

S/130/60/000/04/04/006

AUTHOR: Zuyev, P.P., Chief of Rolling Department
TITLE: Rolling of High-Speed Cutting Steel into Square Profiles
PERIODICAL: Metallurg, 1960, No. 4, pp. 30 - 31

TEXT: Steel for high-speed cutting belongs to steels with a narrow plasticity range. To obtain squares of an accurate shape without fissures along the edge an adequate assortment of gages and a proper rolling method is of great importance. In the article various technologies of rolling, as developed by Elektrostal Plant are described. These have resulted in the desired improvement of the products but on the other hand also in the reduction of the productivity of the mill in increased loss of metal in the form of scale and increased thickness of decarbonized layer. These drawbacks have been eliminated by a new technology developed by the workmen of the plant, which consists of a combined rolling system providing for the following successive profiles: rhomb - rhomb - oval - circle - rhomb - rhomb, as shown in the Diagram; the finished profile on the final line provides for rhomb-square. This system works satisfactorily due to the fact that the oval and round gages bring about a shift of the fast cooling edges formed by the previous rhomb

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Rolling of High-Speed Cutting Steel into Square Profiles

gages, first in the directions of the oval and then by the circumference of the circular gage, with the result that in the following rhomb gage the edges are formed in new places. The new technology does away with intermediate heating, while maintaining the same number of passes. The edges of the final square profile are clean-cut and free from any cracks and fissures. There is 1 diagram. ✓ 4

ASSOCIATION: Zavod Elektrostal' (Elektrostal' Plant)

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SOV/130-58-11-11/16

AUTHOR: Zuyev, P.P.

TITLE: Reducing Rejects Due to Hardening Cracks (Snizheniye
braka po zakalochnym treshchinam)

PERIODICAL: Metallurg, 1958, Nr 11, pp 34 - 37 (USSR)

ABSTRACT: Steels produced at the "Elektrostal" works include many of the pearlite-martensite and martensite classes (eg 3Kh13, 4Kh13, R9, R18, I 347, KhVG, Kh10S2M, Kh9S2, Kh12, Kh12M) and tend to form cracks (Fig 1), on rapid cooling in the rolled state. For slow cooling from 700-900°C the metal is placed in insulated containers some of which are oil fired and others not fired (Fig 2). Analysis of rejects due to cracks showed that the main sources were R9 and R18 coiled steels cooled in the fired pits and rods of 3Kh13, 4Kh13 and Kh10S2M steels cooled in the unfired ones, the cause being insufficient slowness of cooling. The author describes the former fired-pit practice. Tests with 9 mm rounds of R9 steel showed that in the middle and bottom parts cooling rates were rapid: extra burners and a flue were provided and the practice was modified to raise the temperature before charging to over 850°C (instead of 600), the temperature on charging being

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Reducing Rejects due to Hardening Cracks

SOV/130-58-11-11/16

700°C (metal at over 500) and soaking being carried out for three hours at 800°C. The adoption of these measures completely eliminated cracks in R9 and R18 coiled steels. For the unfired pits 6-55 mm square or round bars of these steels are now charged at over 650°C, cooled for over 24 hours and discharged at a temperature below 100°C; they are transported to the heat treatment shop not more than 12 hours after unloading and are charged into the heat-treatment furnace not over 16-24 hours later. Special procedures are adopted for rolled products of the 600 mill and for 3 Kh13 - 4Kh13 steels intended for rolling in a light section mill. There are 2 figures.

ASSOCIATION: Zavod "Elektrostal'" ("Elektrostal'" Works)

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S/132/60/000/002/010/012
A161/A029

AUTHOR: Zuyev, R.N.

TITLE: Compound Dies With Unkeying Devices

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 2, pp. 40 - 42

TEXT: Design and operation of three compound dies used at Gor'kovskiy avtomobil'nyy zavod (Gor'kiy Automobile Plant) are described in detail and illustrated by detailed drawings. The dies are of the consecutive-operation type, in which the operations are performed in sequence in the vertical plane (instead of the horizontal plane) and have two independent work sections (in the upper or in the bottom plate) one of which performs the operation whilst the other is keyed. Both operations are performed during the down-stroke of the plunger. The unkeying of the second section is forced and the keys are returned by springs into the keying position during the return plunger stroke. Some parts can be produced in a single die. The first of the three dies described is a blanking die (Fig. 1) for wasteless stamping of plates with chamfered angles. It has eliminated burrs which were formerly caused by inaccurate feed of metal strip and cocking in the second die groove. The second is a die for tucking in flanges, i.e.,

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Compound Dies With Unkeying Devices

S/182/60/000/002/010/012
A161/A029

bending the flange edge 90° from the vertical into horizontal position (Fig. 2). It is used for making part flanges rigid, and in assembly (e.g., of the inner and outer automobile door panels). Tucking-in is possible on straight, as well as curved surfaces. The unkeying system of the third die (Fig. 3) can be used in different purpose dies: 1) For punching holes in flanges on an extruded cup or a bent bracket; 2) for shaping a cavity and punching a hole in it (without stretching); 3) for cupping a pipe butt end, punching a hole thereafter, and a number of other operations. Figure 3 illustrates the application to extruding a cavity of 80 mm in diameter and punching a hole of 60 mm in diameter which must be concentric and the concentricity error must not exceed 0.1 mm. The keying device is shown from one side only. Two devices must be used, i.e., on both die sides, to eliminate slanting of the ejector ("3" in the drawing). There are 3 figures. ✓

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ZUYEV, R.N.

Efficient laying-out of a band submitted to continuous extrusion.
Kuz.-shtam.proizv. 1 no.6:42-43 Je '59. (MIRA 12:9)
(Extrusion (Metals))

MOGENDOVICH, M.R., prof., red.; ZUYEV, R.V., red.; GEYKHMAN,
K.L., red.

[Materials of the First Scientific and Practical
Conference on Physical Education, Sports, Medical
Inspection, and Exercise Therapy] Materialy Pervoi
nauchno-prakticheskoi konferentsii po fizicheskomu
vospitaniiu, sportu, vrachebnomu kontroliu i lecheb-
noi fizicheskoi kul'ture. Perm', Permskoe otd-
nie Vses. nauchno-med. ob-va po vrachebnomu kontroliu i
lechebnoi fizicheskoi kul'ture, 1963. 78 p.

(MIRA 17:7)

1. Nauchno-prakticheskaya konferentsiya po fizicheskomu
vospitaniiu, sportu, vrachebnomu kontroliu i lechebnoy
fizicheskoy kul'ture, Ist, 1963. 2. Glavnyy vrach Perm-
skogo oblastnogo vrachebno-fizkul'turnogo dispansera
(for Geykhman). 3. Permskiy meditsinskiy institut (for
Mogendovich).

ZUYEV, S.

How miners participate in mine management. Mast. ugl. 7 no.2:3-4
F '58. (MIRA 11:3)

1. Nachal'nik shakhty "Bokovo-Platovskaya" kombinata Donbassantratsit.
(Coal mines and mining) (Mine management)

BEREZIN, Boris Vasil'yevich; ZUYEV, S.D., retsenzent; UKHOV, L.P.,
red.; KRYZHOVA, M.L., red.izd-va; MAL'KOVA, N.T., tekhn.red.

[Repair of the equipment of by-product coke plants] Remont kokso-
khimicheskogo oborudovaniia. Sverdlovsk, Metallurgizdat, 1962.
237 p. (MIRA 16:1)

(Coking plants--Equipment and supplies)

ZUYEV, S.P.; SERBA, F.I.

Workers of our mine are struggling for working safety. Bezop.truda
v prom. 2 no.10:23-24 0 '58. (MIRA 11:11)

1. Nachal'nik shakhty "Bokovo-Platovskaya" Luganskogo sovnrkhoza
(for Zuyev). 2. Zamestitel' glavnogo inzhenera shakhty "Bokovo-
Platovskaya" Luganskogo sovnrkhoza (for Serba).
(Donets Basin--Coal mines and mining--Safety measures)

ZUYEV, S. S., Cand Tech Sci (diss) -- "A study of heating time of nonferrous metals with heat evolved in them by induction". Moscow, 1960. 12 pp (In Higher and Inter Spec Educ RSFSR, Inst of Nonferrous Metals in M. I. Kalinin), 150 copies (KL, No 10, 1960, 130)

ZUYEV, S.S.

Induction heating of flat nonferrous metal ingots. TSvetl met.
36 no.7:72-77 J1 '63. (MIRA 16:8)
(Nonferrous ingots) (Induction heating)

ZUYEV, S. S., kand.tekhn.nauk

Effect of time length in the induction heating of nonferrous
metal ingots. TSvet. met 33 no.8:62-65 Ag '60.

(Nonferrous ingots)
(Induction heating)

(MIRA 13:8)

ZUYEV, S.S.

137-58-5-10046

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 166 (USSR)

AUTHORS: Berman, S. I., Krapukhin, V. V., Zuyev, S. S.

TITLE: Continuous Sequence Anneal of Nonferrous Semifabricated Products by High-frequency Current (Nepreryvno-posledovatel'nyy otzhig polufabrikatov iz tsvetnykh metallov tokami vysokoy chastoty)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 9, pp 25-29

ABSTRACT: Experiments in the HF anneal (A) of wire, rod, and tubing of nonferrous metals and alloys were conducted under laboratory and shop conditions. HF A was conducted with L62, Cu, manganese, Ni, chromel, and other alloy wires. The equipment, the ductors (I) used for heating, and the treatment procedure are described. Uniform heating of the wire was attained in an I in the form of two parallel Cu tubes of 8 mm diameter, or with elliptical Cu tubing. The wire goes into the I at controlled speed, so that the individual pieces do not touch each other. The length of time the wire spent in the I varied between 1.72 and 24 sec, depending on diameter and composition. In all instances, the mechanical properties of the wire met standard requirements

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137-58-5-10046

Continuous Sequence Anneal (cont.)

after HF A. The microstructure of longitudinal and cross sections of the wire was uniform, grain size being 10-12 microns. Continuous sequence heating of brass and Cu rods was performed on an equipment for case-hardening of rolls, with a 2000-kc current. Tubes were A in a pilot-plant setup, the generator of which produced a 2650-cps current. A roller conveyor with driven rollers was adapted to transport the tubes through the I. The experiments showed that HF anneal necessitates heating the tubes to a higher temperature than that required in ordinary A in resistance furnaces. Thus, the heating of L62 brass is to 650-760°C, while for Ni it is 850-950°. Oxidation of the surface and loss of metal in HF annealing of brass and Ni tubing is negligible.

A. B.

1. High frequency heating--Applications
2. Metals--Heat treatment

Card 2/2

ZUYEV, S.S., kand. tekhn. nauk; KRASNOV, P.V., inzh.; SCHASTLIVTSEV,
N.S., inzh., SHIKHOLEYEV, A.I., inzh.

Radio frequency welding of nonferrous metal pipe. Avtom. svar.
17 no.11:78-81 N '64 (MIRA 18:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov (for Zuyev).
2. Kirovskiy zavod obrabotki tsvetnykh metallov (for Krasnov, Schastliltsev, Shikhaleyev).

82402

S/136/60/000/08/004/008
E193/E183

18.7100
AUTHOR: Zuyev, S.S. (Candidate of Technical Sciences)
TITLE: Influence of the Duration of the Heating Cycle in
Induction Heating of Non-Ferrous Ingots
PERIODICAL: Tsvetnyye metally, 1960, No 8, pp 62-65

TEXT: Short duration of the heating cycle is one of the main advantages of induction heating when applied for pre-heating ingots prior to hot-working operations. However, the extent to which the rate of induction heating can be increased is limited by the maximum permissible temperature difference between the surface and the interior of the billet, both during the actual heating and at the moment at which the hot-working operation begins. The present author discusses various theoretical formulae for calculations of the heating cycle, derives several semi-empirical formulae for brass L62 and nickel, and proposes the following method of calculating various parameters of the induction heating process for the equipment operating at a frequency of 2650-2500 cycles/sec:
1) The permissible temperature difference, Δt , between the surface of the ingot and its interior is calculated from the equation

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Influence of the Duration of the Heating Cycle in Induction Heating of Non-Ferrous Ingots

$$\tau_B = 0.25d_c \sqrt{\Delta t}, \text{ sec (for brass) or}$$

$$\tau_B = (d_c - 2) \Delta t^{0.3}, \text{ sec (for nickel),}$$

where τ_B is the time interval (sec) between the removal of the ingot from the induction coil and the start of the working operation, and d_c is the diameter (cm) of the ingot;

2) The minimum induction heating time, τ_n , is then calculated from the formula

$$\left(\frac{d_c}{\frac{2\lambda}{c\gamma} + 3} \right)^2 \frac{t_n}{9\Delta t}$$

where λ is the heat conductivity coefficient (cal/cm sec °C), c is the specific heat (cal/g °C), γ is the specific gravity (g/cm³), and $t_n = t_p - \frac{1}{2}\Delta t$, t_p denoting the maximum temperature of the ingot surface;

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Influence of the Duration of the Heating Cycle in Induction Heating of Non-Ferrous Ingots

- 3) The number of the ingots heated in one operation is determined from the known capacity of the equipment;
 - 4) The power rating of the generator is calculated from the known formulae.
- There are 4 figures and 5 Soviet references. ✓

Card 3/3

ZUYEV, S.S.

High-frequency heating of cylindrical brass and nickel ingots.
TSvet.met.29 no.3:73-78 Mr '56.
(MIRA 9:7)

1.Mintsvetmetzoloto.
(Brass ingots--Heat treatment)(Nickel--Heat treatment)

ZUYEV, S.S.; KRASNOV, P.V.

Equalizing the seam structure in welded brass pipe. Trudy
Giprotsvetmetobrabotka no.24:247-257 '65. (MIRA 18:11)

ZUYEV, T.F.

Perinatal mortality of children in maternal cardiovascular diseases. Vop. okhr. materin. dets. 8 no.1:17-20'63

(MIRA 17:2)

1. Iz kafedry akusheratva i ginekologii. (zav. - prof. P.Ya. Lel'chuk) Rostovskogo-na-Donu meditsinskogo instituta.

TIMOSHENKO, V.V.; MARTYNISHKIN, A.M.; TSUKANOV, V.P.; GANGO, Ya.V.;
SHIKOV, I.P.; NIKONOV, A.V.; POSTNIKOV, V.P.; KOROLEV, G.D.;
ARTAMONOV, A.M.; TEMNIKOV, S.N.; KABLUKOVSKIY, A.F.; MAKHOV, A.Kh.;
KOTIKOV, A.Kh.; ZNAMENSKIY, B.A.; ZUYEV, T.I.; LOZDNYAKOV, A.P.;
BALASHOV, S.A.; YERMOKHIN, I.P.

New design of electrode holders for electric-arc smelting furnaces.
Prom. energ. 15 no.8:13-14 Ag '60. (MIRA 15:1)
(Electric furnaces)

ZUYEV, M.I.; KULTYGIN, V.S.; KABLUKOVSKIY, A.F.; SIMONOV, V.I.; ZUYEV, T.I.;
VOROB'YEV, Yu.K.; MARTYNUSHKIN, A.M.; TSUKANOV, V.P.; LAKTIONOV, V.S.

Improved technology of the smelting of ShKh-15 steel for ball
bearings. Prom.energ. 17 no.2:12 F '62. (MIRA 15:3)
(Steel--Metallurgy) (Ball bearings)

S/130/60/000/009/003/004
A006/A002

AUTHORS: Kablukovskiy, A.F., Simonov, V.I., Zuyev, T.I., Vorob'yev, Yu.K.

TITLE: Intensified Melting in Arc Furnaces

PERIODICAL: Metallurg, 1960, No. 9, pp. 19 - 20

TEXT: When melting UX15 (ShKh15) ball bearing steel in electric arc furnaces at the "Elektrostal" Plant, diffusion deoxidation during the reduction period and holding of the metal under carbide slag takes not less than one hour. Ferrochromium is added to the deoxidized metal 40 minutes after the onset of refining. The carbide slag is converted into white slag 10-15 minutes prior to teeming, and ferrosilicide lumps are supplied to the furnace. Prior to teeming the metal into the ladle, it is deoxidized with aluminum lumps (0.4 kg/ton). The total refining time is 1 hour 40 min - 2 hours 10 min. A new method was developed to raise the efficiency of 20-ton arc furnaces when melting ShKh15 steel without impairing the quality of the metal. This technology differs from the conventional method as follows: a) partial dephosphorization and melting of the charge are combined by adding lime and ore to the pool at the end of the melting period; b) sufficient degassing of the metal is ensured by a reduced carbon content at the be-

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Intensified Melting in Arc Furnaces

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A006/A002

ginning of the oxidizing period and by removing not less than 0.30% carbon during bubbling; c) the metal is preliminary deoxidized at the end of the oxidizing period with refined cast iron containing 4.0 - 4.5% C, 8.0-10.0% Mn and not over 0.030% P in an amount of 7.5-12.5 kg/t; d) additional deoxidizing of the metal prior to the formation of reducing slag with silico-chromium lumps (5.0-6.0 kg/ton) and aluminum (0.4 kg/ton); e) addition of the main portion of ferrochromium to the bare metal without preliminary diffusion deoxidation; f) deoxidation of the slag with coke powder and 75% ferrosilicide and final deoxidation of the metal with aluminum lumps (0.5 kg/ton) prior to teeming; g) the total reducing time is 60-70 min. The contamination of the metal in both cases was almost equal. The melting time with a fresh charge was reduced by 48 min; in remelting of waste it was reduced by 33 min i.e. by 15-19%. The average economy in electric power was 47 kwh/ton in remelting and 75 kwh/ton on a fresh charge. Presently the method is used for melting 12XH3A (12KH3A), 18XHEA (18KHVA), 40X (40Kh), 3X BГ (EKHVG), 60C2A (60S2A) and other structural and instrument steels at the Elektrostal' Plant. A table is given containing technical and economical data of experimental and conventional melts.

ASSOCIATION: "Elektrostal'" zavod (Elektrostal' Plant)

Card 2/2

KABLUKOVSKIY, A.F.; SIMONOV, V.I.; ZUYEV, T.I.; VOROB'YEV, Yu.K.

Improving the arc furnace smelting process. Metallurg 5
no.9:19-20 8 '60. (MIRA 13:8)

1. Zavod "Elektrostal'."
(Steel--Electrometallurgy)

ZUYEV, Tikhon Illarionovich; BARSKIY, B.S., nauchnyy red.; ISLANKINA,
T.F., red.; SAVCHENKO, Ye.V., tekhn.red.

[Electrometallurgy] Elektrometallurgiya. Moskva. Izd-vo
"Znanie," 1961. 29 p. (Vsesoiuznoe obshchestvo po rasprostraneniin
politicheskikh i nauchnykh mnenii. Ser.4, Tekhnika, no.1).
(Electrometallurgy) (MIRA 1/4:1)

ZUYEV, T.T., inzh.

Analysis of the counterpressure of the briquet ribbon.
Torf. prom. 39 no.5:24-28: '62. (MIRA 16:8)

1. Institut torfa AN BSSR.

ZUYEV, T. T., inah.

Role of troughs in peat briquetting. Torf. prom. 40 no.3:
21-23 '63. (MIRA 16:4)

I. Institut torfa AN Belorusskoy SSR.
(Briquets(Fuel)) (Peat)

ZUYEV, V.; KORN, A.; IVANOV, V.

"Mechanization of loading and unloading operations in the transportation of agricultural products" by V.A. Goberman, L.A. Goberman. Reviewed by V. Zuev, A. Korn, V. Ivanov. Avt.transp. 40 no.5:61 My '62. (MIRA 15:5)
(Farm produce—Transportation)
(Loading and unloading—Equipment and supplies)
(Goberman, V.A.) (Goberman, L.A.)

ZUYEV, V., gornyy inzh.

Giant dredger. Nauka i zhizn' 27 no.9:62 S '60.

(MIRA 13:9)

(Gold dredging)

107-57-3-41/64

AUTHOR: Zuyev, V. (Chita)

TITLE: Branding Inscriptions on Plastics. Experience exchange
(Vyzhiganiye nadpisey na plastmassakh. Obmen opytom)

PERIODICAL: Radio, 1957, Nr 3, p 39 (USSR)

ABSTRACT: A device for branding inscriptions on plastics is suggested which consists of an electric soldering iron whose bit is sawed lengthwise, a character-bearing branding piece which can be inserted into the slit of the bit, and a brass bushing which serves to fasten the branding piece to the bit. There is one figure in the article.

Card 1/1

ZUYEV, V.

Vital activity of Communists. Grazhd.av. 18 no.8:6-7 Ag '61.
(MIRA 14:8)
1. Zamestitel' nachal'nika Politicheskogo upravleniya Grazhdanskogo
vozdushnogo flota.
(Communist Party of the Soviet Union--Party work)
(Aeronautics, Commercial)

ZUYEV, V., kand. tekhn. nauk; LUK'YANENKOV, I., inzh.-mekhanik

Mechanized removing of manure. Nauka i pered. op. v sel'khoz
9 no.10:52-55 0 '59 (MIRA 13:3)
(Farm manure) (Farm equipment)

ZUYEV, V. (p. Chita)

Burning inscriptions into plastic. Radio no. 7:39 Mr '57.

(Plastic materials)

(MLRA 10:5)

ZUYEV, V., inzh.-konstruktor

Important subject. Prof.-tekh. obr. 21 no.8;28.29 Ag '64.

(MIRA 17:9)

1. Otdel glavnogo mekhanika Moskovskogo avtozavoda im. I.A.Likhacheva.

GOLDFARB, D.M.; XUYEV, V.A.; TIMAKOV, V.D., professor, *savedyuyushchiy*.

Effect of amytal-induced sleep on the efficacy of serum therapy of experimental tetanus intoxication in white mice. Authors' abstract. *Zhur.mikrobiol. epid.i immn. no.8:65-66 Ag '53.* (MLBA 6:11)

1. Kafedra mikrobiologii II Moskovskogo meditsinskogo instituta im. I.V.Stalina
(Sleep) (Tetanus) (Serum therapy)

ZOYEV, V.A.

~~_____~~
Role of cellular reactions in immunity in experimental influenza
[with summary in English]. Vop.virus. 2 no.3:176-179 My-Je 1972
(KIRA 10:10)

1. Moskovskiy nauchno-issledovatel'skiy institut vaktsin i
syvorotok imeni I.I.Mechnikova.
(INFLUENZA, immunology,
leukocyte antibody response to antigen in animals
(Rus))

ZUYEV, V.A.

G.N.Gabrichovski; 50th anniversary of his death, 1860-1907 .
Zhur.mikrobiol.epid. i immun. 28 no.3:137-140 Mr '57. (MIRA 10:6)
(GABRICHVSKII, GEORGII NORBERTOVICH, 1860-1907)

ZUYEV, V.A., Cand Med Sci -- (disc) "Significance
of cellular reactions in immunity in experimental
influenza
~~grippe~~." Mos, 1958, 11 pp (Min of Health USSR,
Central Inst for the Advanced Training of Physicians)
(KL, 23-58, 111)

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GOL'DFARB, D.M.; ZUYEV, V.A.

Phagolytic enzyme detectable on solid culture media. Vop.virus
no.6:662-667 N-D '63. (MIRA 17:6)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei,
AMN SSSR, Moskva.

ZUYEV, V.A.

Lytic reactions in phage infections. Vest. AMN SSSR 18 no.12:
62-73 '63. (MIRA 17:7)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei
AMN SSSR.

TIMAKOV, V.D.; GOL'DFARB, D.M.; FOMICHEV, Yu.K.; SKAVRONSKAYA, A.G.;
ZUYEV, V.A.

Antiphage and antibacterial activity of the antitumor
preparations dichloroethylamine and its derivatives. Vop.
virus no.6:650-662 N-D '63. (MIRA 17:6)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei
AMN SSSR, Moskva.

ZIL'BER, L.A., prof., red.; VERSHILOVA, P.A., prof., red.
ZUYEV, V.A., red.

[Current problems in immunology] Aktual'nye voprosy im-
munologii. Moskva, Meditsina, 1964. 359 p.

(MIRA 17:9)

1. Deystvitel'nyy chlen AMN SSSR (for Zil'ber). 2. Chlen-
korrespondent AMN SSSR (for Vershilova).

GERSHANOVICH, V.N.; BURD, G.I.; ANDREYEVA, I.V.; ZUYEV, V.A.

Effect of phage T2 "ghosts" on the synthesis of inducible beta-galactosidase in Escherichia coli B cells. Biokhimiya 30 no.2: 395-406 Mr-Apr '65. (MIRA 18:7)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR, Moskva.

ZUYEV, V.A.

Use of the lysin-formation sign (E-sign) in intraspecies
differentiation of phages. Zhur.mikrobiol., epid. i immun.
42 no.9:42-44 S '65. (MIRA 18:12)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN
SSSR i Uzhgorodskiy nauchno-issledovatel'skiy institut
epidemiologii, mikrobiologii i gigyeny. Submitted June 26,
1964.

ACC NR: AF7005204

SOURCE CODE: UR/0185/66/011/011/1176/1183

AUTHOR: Dmytruk, M. L.--Dmitruk, N. L.; Zuyev, V. O.--Zuyev, V. A.

ORG: Institute of Semiconductors, AN UkrSSR, Kiev (Instytut napivprovidnykiv AN URSR)

TITLE: Surface photo-emf in semiconductors with short minority carrier lifetimes

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 11, 1966, 1176-1183

TOPIC TAGS: photo emf, semiconductor carrier, minority carrier, carrier lifetime, surface property

ABSTRACT: This is a continuation of earlier work (Ukr. fizychn. zh. v. 11, no. 2, 1966) dealing with capacitive photo-emf in GaAs. In the present paper the authors consider theoretically the equivalence of surface photo-emf in semiconductors of this type, which have short minority-carrier lifetimes, and in which the carriers are subject to adhesion and the diffusion length is commensurate with the size of the space-charge region next to the surface. The problem is solved in the linear approximation, with the potential approximated by a linear function of the coordinates. The distribution of the optically-induced addition to the carrier density, calculated for the typical case of GaAs, turns out to be nonmonotonic, with the majority carriers having a Boltzmann distribution near the surface, but the minority carriers having a much more complicated distribution. The calculated value of the photo emf of the depletion layer turns out to depend less on the potential than in the case of Ge or

Card 1/2

ACC NR: AP7005204

Si. The authors thank Professor K. B. Tolpygo for interest in the work and for useful advice. Orig. art. has: 3 figures and 23 formulas.

SUB CODE: 20/ SUBM DATE: 27Feb66/ ORIG REF: 007/ OTH REF: 004

Card 2/2

ZUYEV, V.A.; SAMOYLOVA, T.P.; STETSSENKO, V.G.

Self-propelled electric combine for grain. *Biul. nauch.-tekh. po
elek. sel'khoz. no.1:29-32 '56.* (MIRA 10:9)
(Combines (Agricultural machinery))

BYSTRITSKIY, Dorian Naumovich; GORSHKOV, Ye.M.; ZUYKOV, V.A.; SMELYANSKIY,
V.A., spets.red.; SILIN, V.S., red.; BALLEU, A.I., tekhn.red.

[Mobile electric power plants in agriculture] Peredvizhnye
elektricheskie stantsii v sel'skom khoziaistve. Moskva, Gos.
izd-vo sel'khoz.lit-ry, 1960. 251 p. (MIRA 13:5)
(Electric power plants)

ZUYEV, V.A. [Zufev, V.O.]; SACHENEG, A.V.; TOLEPYGO, K.B. [Tolpygo, K.B.]

Kinetics of photoconductivity in semiconductors with the trapping
levels for minority current carriers on the surface. Ukr. fiz. zhur.
10 no.3:275-286 Mr '65. (MIRA 18:4)

1. Institut poluprovednikov AN UkrSSR, Kiyev.

ZUYEV, V.A. [Zulev, V.O.]; SACHENKO, A.V.; TOLPYGO, K.B. [Tolpyho, K.B.]

Kinetics of the photoconductivity of thin semiconductor films
having trapping and recombination levels. Ukr. fiz. zhur. 10
no. 11:1176-1186 N '65. (MIRA 18:12)

1. Institut poluprovodnikov AN UkrSSR, Kiyev. Submitted Dec.
15, 1964.

GOL'DIN, M.M.; ZUYEV, V.D.; PINUS, L.A.; FONOMAREV, V.F.;
CHERNYSHEV, V.Ye.; LIKHIN, N.I., inzh., red.;
YARKOV, A.M., inzh., red.

[Adjustment and operation of automatic lines composed of
standard units; a handbook] Naladka i ekspluatatsia av-
tomaticheskikh lini iz normalizovannykh uzlov; spravochnoe
posobie. Moskva, Mashinostroenie, 1965. 443 p.

(MIRA 18:10)

ZUYEV, Vladimir Aleksyevich; PESTRYAKOV, A.I., red.; PEVZNER, V.I.,
tekhn. red.; OKOLELOVA, Z.P., tekhn. red.

[Mechanization of the removal of silage from storehouses]
Mekhanizatsia vyemki silosa iz khranilishch. Moskva, Sel'-
khozizdat, 1963. 94 p. (MIRA 17:1)

KABANOV, F.I.; KAZARNOVSKIY, Ya.S., KAREBNOV, N.V.; ZEMEV, T.I.

Production of technological gas by means of high-temperature
vapor-oxygen conversion of petroleum fuels under increased
pressure. Khim. prom. 41 no.8:587-594 Ag '65.

(MIRA 18:9)

KASPIROV, Grant Bogdanovich; ZUYEV, V.I., redaktor; RUMYANTSEV,
N.M., redaktor; FRODINOV, I.M., red.

[Establishing production standards for woodpulp production]
Tekhnicheskoe normirovanie tselulozno-bumazhnogo proizvedeniya.
Moskva, lesnaya promyshlennost', 1964. 198 p.
(MIRA 18:1)

KALYUZHNYI, I.T.; SIDOROVA, L.N.; BURMIN, L.; AKTAYEV, S.; TEPLITS,
V.V.; ZUYEV, V.N.; POKROVSKAYA, T.I.; KOZHOMKULOV, T.A.;
LAVROVA, N.N., prof., red.; ZUBOK, Ya.Z., tekhn. red.

[Read this, this is useful] Prochitai, eto polezno. Frunze,
1962. 10 nos. [Botkin's disease] Bolezn' Botkina. 19 p.
[Communicable (infectious) diseases in children] Detskie
zaraznye (infektsionnye) bolezni. 18 p. [Helminths and the
harm they cause to human health] Gel'minty i ikh vred dlia
zdorov'ia cheloveka. 26 p. [Work hygiene of the beet grower]
Gigiena truda sveklovoda. 12 p. [Hygienic regimen of the
schoolchild] Gigienicheskii rezhim shkol'nika. 24 p. [Fungus
diseases of the skin] Gribkovye zabolevaniia kozhi. 24 p.
[Prevention and treatment of cardiac and vascular diseases]
Preduprezhdenie i lechenie boleznei serdtsa i sosudov. 19 p.
[Prevention and treatment of rickets] Rakhit, ego predu-
prezhdenie i lechenie. 8 p. [Old age and longevity] Starost'
i dolgoletie. 14 p. [Vitamins and their significance for
human health] Vitaminy i ikh znachenie dlia zdorov'ia chelo-
veka. 22 p.
(MIRA 17:3)

ANDRIANOV, V.N.; BEYLIS, M.Ye.; BUDZKO, I.A.; ZAKHARIN, A.G.; ZLATKOVSKIY,
A.P.; ZUYEV, V.A.; KRASNOV, V.S.; LISTOV, P.N.; NAZAROV, G.I.;
POYARKOV, M.F.; SMIRNOV, B.V.

Nikolai Alekseevich Sazonov; obituary. Elektrichestvo no.5:
92-93 My '63. (MIRA 16:7)

(Sazonov, Nikolai Alekseevich, 1903-)

BLINKIN, Semen Aleksandrovich; ZUYEV, V.A., red.; KOKIN, N.M.,
tekh. red.

[Methods of rapid bacteriological diagnosis of intestinal
infections] Metody uskorennoi bakteriologicheskoi diag-
nostiki kishcheykh infektsii. Moskva, Medgiz, 1963. 290 p.

(MIRA 16:12)

(INTESTINES--MICROBIOLOGY) (INTESTINES--DISEASES)

ZUYEV, V.A., kand.tekhn.nauk; SMOL'KO, I.O., inzh.

Use of electrically powered machinery for hauling silage out of
pits and trenches. Nauch. trudy VIRSKH 11:66-80 '62. (MIRA 16:3)
(Ensilage--Transportation)

GERSHANOVICH, V.N.; ZUYEV, V.A.; BUNINA, N.N.; KUZNETSOVA, N.V.; KATS, G.Y.

Chemical nature and the mechanism of action of the succinic oxidase inhibitor from *Trypanosoma cruzi*. *Biokhimiia* 27 no.2:252-259
Mr-Apr '62. (MIRA 15:8)

1. Institute of Vaccines and Sera, and the State Control Institute of Medical and Biological Preparations, Moscow.
(SUCCINIC OXIDASE) (TRYPANOSOMA CRUZI)

ZUYEV, V.K.

Conference on the results of the elimination of a localized outbreak
of smallpox in Moscow in 1960. Zhur.mikrobiol. epid. i immun. 32
no.4:153-154 Ap '61. (MIRA 14:6)

(MOSCOW—SMALLPOX)

ZUYEV, V.A., kand.tekhn.nauk; SMOL'KO, I.O., inzh.

Using electric loading equipment for removing silage from pit
and trench silos. Mekh. i elek. sots. sel'khoz. 19 no.6:23-25
'61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifikatsii
sel'skogo khozyaystva.

(Ensilage)

(Electricity in agriculture)

ZUYEV, V.A.; BUKRINSKAYA, A.G.

Electron microscope study of parainfluenza viruses. Vop. virus.
5 no.4:490-492 Ja-Ag '60. (MIRA 14:1)

1. Moskovskiy nauchno-issledovatel'skiy institut vaktsin i
syvorotok imeni I.I.Mechnikova i Institut virusologii imeni D.I.
Ivancovskogo AMN SSSR, Moskva.
(INFLUENZA VIRUSES)

ZUYEV, V. A.

"Operating Data on the Self-Propelled, Electric Grain Combine." Cand Tech Sci, All-Union Sci Res Inst for the Electrification of Agriculture, All Union Order of Lenin Acad of Agricultural Sciences imeni V. I. Lenin, Moscow, 1955. (RL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

ZUYEV, V.A., inzh.; TARAS'YEV, I., inzh.

Cleaning of mine air ducts. Ugol' Ukr. 4 no.12:19-20 D '60.
(MIRA 13:12)

(Mine ventilation)

ZUYEV, V.A., inzh.

Distribution of ventilation units in congested areas of mines
in operation. Ugol' Ukr. 3 no.12:22 D '59.

(MIRA 13:4)

1. Dneprogiproskht.
(Mine ventilation)

KRYLOVA, Margarita Dmitriyevna; ZUYEV, V.A., red.; KUZ'MINA, N.S.,
tekh. red.

[Phage typing of bacteria] Fagotipirovanie bakterii. Mo-
skva, Medgiz, 1963. 199 p. (MIRA 16:11)
(BACTERIOPHAGE)

ZUYEV, V. A.

USSR/Virology - Human and Animal Viruses.

E

Abs Jour : Ref Zhur Biol., No 1, 1959, 574

Author : Zuev, V.A.

Inst : Moscow Scientific Research Institute of Vaccines and Sera

Title : The Role of Cellular Antibodies in Grippe Immunity.

Orig Pub : Tr. Mosk. n.-i. in-ta vaktsin i syvorotok, 1957, 9, 62-65

Abstract : No abstract.

Card 1/1

- 10 -

SOV/118-59-4-17/25

AUTHOR: Zuyev, V.A., Engineer

TITLE: Pneumatic Locomotives for Haulage

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1959,
Nr 4, pp 49-50 (USSR)

ABSTRACT: Since it is prohibited to use electric locomotives in gaseous fan drifts, haulage under this condition is still not mechanized. In consideration of Western European practice, the author recommends the use of pneumatic locomotives. The Donetskiy filial Giprougleshasha (Donets Branch of the Giprougleshasha) has designed a pneumatic locomotive which can pull eight 1 ton mine cars for 600 m with one charge. The pneumatic locomotive works on compressed air at 4 atm. The charging of the compressed air cylinders takes 3 to 4 minutes. Other pneumatic locomotives type "BVD-35" have been imported from Czechoslovakia to speed up the mechanization of haulage in fan drifts of gassy mines of the Tsentral'nyy rayon Donbassa

Card 1/2

Pneumatic Locomotives for Haulage

SOV/118-59-4-17/25

(Central District of the Donbass). The air compressor used is the "3PSK-380" (productivity - 200 cu m per minute; pressure phases - 5; surplus air pressure in the air pipe - from 175 to 200 atm; weight of the compressor plus equipment - 15,300 kg; power source - a synchronous motor of 320 kilowatts and 300 r.p.m.). The BVD-35 pneumatic locomotive has an adhesive weight of 9,000 kg; 6 compressed air cylinders (pressure - 175 atm.); range - 6 km; maximum tractive force - 1,500 kg (minimum from 500 to 700 kg; normal speed - 3 m per second; maximum speed 5 m per second. The Institut Dneprogiproshakht (the Dneprogiproshakht Institute) is planning to use pneumatic haulage for 3 mines of the Donbass kombinat "Stalinugol'" (the Donbass "Stalinugol'" Combine). There are 5 diagrams.

Card 2/2

ZUYEV, V. A.

USSR / Virology - Human and Animal Viruses.

E

Abs Jour: Ref Zhur-Biol., No 9, 1958, 38214.

Author : Zuev, V. A.

Inst : Not given.

Title : Significance of Cell Reactions in Immunity of
Experimental Influenza.

Orig Pub: Vopr. virusologii, 1957, No 3, 176-179.

Abstract: A study was conducted on the capacity of leucocytes to produce antibodies of influenza virus and toward phagocytosis. Antibodies appeared in leucocytes of immunized mice 48-72 hours earlier and at a higher titer than in blood serum. In leucocytes a virus was found which was absorbed in the immunization process and could be isolated from cells, evidently, due to unstable combination with the antibodies.

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ZUEV V. V. EXCERPTA MEDICA Sec 4 Vol.11/9 Microbiology Sep 58

2222. THE SIGNIFICANCE OF CELLULAR REACTIONS IN IMMUNITY IN EXPERIMENTAL INFLUENZA (Russian text) - Zuev V. A. - VOP. VIRUS-OL. 1957, 3 (176-179) Tables 2

If mice were inoculated intranasally three times in consecutive days with 0.025 ml. allantoic fluid containing influenza virus PR8 of the dilution 10^{-7} , and after 24, 48, 72, 96, 120 and 144 hr. after the last immunization serum was taken from the heart and leucocytes were obtained from the abdomen treated the day before with 3% bouillon, the leucocytes, after being destroyed by freezing and thawing, neutralized already after 24 hr. a suspension of virus 10^{-7} diluted. The antiserum, on the contrary, does not neutralize before 96 hr. In the diluted extract of leucocytes of mice immunized twice with influenza virus PR8 over an interval of 7 days, live virus could be detected. Out of 5 attempts, the examination of 4 became positive after 2-3 passages in fertile hen eggs. A fortnight after immunization the mice sera contain an antibody titre of 1:256 and they prove to be resistant to 100 ID of the virus. From the simultaneous existence of virus and its antibody in leucocytes and from the fact that antibody in leucocytes appears earlier than in serum, it is concluded that leucocytes play a role in immunity to influenza.

Gross - Berlin

ZUYEV, V.A.

ANDRIANOV, V.N., doktor tekhn.nauk; BERSENEV, Ye.Ye., inzh.; BYSTRITSKIY, D.N., kand.tekhn.nauk; GORBENNIKOV, A.F., kand.tekhn.nauk; GRESOV, N.A., kand.tekhn.nauk; ZUYEV, V.A., kand.tekhn.nauk; KLIMOV, A.A., kand.tekhn.nauk; KOROLEV, V.F., kand.tekhn.nauk; KUDRYAVTSEV, I.F., kand.tekhn.nauk; KULIK, M.Ye., kand.tekhn.nauk; NAZAROV, G.I., kand.tekhn.nauk; OLYNIK, N.P., inzh.; OSTROV, P.A., kand.tekhn.nauk; PODSOSOV, A.N., inzh.; POPOV, S.T., inzh.; PRISHCHEP, L.G., kand.tekhn.nauk; PGHELKIN, Yu.N., inzh.; RUBTSOV, P.A., kand.tekhn.nauk; RUNOV, B.A., kand.tekhn.nauk; SAVINKOV, K.P., kand.tekhn.nauk; SAZONOV, N.A., prof., doktor tekhn.nauk; SERGETEV, A.S., inzh.; SKVORTSOV, P.F., kand.tekhn.nauk; SMIRNOV, B.V., kand.tekhn.nauk; SMIRNOV, V.I., kand.tekhn.nauk; TYMINSKIY, Ye.Y., inzh.; URVACHEV, P.N., kand.tekhn.nauk; SHTRURMAN, B.A., inzh.; SHCHUROV, S.V., kand.ekon.nauk; RUNOVA, L.M., inzh.; VOL'FOVSKAYA, D.N., red.; NIKITINA, V.M., red.; BALLOD, A.I., tekhn.red.

[Manual on the use of electric power in agriculture] Spravochnik po primeneniiu elektorenergii v sel'skom khoziaistve. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 606 p. (MIRA 11:5)
(Electricity in agriculture)

ACC NR: AP5028920

SOURCE CODE: M/0185/65/010/011/1176/1186

AUTHOR: Zuyev, V. O. -- Zuyev, V. A.; Sachenko, A. V.; Tolstou, I. B. -- Tolpygo, K. B.

ORG: Institute of Semiconductors, AN UkrSSR (Instytut navivrovidnykiv AN UkrSSR)

TITLE: Kinetics of photoconductivity of thin semiconductor layers having surface levels of attachment and recombination

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 10, no. 11, 1965, 1176-1186

TOPIC TAGS: photoconductivity, semiconductivity, semiconductor carrier, relaxation process

ABSTRACT: An investigation was made of the photoconductivity of a semiconductor of finite thickness having attachment and recombination levels on the surface. A general expression for photoconductivity σ was derived, with the aid of which the dependence of σ on the absorption coefficient and the frequency can be obtained. In deriving σ the following assumptions were made: 1) the impurity semiconductor is of the n-type and its donors are totally ionized. There is no attachment in the volume and the nonequilibrium carriers are characterized by the volume lifetime τ . 2) In the region of volume charge the distribution of carriers is of quasi-Boltzman type. 3) The additional concentration of holes p_1 in the essential region $x \sim (2-3) L_0$ considerably exceeds equilibrium p_0 . The cases of sinusoidal, rectangular, and δ -form modulation

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ACC NR: AP5028920

of light were considered. For "thin" specimens ($d < |L_p|$) a time dependence of photoconductivity was obtained in case of Π - and δ -modulation. This dependence shows that in a limiting case of a fast exchange of surface levels with bands, the relaxation of photoconductivity is monoexponential. In this case the characteristic time of the photoconductivity decrease is the lifetime of the nonequilibrium carriers. If τ_{eff} is known, the rate of surface recombination S can be determined. When the lifetime of carriers of the levels is considerable, the relaxation of photoconductivity is not monoexponential. For a model with one surface level there are two exponential sections of photoconductivity relaxation. One characterizes the carrier recombination in the volume and on the surface, and the other is linked with the monopolar part of the photoconductivity. The second section can be attributed to the capture of minority carriers of the surface level. Orig. art. has: 3 figures and 36 formulas. (JA)

SUB CODE: 20/ SUBM DATE: 15Dec64/ ORIG REF: 009/ OTH REF: 004/ ATD PRESS:

4149

PC
Card 2/2

GOL'DFARB, D.M.; ZUXEV, V.A.; GERSHANOVICH, V.N.

Phage reproduction in spheroplasts of Escherichia coli produced
with the help of lytic enzyme of the phage T2, Mikrobiologiya 34
no.4:648-652 J1-Ag '65.

(MTPA 18:10)

1. Institut epidemiologii i mikrobiologii imeni N.P. Gamalei
AMN SSSR,

DVUKRAYEV, I.A.; ZUYEV, V.D.

Axial-piston pump with a bilateral wedgs. Kuz.-shtam. proizv.
4 no.1:45-48 Ja '62. (MIRA 17:3)

KUZNETSOV, M.M.; SHASHKIN, A.S.; ZUYEV, V.D., inzh., retsenzant;
KUNIN, P.A., inzh., red.

[Operation and adjustment of hydraulic systems of machine
tools] Ekspluatatsiia i naladka gidrosistem metalloobrabot-
shchikh stankov. Moskva, Mashinostroenie, 1965. 339 p.
(MIRA 18:4)

ZUYEV, Vasily Fedorovich, akademik; RAYKOV, B.Ye., redaktor; FIALKINA, G.A., redaktor; SHAPOSHNIKOVA, A.A., redaktor; GARNIK, V.F., tekhnicheskii redaktor

[Pedagogical works] Pedagogicheskie trudy. Red., vstup.stat'ia i kommentarii B.E.Raikova. Moskva, Izd-vo Akademii pedagog. nauk, 1956. 146 p. (MIRA 9:10)

1. Deystvitel'nyy chlen Akademii pedagogicheskikh nauk BSPSR (for Raykov)
(Nature study)

\$/276/63/000/002/030/052
AC152/A126

AUTHORS: Tsosik, I.P., Menashvin, G.A., and Muev, V.S.

TITLE: Machine for mechanized enamel-slip application to steel objects

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2, 1968, 199, noabstract 28595 (3b. rabot N.-i. in-ta tekhnol. mashinost. Sovnarkhoz Dostovsk. enon. aad. r-na, no. 1, 1960, 9-15)

TEXT: An experimental mechanized merry-go-round type installation for enamel-slip application is described on which a simultaneous progressive and rotary motion of workpieces is realized. In the process of progressive motion the workpieces are dipped into a bath with slip. The number of reversing turns is controlled by means of a pulse-counting relay and the speed of the carriage and rotational speed of workpieces are controlled by cokes mounted in the pneumatic system. The slip application takes place under constant preset conditions securing high-quality products. by means of easily exchangeable guide blocks a coating can be applied to

Card 1/2

Machine for mechanized...

S/276/64/000/002/030/052
AQ52/A126

hollow objects of various configuration. The advantages of the installation are: the possibility of a simultaneous enamel application to the inside and outside surfaces of an object, reduction of the primary coat thickness to 0.1-0.15mm, reduction of the covering enamel layer to 0.2-0.22mm, improvement of quality, increase of efficiency by over 10%. The possibility of incorporating the installation in a mechanized line for steelware enameling (320mm maximum size of pieces) is stressed.

L. Kamionakiy

Abstracter's note: Complete translation.

Card 2/2

USSR/Cultivated Plants. Fruit Trees. Small Fruit Plants.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77829.

Author : Zuyev, V. I.

Inst

Title : Non-Root Feeding of Apple Trees in Nurseries.

Orig Pub: Sad i gorod, 1956, No 6, 75.

Abstract: Yearly spraying of young apple tree sets, once a month, with a mixture of aqueous solutions of 5% P₂O₅ and 0.75% N₂ for the Rennet Simirenko variety and 1.5% for the Rozmarin variety, conducted by the Department of Fruit and Vegetable Growing of the Tashkent Agricultural Institute in nurseries and the training-experimental farm in 1952-1954, caused an increase of the number of stem shoots on the trunk, thickening of the

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USSR/Cultivated Plants. Fruit Trees. Small Fruit Plants.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77829.

trunk by 1.5-1.6 mm and growth of the set by
12-15% in height. -- A. P. Shcherbakov.

Card : 2/2

31825
S/194/61/000/010/025/082
D222/D301

9,7140 (also 1147)

AUTHOR: Zuyev, V.I.

TITLE: Problems in the development of a magnetic drum storage unit with accelerated readout

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 10, 1961, 29, abstract 10 B188 (V sb. Vychisl. tekhnika, M., Atomizdat, 1960, 24-36)

TEXT: Methods of reducing the readout time in magnetic drum storage units are considered. The method of "rigid" allocation of data requires the programmer to allocate the words on the drum in such a way as to ensure a minimum access time. Because of the complexity of programming this method is not used. The method of multiple access during one revolution enables the reading of instructions and recording of the results, obtained during the previous revolution, to be carried out. A circuit applicable for three and four address instruction systems is given. The disadvantage of this sys-

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S/194/61/000/010/025/082

D222/D301

Problems in the development...

tem compared with the usual one is the increased amount of electronic hardware. A method considered in more detail is the application of several blocks of heads (BH method). Around the drum along the generating elements six BH's are arranged, with 74 heads in each block. Writing is carried out by one block. The remaining five are for reading. The read-write circuits are controlled by a count start track synchronizing the pulses, and six word start tracks (one for each BH). Words containing numbers or instructions are recorded along the circumference of the drum sequentially. The selection of any of the 64 heads of a recording or reading block
[Abstracter's note: Error in original, read block instead of drum] X
is executed by a matrix circuit. The BH selection circuit ensures that the word is read by the block which is nearest at the time of the instruction. The circuit contains about 200 valves. 6 figures.
[Abstracter's note: Complete translation]

Card 2/2

ALEKPEROV, V.P., inzh.; ATOVMYAN, I.O., inzh.; ZUYEV, V.I., inzh.; KAVUN, Ye.S., kand.tekhn.nauk; KOGAN, B.Ya., kand.tekhn.nauk; KOPAY-GORBA, P.N., kand.tekhn.nauk; KULAKOV, A.A., inzh.; LEBEDEV, A.N., kand.tekhn.nauk; PAPERNOV, A.A., doktor tekhn.nauk; PEL'POR, D.S., doktor tekhn.nauk; PLOTNIKOV, V.N., kand.tekhn.nauk; BUZSKIY, Yu.Ye., kand.tekhn.nauk; SOLODOVNIKOV, V.V., doktor tekhn.nauk; TOPCHYEYEV, Yu.I., kand.tekhn.nauk; ULANOV, G.M., kand.tekhn.nauk; SHRAMKO, L.S., kand.tekhn.nauk; DOBROGURSKIY, S.O., doktor tekhn.nauk, retsenzent; KAZAKOV, V.A., kand.tekhn.nauk, retsenzent; PETROV, V.V., kand.tekhn.nauk, retsenzent; KHAVKIN, G.A., inzh., retsenzent; SOLODOVNIKOV, V.V., prof., doktor tekhn.nauk, red.; VITENBERG, I.M., kand.tekhn.nauk, nauchnyy red.; MOLEDAVER, A.I., kand.tekhn.nauk, nauchnyy red.; KHETAGUROV, Ya.A., kand.tekhn.nauk, nauchnyy red.; POLYAKOV, G.F., red.izd-va; KONOVALOV, G.M., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Fundamentals of automatic control] Osnovy avtomaticheskogo regulirovaniya. Vol.2. [Elements of automatic control systems] Elementy sistem avtomaticheskogo regulirovaniya. Pt 2. [Compensating elements and computer components] Korrektiruiushchie elementy i elementy vychislitel'nykh mashin. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry. 1959. 453 p. (MIRA 12:4)
 (Automatic control) (Electronic apparatus and appliances)
 (Electronic calculating machines)

Some problems in the development ...

S/745/62/000/003/001/004

function are obtained within 4 seconds. Reference is made to a paper by T. Goodman and J. Beswick (Trans. ASME, v. 78, n.2, 1956). There are 4 figures and 4 tables.

Card 2/2

ZUYEV, V.I.

USSR/Cultivated Plants. Potatoes. Vegetables. Melons

M-5

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1578

Author : V.I. Zuyev

Inst : ~~Not Given~~

Title : Cultivation of Vegetable Cultures in Golodnaya [Hungry] Steppe.

Orig Pub : Sots. s.kh. Uzbekistana, 1957, No 5, 66-68

Abstract : No abstract

Card : 1/1

ZUYEV, V.I.

PHASE I BOOK EXPLOITATION

SOV/4651

Moscow. Inzhenerno-fizicheskiy institut

Vychislitel'naya tekhnika; sbornik statey (Computer Technique; Collection of Articles) Moscow, Atomizdat, 1960. 54 p. 2,500 copies printed.

Sponsoring Agencies: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR; Moskovskiy inzhenerno-fizicheskiy institut.

Resp. Ed.: Ya.A. Khetagurov, Candidate of Technical Sciences; Tech. Ed.: S.M. Popova.

PURPOSE: This collection of reports is intended for technical personnel working with computers.

COVERAGE: The collection contains reports dealing with some problems of computer technique. The reports of I.O. Atovmyan, V.I. Zuyev, and G.N. Solov'yev discuss various problems concerning a general-purpose discrete-action computer which was designed and is presently under construction at the MIFI, Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering Physics Institute). The reports of Ya.A. Khetagurov, I.M. Vitenberg and Ya.P. Zhidkov examine other technical problems of computer design. There are no references.

~~Card 1/4~~

Computer Technique (Cont.)

SOV/4651

Zuyev, V.I. Problems in the Development of Memory Systems Using a Magnetic Drum
With an Accelerated Access

24

The author describes several methods of accelerated accesses from a memory system using a magnetic drum. He considers the following methods as the most important: (1) "rigid" spacing of data on the drum; (2) multiple conversion during one turn of the drum; and (3) reduction of the storage cycle by using several units of magnetic heads.

Vitenberg, I.M. Some Problems in Designing Control Circuits of Automated
Electrical Analogs

37

After describing the purpose and functions of modern electrical analog systems, the author discusses the role of automated electrical analogs in solving problems of structural mechanics, automatic regulation, ballistics, linear and non-linear programming, and also in the control of industrial processes. The development of all-purpose and specialized automated electrical analogs and their elements has been conducted under the author's supervision at the Nauchno-issledovatel'skiy institut shchetnykh mashin (Scientific Research Institute of Computers) and in the Moscow Engineering Physics Institute with the help of engineers Ye.A. Yerokhin and V.F. Arkhovskiy and others.

Card-3/4

KABANOV, F.I.; KARKHOV, N.V.; KAZARNOVSKIY, Ya.S.; OVCHARENKO, B.G.;
Prinimal uchastiye: ZUYEV, V.I.

Production of process gas by the high temperature conversion
of natural gas at elevated pressure. Khim.prom. no.9:547-555
Ag '62. (MIRA 15:9)

(Gas, Natural)
(Gas manufacture and works)

ZUYEV, V. I., CAND AGR SCI, "PECULIARITIES OF POTATO
CROPS ON THE SALINE SOILS OF GOLODNAYA STEPPE," STALINA-
BAD, 1960. (ACAD SCI TADZHIK SSR, DEPT OF AGR AND BIO
Sci). (KL, 2-61, 215).

-216-

ZUEV, V. I.

USSR / Cultivated Plants. Fruits, Berries.

M-7

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 53739

Author : Zuev, V. I.

Inst : Tashkent Agricultural Institute

Title : Extra-Root Top Dressing of Fruit Seedlings

Orig Pub : Tr. Tashkentsk. s.kh. in-t, 1957, vyp 8, 23-26

Abstract : Three year long experiments showed the expediency of extra-root top dressing of apple tree seedlings by NPK. A 0.7-1% solution of N_{50} and 3-5% solution of the aqueous extract of P_0 , mixed in equal amounts, were used. This spraying was applied once a month. The growth of the extension sprout increased by 22-27 cm (112-117%). In the growth of the lateral sprout was noticed an increase of 6-12 cm. The thickening of the stem was also observed. -- M. D. Deulina.

Card 1/1

ZUYEV, V.I.

Problems concerning the development of a memory device using
a magnetic drum with accelerated selection. Vych. tekhn. no.1:
24-36 '60. (MIRA 15:3)
(Magnetic memory (Calculating machines))