh priborov (The Khar'kov Testing and Measuring Devices Plant) (KIP) has built a gamma-relay for the mining industry. The laboratory studied various operating relays and concluded that detectors of gamma-relay radiation must be fed by direct current. Halogenous counters must be used as detectors. The intensity of their feed is almost equal to the anode feed of the electronic tubes used in the gamma-relay, and a common rectifier could be built. The authors give a detailed description of the device. The use of several such relays at the crushing plant YUGOK showed that the flow on the transmitting belt could be efficiently controlled, thus avoiding clogging or breakage of the belt. There are 2 photos, 1 schematic diagram and 2 Soviet reference.

Card 1/1

1. Mining equipment
2. Gamma relay-Applications

VINITSKIY, A.M., kand.tekhn.nauk; FIGOTIN, L.I., inzh.; BAKHVALOVA, L.B.,
inzh.

Automation of autoclave processing of building elements
using a programmed temperature regulator. Stroi.mat. 8
no.7:23-25 JI '62. (MIRA 15:8)
(Autoclaves) (Automatic control) (Temperature regulators)

FIGULA, K.

"Researches Concerning Water Conditions of Highland Pastures." p. 179, (ROCZNIKI HAUK
ROLNICZYCH. SERIA A-ROSLINNA, Vol. 66, no. 2, 1953, Warsaw, Poland).

SO: Monthly List of East European Accession, Lib of Congress, Vol 2, no 10 Oct. 1953, Uncl.

3874

551 482 215.3 : 627 811 : 63 823

Figub. K. Development Trends of Agricultural Production in Connection with the Planning of Water Economy in the Mountains. AG

"Kierunki rozwojowe produkcji rolniczej w związku z planowaniem gospodarki wodnej w gorach". Gospodarka Wodna. No. 12. 1954. pp. 477-479.

In organizing planned agricultural production in mountainous regions, not only maximum productional means should be taken into consideration, but also hydrological conditions concerning the leading off of waters for purposes of flood control. The possibilities are discussed of cultivating root crops, winter cereals and industrial crops; other possibilities for land utilization are also discussed, such as meadow and pasture utilization, excellent for counter-acting erosion. The most important mountain land utilization is, however, for forests, the biological role of which is notably greater than that of agricultural areas, and consists in increasing the relation between underground and surface outflow. It is urged that planning the arrangement of land use, as a measure for the biological conversion of river basins, must take into consideration three criteria: the height and declivity of the terrain, and the value and usefulness of the soil substratum.

11/11/54, K.

Water economy of grasses, I. II. K. Figs. (Russ. Nauch. vol. 1954, 70, A, 290-300, 301-313). Water deficit in *Festuca pratensis*, *Arrhenatherum elatius*, *Lolium perenne*, *L. italicum* and *L. westwoldicum*, sufficient to depress yields of total org. matter

increased the cation content (notably K and Ca) content and increased the anion content (especially P) of the plant ash and also increased the % of N and crude protein in the plants. With rise in soil moisture contents the ratios P/N and Ca/P became narrower and the K/N ratio widened.

II. In pot trials with timothy the levels of soil water and of fertilizer treatment were varied. Differences in yield due to soil moisture level were greatest when N + P and least when K + P fertilizers were given. The N content (%) of the plants diminished with rise in soil moisture content regardless of fertilizer treatment. In general low water supplies were associated with high % of ash contents. By raising the water level the utilization of P and K was increased more than that of K.

A. G. POLLARD.

FIGULA, K.

Problem of water management in the highlands. p. 335

Vol. 15, no. 8, Aug. 1955
GOSPODARKA WODNA
Warszawa

Source: East European Accessions List (EEAL), IC, Vol. 5, no. 3,
March 1956

FIGULA, KAZIMIERZ.

POLAND/Soil Science - Cultivation, Amelioration, Erosion.

J-4

Abs Jour : Ref Zhur - Biol., No 2, 1958, 5833

Author : Figula, Kazimierz

Inst : -

Title : A preliminary Characterization of the Erosion Processes on the Soils of Several Territories of the Krakovskoye Voyevodstvo.

Orig Pub : Roczn. nauk rolniczych, 1955, F71, No 1, 111-148

Abstract : On the basis of field experiments the author concludes that under similar geomorphological conditions the soils of loess deposits are subject to more intense erosion. In the Carpathian oblast' linear forms of erosion predominate. Some anti-erosion measures are indicated.

Card 1/1

FIGULA, K.

A monograph on the upper Dunajec.

p. 327 (Prace i Studia) No. 1, 1956, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

FEHER, Istvan, dr.; FIGULI, Judit

Dialdehyde-cellulose as tanning material. Bor cipo 12
no.5/6:133-135 0 '62.

1. Boripari Kutato Intezet. 2. "Bor- es Cipotechnika" foszerkesztoje
(for Feher).

L 44107-56

ACC NR: AP6022423 (A,N) SOURCE CODE: PO/0021/66/000/003/0111/0115

AUTHOR: Hickiewicz, J. (M¹Eng.); Zywiec, A. (M¹Eng.); Figura, T. (M¹Eng.);
Borkowski, K. (M¹Eng.)

ORG: [Hickiewicz; Zywiec] Silesian Polytechnical University, Chair of Electric
Machines (Politechnika Slaska, Katedra Maszyn Elektrycznych); [Figura; Borkowski]
A-31 Plant (Zaklad A-31)

TITLE: A series of ¹⁵magnetic amplifiers made in Poland

SOURCE: Przegląd elektrotechniczny, no. 3, 1966, 111-115

TOPIC TAGS: automation equipment, magnetic amplifier, feedback amplifier,
power amplifier, preamplifier

ABSTRACT: Introductory remarks to the article contain the statement that amplistat
(internal feedback) magnetic amplifiers are among the contactless part of automation
equipment developed rapidly in recent years. The authors then proceeded to describe

Card 1/2

UDC: 621.375.3

L 44107-66

ACC NR: AP6022423

3

an industrial series of amplistat preamplifiers and power amplifiers developed in 1959—1963 by the Chair of Electric Machines (headed by Prof. Zygmunt Gogolewski) together with the A-31 Plant, which manufactures them at the present time. Amplifier design, power (selected to fit equipment made in Poland), and feed methods were given, and coupling of single-phase units into three-phase systems with a-c or d-c output was discussed. The 10-w preamplifier and 2500-w amplifier, typical of the series, were dealt with in detail, and the properties compared with foreign makes. The designer team expressed their thanks to Professor Z. Gogolewski, Docent Dr. W. Paszek, and Dr. J. Kubek for their guidance, numerous valuable suggestions, and group discussion of the many problems encountered in developing the series. Orig. art. has: 13 figures and 4 tables. [Based on authors' abstract] [DR]

SUB CODE: 09/ SUBM DATE: none/

Card 2/2 *LC*

FIGURA, Zdenko, inz.

Position gauges of noncontinuous automatic control systems.
Automatizace 7 no. 7:179-183 J1 '64.

1. Development Institute of Mechanization and Automation
Development, Nove Mesto nad Vahom.

FIGURIN, T.A.

Workers of the Ministry of the River Fleet are making suggestions.
Rech.transp. 16 no.5:4-6 My '57. (MLBA 10:5)

1.Sekretar' partkoma Ministerstva rechnogo flota.
(Inland water transportation)

FIGURINA, I.I.

Regeneration of the cerebral cortex. Biul. eksp. biol. i med. 57
no.3:105-108 Mr '64. (MIRA 17:11)

1. Laboratoriya sravnitel'noy fiziologii vnutrennikh analizatorov
(zav. - prof. E.Sh. Ayarapet'yants) Instituta fiziologii imeni
Pavlova (dir. - akademik V.N. Chernigovskiy) AN SSSR, Leningrad.
Predstavlena deystvitel'nym chlenom AMN SSSR B.N. Klosovskim.

ELCURIAN, I.I.

Corpora geniculatum laterale and the visual cortex following
enucleation in rats. Nauch.sob. Inst.fiziol. AN SSSR no.3:
164-167 '65. (MIRA 18:5)

1. Laboratoriya sravnitel'noy fiziologii vnutrennikh analizatorov
(zav. - E.Sh.Ayrabet'yants) Instituta fiziologii imeni Pavlova AN
SSSR.

POLOCHENOVA, G.A.; FIGURINA, I.I.

Histological examination of the brain following the extirpation
of the cerebral cortex in dogs. Nauch.sob. Inst.fiziol. AN SSSR
no.3:153-157 '65. (MIRA 18:5)

1. Laboratoriya sravnitel'noy fiziologii vnutrennikh analizatorov
(zav. - E.Ih.Ayrapet'yants) Instituta fiziologii imeni Pavlova
AN SSSR.

FIGURINA, I.I.

Connections between the thalamus and the sigmoid gyrus cortex
in ontogeny of dogs. Vest. LGU 20 no.3:91-96 '65.

(MIRA 18:2)

FIGURINA, I.I.

Degeneration of lateral geniculate bodies following enucleation
in puppies and young monkeys. Dokl. AN SSSR 161 no.1:248-250
Mr '65. (MIRA 18:3)

1. Institut fiziologii im. I.P. Pavlova AN SSSR. Submitted
June 1, 1964.

FIGURINA, M. M.

USSR/Medicine - Infectious Diseases Feb 52

"Clinical Characteristics of the Atypical Form of Tick Encephalitis," S. M. Davidenkov, M. M. Figurina, I. I. Shtil'bens, Ye. F. Kul'kova, O. A. Pokrovskaya, Leningrad, Clinic of Nervous Diseases, State Inst for Advanced Tng of Physicians imeni S. M. Kirov; Hosp of Infectious Diseases imeni S. P. Botkin

"Klin Med" Vol XXX, No 2, pp 19-27

Describes clinical characteristics, treatment, etc. of a Western form of tick encephalitis occurring in regions where Ixodes persulcatus and Ixodes ricinus function as transmitters, and draws parallel

209T73

USSR/Medicine - Infectious Diseases Feb 52 (Contd)

between this form and Far-Eastern tick encephalitis. The Western form described is distinguished clinically by a double wave of meningoencephalitis and epidemiologically by the fact that the infection is transmitted not only by the bite of a tick, but also by consumption of the milk of infected goats.

209T73

GUREVICH, Ye.S., prof.; FIGURINA, M.M. (Leningrad)

Research and services at the S.P.Botkin Hospital in Leningrad; on
the 125th anniversary of S.P.Botkin's birth. Klin.med. 35 no.8:
74-81 Ag '57. (MIRA 10:11)

(HOSPITALS

S.P.Botkin's hosp., research & serv. activities)

FIGURINA, Mariya Mikhaylovna, zasl. vrach RSFSR; SELIVANOV, V.I.,
red.; KHARASH, G.A., tekhn. red.

[S.P.Botkin Infectious Disease Hospital in Leningrad] Lenin-
gradskaia infektsionnaia bol'nitsa im. S.P.Botkina, 1882-1961.
Leningrad, Medgiz, 1961. 98 p. (MIRA 15:4)
(LENINGRAD—COMMUNICABLE DISEASES—HOSPITALS)

FIGURINA, M.M.; SEMENOVA, A.N.

Clinical characteristics of current forms of typhus as per data
of the Leningrad S.P. Botkin Hospital. Trudy Len.inst.epid.i
mikrobiol. 23:110-120 '61. (MIRA 16:3)

1. Iz Leningradskoy bol'nitsy imeni S.P. Botkina.
(LENINGRAD--TYPHUS FEVER)

FIGURINA, Mariya Mikhailovna; ZMEYEV, G.Ya., red.; SAFRONOVA, I.M., tekhn.
red.

[Typhus fever] Sypnoi tif. Leningrad, Medgiz, 1962. 10 p.

(MIRA 16:2)

(TYPHUS FEVER)

KOLESOV, V.I., prof., FIGURINA, T.D., SARAYEVA, A.N.

Clinical and bacteriological observations of the use of antibiotics
in purulent surgical diseases [with summary in English]. *Khirurgiya*
34 no.4:31-36 Ap '58 (MIRA 11:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. V.I.
Kolesov) i Leningradskogo meditsinskogo instituta imeni akademika
I.P. Pavlova.

(ANTIBIOTICS, therapeutic use
purulent dis., abscesses & infected wds., indic. (Rus))
(INFECTION, therapy
antibiotics in purulent dis., abscesses & infected
wds. (Rus))

FIGURINA, T.D.

On the use of antibiotics for patients with suppurative surgical diseases. Sov. med. 24 no. 7:74-78 J1 '60. (MIRA 13:8)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. V.I. Kolesov)
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FIGURINA, T.D. (Leningrad, ul. Polyarnikov, d.19, kv.4); ROMANKOVA, M.P.

Methods of intravital coronary arteriography; a review of
foreign literature. Vest. khir. 91 no.7:95-98 J1'63
(MIRA 16:12)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof.
V.I.Kolesov) 1-ge Leningradskogo meditsinskogo instituta
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BARCHENKO, N.I.; KOLPAKOV, A.M.; FIGURINA, Z.G.; YASHIN, V.I.,
Starshiy instruktor

Effect of balloon breakers on the breakage of staple yarn No.40
in unwinding. Tekst.prom. 21 no.6:35-36 Je '61.

(MIRA 15:2)

1. Glavnyy inzh. Istom'inskoy pryadil'no-tkatskoy fabriki (for
Barchenko). 2. Nachal'nik tkatskogo proizvodstva Istomkinskoy
pryadil'no-tkatskoy fabriki (for Kolpakov). 3. Nachal'nik
prigotovitel'nogo tsekha Istomkinskoy pryadil'no-tkatskoy
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(Textile machinery)

(Yarn)

KOLPAKOV, A.M.; FIGURINA, Z.G.; YASHIN, V.I.

Effect of ballon dividers on the breakage of yarn during winding. Tekst. prom. 22 no.7:40-42 JI '62.

(MIRA 17:1)

1. Nachal'nik tkatskogo proizvodstva Istomkinskoy pryadil'no-tkatskoy fabriki (for Kolpakov). 2. Nachal'nik prigotovitel'nogo otdela Istomkinskoy pryadil'no-tkatskoy fabriki (for Figurina). 3. Starshiy instruktor Istomkinskoy pryadil'no-tkatskoy fabriki (for Yashin).

MAKAROV, Roman Romanovich; FIGURNOV, Konstantin Mikhaylovich
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[Clinical lectures on selected obstetric topics] Klini-
cheskie lektsii po izbrannym glavam akusherstva. Lenin-
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ZUBAREV, V.I.; BEREGOVSKIY, V.I.; FIGURKOV, I.V.

Transfer to oxygen-blown smelting of the Almalyk Copper Smeltery
and an increase in its capacity. TSvet. met. 36 no.8:6-9

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(MIRA 16:9)

(Almalyk--Copper industry) (Oxygen--Industrial applications)

137-58-5-8753

FIGURKOVA, L. I.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 4 (USSR)

AUTHORS: Plaksin, I. N., Okolovich, A. M., Figurkova, L. I., Yekhlakova, S. A.

TITLE: A Comparative Analysis of the Procedures Employed for the Separation of Copper-lead Concentrate at the Berezovskaya and Zolotushinskaya Plant (Sravnitel'nyy analiz usloviy raboty tsiklov razdeleniya medno-svintsovogo kontsentrata na Berezovskoy and Zolotushinskoy fabrikakh)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 10, pp 13-19

ABSTRACT: A presentation of results of the sampling of selective flotation of Cu-Zn (Cu-Pb?) concentrates at Zolotushinskaya and Berezovskaya milling plants. A comparison of the data obtained revealed the following facts. According to all criteria the progress of flotation processes at the Berezovskaya plant is more stable. All operations of selective flotation at the Berezovskaya plant are carried out with considerably thicker pulp and the content of the solid constituents is kept constant. The processes at the two plants also differ greatly with regard to the amounts of depressant employed. The Zolotushinskaya plant operates with a

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137-58-5-8753

A Comparative Analysis of the Procedures Employed (cont.)

higher cyanide content. The selection process at that plant proceeds at a higher concentration of hydroxyl ion (with a pH greater than 10) without addition of alkaline reagents for the regulation of flotation; the introduction of soda merely impairs the separation of minerals. At the Berezovskaya plant 100-150 g/t of soda are introduced for this process while the pH remains within the range of 9.

A Sh.

1. Copper ores--Flotation
2. Zinc ores--Flotation
3. Lead ores--Flotation
4. Ores--Processing

Card 2/2

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Using combinations of collectors in an ore dressing plant to increase the selectivity of the flotation of complex ores. Nauch. soob. IGD 16:180-185 '62.

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FIGURNOV, Konstantin Mikhaylovich

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ZOV, Yu.N.; STEPIN, S.A.; FIGURNOV, N.M.; KACHURIN, V.K., redaktor;
SNITKO, I.K., redaktor; GAVRILOV, S.S., tekhnicheskiy redaktor.

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tekhniko-teoret. lit-ry, 1954. 286 p. (MLBA 7:12)
(Materials--Testing) (Metals--Testing) (Strength of materials)

ATLAS, M.; KADYSHEV, L.; MAKAROVA, M.; SOROKIN, G.; FIGURNOV, P.

On the basic economic law. Vop. ekon. no.1:39-52 Ja '62.
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Yevropeyskikh Stranakh Narodnoy Demokratii. Moskva, Vneshtorgizdat, 1955.

iii p. Diagr. 23 cm.

FIGURNOV, P K

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