MOLOTKOV, P.I.; POLYAKOV, A.F.

Method of studying damages to soil caused by clear cuttings and following erosion processes in mountain forests. Pochvovedenie no.8:87-91 Ag '60. (MIRA 13:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut lesnogo khozyaystva i agrolesomelioratsii.
(Forest soils) (Erosion)

MOLOTKOV, P.

Early reproduction and abnormalities of the flower in Larix decidua Mill. Bot. zhur. 45 no.4:577-578 Ap '60. (MIRA 14:5)
(Mukacheva District--Larch)
(Abnormalities (Plants))
(Forest ecology)

MOLOTKOV, P.I.; KAPLUNOVSKIY, P.S.; GAVRUSEVICH, A.N.; MOLOTKOVA, I.I.; PASTERNAK, P.S.; CHUHATYY, O.V.; POLYANOVSKIY, A.A., otv. za vypusk; PANCHENKO, V., red.; LUCHKIV, M., tekhn. red.

[Mountain forest types] Tipy gornykh lesov. Uzhgorod, Zakarpatskoe obl. knizhno-gazetnoe izd-vo, 1961. 79 p. (MIRA 15:7)
(Transcarpathia--Forests and forestry)

SOV/91-59-9-14/33

8(6), 9(2)

AUTHOR: Gandin, B.D., Molotkov, R.A., Engineers

TITLE: An Instrument for Testing Thermal Relays and Automatic Setting Devices

PERIODICAL: Energetik, 1959, Nr 9, pp 22-23 (USSR)

ABSTRACT: The authors describe an instrument for testing thermal relays and automatic setting devices with a working current of up to 50 amps. The portable instrument has a weight of 9.7 kg and the dimensions of 380 x 205 x 170 mm. A photograph of this device is shown in Figure 1. The circuit diagram is shown in Figure 2. The device consists of a transformer with a magnetic shunt, one E421 ammeter with a measuring current transformer of type UTT-5, signal lamp MH-3 and the necessary number of switches. The device is powered by 220 volts ac. The authors present constructional details, coil data, for the transformer, which is shown in Figure 4. There are 1 photograph, 1 circuit diagram, 4 diagrams and 1 table.

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87432
S/191/60/000/010/004/017
B004/B060

158110

AUTHORS: Skrylova, L. V., [redacted], Gonor, E. S., Kazanskaya, V. F., Gvirts, E. M.

TITLE: Polyglycidyl Cyanurates as Heat-resistant Epoxy Resins

PERIODICAL: Plasticheskiye massy, 1960, No. 10, pp. 13-14

TEXT: The authors based on the U.S. Patent No. 2,809,942 to synthesize an epoxy resin from cyanuric acid and epichloro hydrin (ЭЦ(ETs-Resin)). [Abstracter's Note: The synthesis is not described]. Number of epoxy groups (29-32%), content of inorganically bound chlorine (0.04-0.06%), and content of organically bound chlorine (5-6%) were determined. ETs resin was polymerized either with maleic anhydride or phthalic anhydride. Its thermomecharical properties were examined and compared with those of ЭД-6(ED-6) resin (a dian resin). A better heat resistance (up to 170-175°C) and a smaller dielectricity loss were established at high temperatures, as compared with ED-6. There are 2 figures and 3 non-Soviet references.

Card 1/1

S/110/60/000/010/008/014
E194/E455

The Influence of Fillers on the Properties of Casting (Potting) Compounds

tested were polyester and epoxide compounds and also one epoxide-polyester compound developed by the author and his collaborators. The student T.V.Setkova participated in the experimental work. Fillers were selected from a number of materials used in the rubber and paint industries. Although Marshallite (quartz dust) is extensively used, little information is available about the suitability of other fillers. Marshallite is not always suitable, for example when good machinability is required. Various other special properties are required of compounds. The polyester and epoxide polyester compounds were based on unsaturated polyester resin grade ЭМО-1 (EMO-1) manufactured by polycondensation at 170 to 200°C. The formulations of the compounds are given. Fillers were introduced into the blended compounds until a pre-determined consistency, or viscosity, was reached. The consistency was measured with a penetrometer as used for petroleum products but with a modified tip. Mechanical properties and spark resistance were determined on standard rod specimens of

The Influence of Fillers on the Properties of Casting (Potting) Compounds

10 x 15 x 120 mm. The specimens were made by casting in steel moulds and hardening for 16 hours at 120°C or 140°C, depending on the resins. Strength in bending and impact strength were determined by standard methods and hardness by the Brinell method. Dielectric properties were determined on disc specimens, one of the electrodes being a steel cup. The dielectric loss angle was determined at 50 c/s and the 50 c/s electric strength was determined in transformer oil. The filler content was determined by ashing and weighing. The test results are tabulated and show not only the influence of the nature of the filler on the properties of the compound but also permit comparison of the properties of three different types of compounds with a single filler or without any. The results are described in some detail and it is found that compounds using Marshallite as filler have the best dielectric properties while those with iron and zinc oxides have the worst. Epoxide compounds have the best mechanical and dielectric properties. Epoxide-polyester compounds have better

The Influence of Fillers on the Properties of Casting (Potting) Compounds

properties than polyester compounds. The bad effect of iron and zinc oxides on the electric strength was particularly marked. The arc resistance of almost all of the compounds was low, except for that of the epoxypolyester compound with Marshallite. No reason was discovered for this exception. There are 1 figure, 2 tables and 5 references: 1 Soviet and 4 non-Soviet.

SUBMITTED: November 23, 1959

Card 4/4

88554

S/191/60/000/011/004/016
3013/B054

15.8110

AUTHORS: Molotkov, R. V., Tsirkin, M. Z.

TITLE: Epoxy Adhesives With Dicyano Diamide as Hardener

PERIODICAL: Plasticheskiye massy, 1960, No. 11, pp. 11 - 13

TEXT: The authors studied the tensile and shear strength of adhesive joints of various epoxy resins with dicyano diamide as hardener and various fillers. For comparison, they tested the adhesive strength of joints glued with "Aral'dit, Type 1". Besides, they determined heat resistance and thermal aging of adhesive joints. The adhesives were produced on the basis of epoxy resins of the types ЭВ-4 (EV-4), ЭВЧ-4 (EVCh-4), and Э-44 (E-44), as well as the precondensation product of ЭД-6 (ED-6) epoxy resin with dicyano diamide. Aluminum powder, powdered asbestos, powdered silica gel, and Marshalite were used as fillers. Tables 1 and 2 give the test results obtained with the adhesives prepared. The authors glued crude-copper plates 100 by 25 by 1.56 mm with a Brinell hardness of 115 kg/mm^2. The plates were piled up in a pressure device (Fig. 1), heated to 110° - 120°C, and

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88554

Epoxy Adhesives With Dicyano Diamide as Hardener

S/191/60/000/011/004/016
B013/B054

subjected to constant pressure. To harden the adhesive, the samples were exposed to a temperature of 130°C for 4.5 hours. The tensile and shear strength was tested on a tensile-testing machine with an elongation rate of 20 mm/min at 20° and 120°C (Figs. 2 and 3). It was found that adhesives with 0.5 - 0.7 moles of dicyano diamide per 1 epoxy group, as well as adhesives with about 10% powdered asbestos, warrant maximum tensile and shear strength of adhesive joints. Adhesive joints obtained with the use of adhesives with 7% aluminum powder or 20-30% of Marshalite show lower tensile and shear strength (up to 400 kg/cm^2). It was found that some adhesives produced with aluminum powder give joints which attain the tensile and shear strength of joints glued with "Araldit, Type 1". The adhesive with 10% powdered asbestos gives a joint which is even stronger. There are 3 figures, 2 tables, and 5 references: 1 Soviet, 1 US, 1 German, 1 Polish, and 1 Czechoslovakian.

Card 2/2

15.8110

87647
S/191/60/000/012/006/016
B020/B066

AUTHORS: Molotkov, B. V., Lykova, T. A.

TITLE: Combination of Unsaturated Polyesters With Epoxy Resins

PERIODICAL: Plasticheskiye massy, 1960, No. 12, pp. 16 - 19

TEXT: The present paper gives results of investigations of some properties of epoxy-polyester compounds in dependence on their composition. They were shown to be useful for the production of laminated glass-reinforced plastics. In this study, mainly the method of thermomechanical curves devised by V. A. Kargin and co-workers (Ref.5) was applied. In addition to the thermomechanical characteristics of the cured epoxy-polyester compounds, also the temperature dependence of tan δ was determined. To produce these compounds, the polyester resins ПН-1 (PN-1), ЭМО (EMO) (a polycondensation product of ethylene glycol, maleic anhydride and oleic acid), and ДЭМСО (DEMSO) (a condensation product of diethylene glycol, maleic anhydride, sebacic acid and oleic acid), as well as the epoxy resin ЭД-6 (ED-6), were used. Besides, styrene, maleic anhydride, quinhydrone (inhibitor) and benzoyl peroxide were added. The ther mo-

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Combination of Unsaturated Polyesters With Epoxy Resins

S/191/60/000/012/006/016
B020/B066

mechanical curves were obtained by measuring the deformation at a load of 5 kg at evenly increasing temperature (50°C per hour). Measurements were made on a modified device for the determination of the dimensional stability under heat according to Vicat. The tan δ was measured at a frequency of 50 cps and a gradient of 1 kv/mm by means of a "MED" ("MDP") bridge. A steel vessel was used as high-voltage electrode, the measuring electrode and the guard ring were made of an aluminum foil. The temperature of the sample was measured by means of a thermocouple. Resistance to heat, limit of static flexural strength, and specific resilience of laminated glass-reinforced plastics were determined according to respective ГОСТ (GOST) standards. To determine the effect of composition of epoxy-polyester compounds on their properties, the dependence of hardness and tan δ at different temperatures on the content of epoxy resin and maleic anhydride in the compounds was determined (Figs.1-3). Figs.1-3 illustrate the resultant tan δ and hardnesses for several epoxy-polyester compounds with equal content of styrene, benzoyl peroxide and quinhydrone. Figs.4 and 5 show the thermomechanical curves for the cured compounds with the polyester PN-1. When combined with polyesters, the epoxy resin appreciably improves the temperature dependence of tan δ (Fig.6). In the

S/191/60/000/012/006/016
B020/B066

Combination of Unsaturated Polyesters With Epoxy Resins

table, the properties of PN-1 polyester and an epoxy-polyester compound as a binding agent for laminated glass-reinforced plastics are summarized, and the advantages of the latter become evident. Epoxy-polyester binding agents for laminated glass-reinforced plastics with high resistance to heat and strength may, thus, be considered quite suitable. O.G.Sherina, A. A. Frolenkova, and D. E. Bakhmendo, students of the Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute imeni M. I. Kalinin), assisted in this study. There are 6 figures and 6 references: 4 Soviet, 1 US, and 1 British.

ISAKOVICH, M.M.; MOLOTKOV, R.V.

Apparatus for determining the gelatinization time of epoxide and polyester compositions. Plast.massy no.5:60-61 '62. (MIRA 15:4)
(Resins, Synthetic) (Gelation)

L 12583-63 EWP(j)/EWT(m)/BDS AFFTC/ASD Pc-4 RM
ACCESSION NR: AT3003303 S/0191/63/000/007/0017/0020

60

AUTHORS: Tsirkin, M. Z.; Molotkov, R. V.; Kazanskaya, V. F.

TITLE: Tetrahydrophthalic and methyltetrahydrophthalic anhydrides as epoxy resin curing agent

15

SOURCE: Plasticheskiye massy, no. 7, 1963, 17-20

TOPIC TAGS: tetrahydrophthalic anhydride, methyltetrahydrophthalic anhydride, epoxy resin, maleic anhydride, plastic curing agent

ABSTRACT: In order to obtain a less toxic and less temperature-sensitive epoxy resin curing agent, as compared to maleic and phtalic anhydrides, new types of curing agents were synthesized and tested. The synthesized curing agents are Cis-1,2,3,6-tetrahydrophthalic anhydride and Cis-4-methyl-a,2,3,6-tetrahydrophthalic anhydride. The physico-chemical properties and dielectric properties of the compounds cured with the above anhydrides are close to the properties of the compounds cured with maleic and phthalic anhydrides. Methyltetrahydrophthalic anhydride possesses better properties than tetrahydrophthalic anhydride. It also has an advantage over maleic and phthalic anhydrides since its resins have a longer life span, is less volatile than maleic anhydride, and has a much lower

Card 1/2

L 12583-63
ACCESSION NR: AP3003303 0

melting temperature than phthalic and tetrahydrophthalic anhydrides. Orig. art. has: 6 tables and 2 figures.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 30Jul63 ENCL: 00

SUB CODE: ML NO REF SOV: 004 OTHER: 003

Card 2/2

KOLOTKOV, Roman Vladimirovich; LYKOVA, Tamara Alekseyevna; SHALUN, G.B., red.; ALAMYSHEVA, N.A., red.izd-va; GVIRTS, V.L., tekhn. red.

[Premixes, the new molded materials] Novye pressmaterialy - premiksy. Leningrad, 1963. 19 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Sinteticheskie materialy, no.4) (MIRA 17:3)

L 31920-66 EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AP6007971 (A) SOURCE CODE: UR/0191/66/000/003/0054/0057

AUTHOR: Fotokhina, Ye. S.; Moldavskiy, B. L.; Molotkov, R. V.; Batalin, O. Ye.; Ravkina, [redacted], E. S.; Slobina, A. V.; Buslovich, Ye. Ya.; Rubinsteyn, E. I.; Lykova, T. A.; Bychkova, V. A.

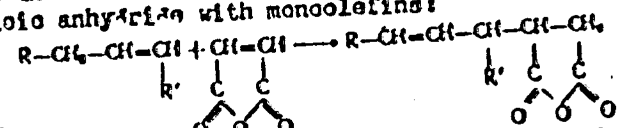
ORG: none

TITLE: Alkenylsuccinic acid anhydrides as hardening agents for epoxy resins

SOURCE: Plasticheskiye massy, no. 3, 1966, 54-57

TOPIC TAGS: epoxy plastic, hardening, solid mechanical property

ABSTRACT: The authors studied the synthesis and use of alkenylsuccinic acid anhydrides as liquid and low-toxic hardening agents for epoxy resins. The anhydrides were synthesized in an electrically heated steel autoclave with a mixing device by the reaction of maleic anhydride with monoolefins:



The following anhydrides were prepared: (acid, boiling point in C, at pressure in mm) crotylsuccinic, 122-147, 8; pentenylsuccinic, 135-148, 8; dodecenylsuccinic, 124-210,

UDC: 678.643'42'5:673.C43

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L 31920-66

ACC NR: AP6007971

2

5; and a mixture of isooctenyl- and isononenylsuccinic (ASA), 155-169, 8. Epoxy resins ED-5, ED-6, and EDL were hardened by ASA at 140C for 24 hr, using 93-115, 73-93- and 47-57 g of ASA over 100 g of epoxy resins respectively. Using dimethylaniline or triethanolamine as the accelerators, the hardening process was accomplished within 1.5-2 hr at 100C. With the exception of thermal stability, which was 25-35C lower, the physicomechanical properties of the products obtained resembled very closely those obtained by the use of maleic anhydride as the hardening agent. Orig. art. has: 6 tables, 4 fig., and 1 formula.

SUB CODE: 11,07/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001

Card 2/2

MOLOTKOV, S.A.

Fire spreader. Bezop. truda v prom. 3 no.11:36 N '59.
(MIRA 13:3)

(Automobiles--Tires)

RUZHITSKIY, V.O.; BYKOV, I.N.; TOCHILIN, M.S.; KURYLEVA, N.A.; MOLOTKOV, S.P.

Ultrabasic explosion breccia of the Russian Platform. Dokl. AN SSSR 162 no.6: 1367-1369 Je '65. (MIRA 18:7)

1. Voronezhskiy gosudarstvennyy universitet. Submitted March 18, 1965.

MOLOTKOV, V.A.

Dehelminthization intrichocephaliasis and ascariasis. Zdrav.Belor. 5 no.12:39-40 D '59. (MIRA 13:4)

1. Iz Baranovichskoy sanepidstantsii.
(ASCARIDS AND ASCARIASIS) (TRICHOCEPHALIASIS)

MOLOTKOV, V.A.

Effectiveness of anti-ascariasis preparations. Zdrav. Bel. 7 no.12: 54-55 D '61. (MIRA 15:2)

1. Iz Baranovichskoy gorsanepidstantsii (glavnyy vrach - zasluzhennyy vrach respubliki A.A.Abanovich).
(ASCARIDS AND ASCARIASIS) (ANTHELMINTICS)

Molotkov, V.A.

133-58-4-23/40

AUTHORS: Dorokhov, V. I. and Lopatin, A. V., Candidates of Technical Science and Molotkov, V. A., Engineer

TITLE: On the Evaluation of the Quality of Boiler Plate (K otsenke kachestva kotel'nogo lista)

PERIODICAL: Stal', 1958, Nr 4, pp 348-352 (USSR)

ABSTRACT: The evaluation of the quality of boiler plate (up to 25 mm thick) according to GOST 5520-50 based on the examination of fracture for laminations is discussed. On the basis of evidence collected on the Works imeni Il'ich during the inspection of the plate and special investigations carried out in order to establish the nature of laminations and the influence of testing conditions on the results obtained the following conclusions are drawn: 1) on evaluating the quality of boiler steel according to laminations observed in the fracture of test specimens, it is necessary to differentiate laminations of the first type, i.e. such laminations which physically exist in the steel in the form of breaks of continuity before the tests, and laminations of the second type which are formed during the break of the specimen in places of liquations (segregation) strips. 2) The appearance of laminations

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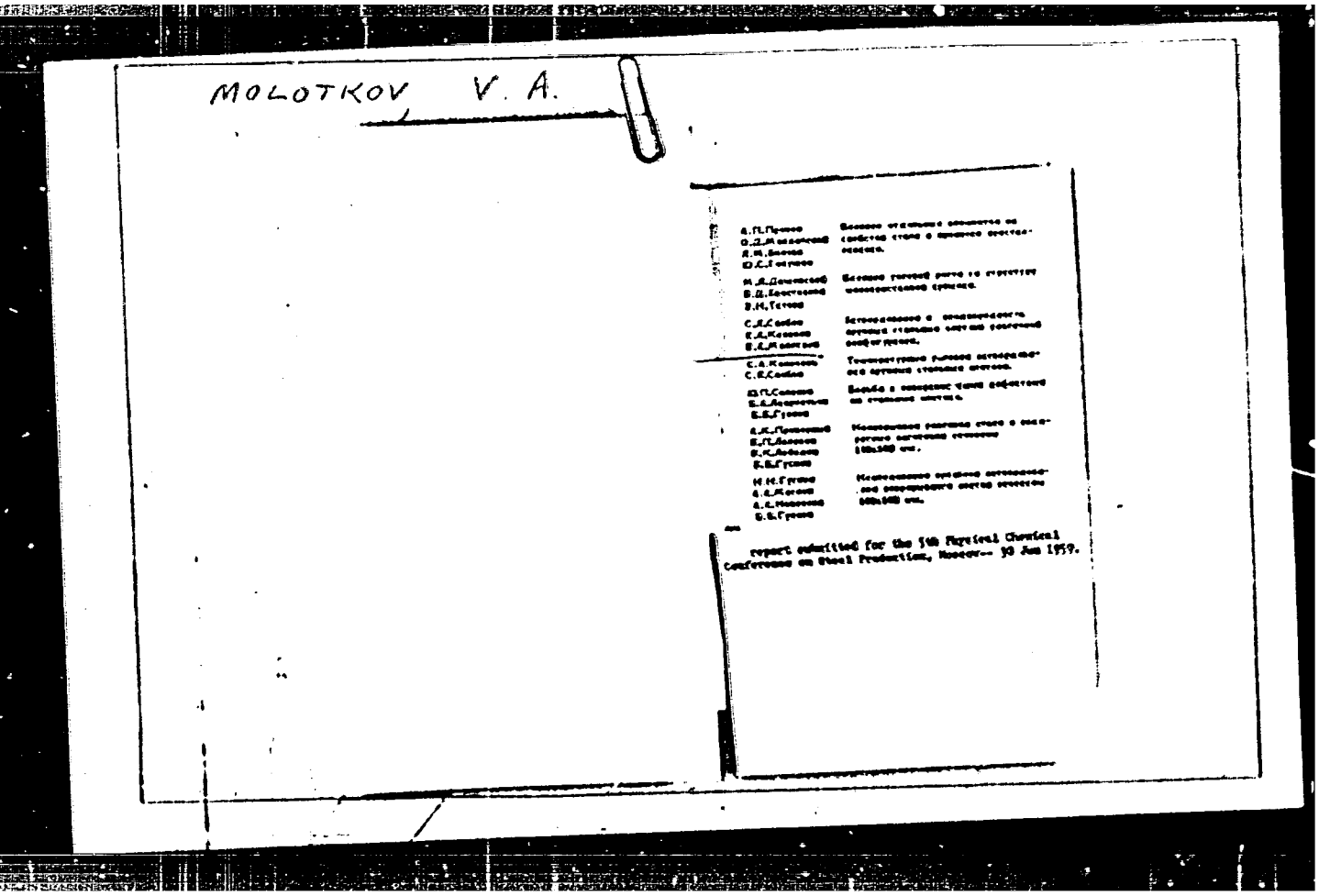
On the Evaluation of the Quality of Boiler Plate 133-58-4-23/40

of the second type depends on the temperature of the test, spread of applying the load, structural state of the metal of the specimen and other test conditions. All factors promoting brittle fracture of the specimen lead to a decrease of dimensions and number of such laminations or even to their complete disappearance. Therefore, the evaluation of the quality of steel from the appearance of fracture without taking into consideration test conditions cannot be considered as reliable. 3) Therefore, the test for fracture according to GOST 5520-50 should be replaced by an investigation of the macrostructure of plate. 4) In view of the development of the production of thick plate GOST 5520 should be extended to plates up to 200 to 250 mm thick. In view of a large range of thickness of boiler plates, scales of macro-structures for various thickness ranges should be included into the standard. For plates 50 to 150 mm thick the scale used on the works imeni Il'ich (Fig.7) can be used. There are 7 figures and 2 references, both of which are Soviet. In the editorial note further discussion on the subject is invited.

Card 2/2

ASSOCIATION: Zavod im. Il'icha (Works imeni Il'ich)

1. Metal plates--Quality control 2. Metal plates--Test results
3. Metal plates--Inspection 4. Boilers--Material



CHERNEGA, D.F.; MOLOTKOV, V.A.; KISEL', N.N.; TROFIMOVA, K.G.

Investigating the effect on ingot metal properties of electric slag hot top heating using graphite electrodes. Avtom.svar. 12 no.1:81-86 Ja '59. (MIRA 12:4)

1. Kiyevskiy ordena Lenina politekhnicheskiy institut (for Chernega).
2. Zhdanovskiy metallurgicheskiy zavod im. Il'icha (for Molotkov, Kisel', Trofimova).
(Steel ingots—Testing) (Slag) (Electrodes, Carbon)

S/137/60/000/010/006/040
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 10, p. 60, # 22882

AUTHORS: Skoblo, S.Ya., Dorokhov, V.I., Molotkov, V.A., Pereverzeva, Ye.G.

TITLE: Investigation of the Heterogeneity of 7-ton and 16.5-ton Killed Steel Sheet Ingots

PERIODICAL: Sb. nauchn. tr. Zhdanovsk. metallurg. in-t, 1960, No. 5, pp. 95-114

TEXT: Results are given of investigations of various indices showing the heterogeneity of killed CT.3 (St.3) steel sheet ingots of 7-ton weight and of CT.22K (St.22K) ingots of 16.5-ton weight. The steels were melted in a basic open-hearth furnace by the scrap-ore process. The 7-ton ingots were syphon-cast into a compact-bottom mold of H/D = 2.8 and 3 - 5% conicity. The 16.5-ton ingots were top-cast through an intermediate ladle with 2 buckets into an upward expanding through-mold of H/D = 2.4 and 1 - 3% conicity. The 7-ton ingots are characterized by a sharply marked axial (particularly in the middle portion of the height) and off-axial heterogeneity. The 16.5-ton ingots are characterized by a stronger axial and off-axial heterogeneity. The main defects of the ingot macro-structure

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S/137/60/000/010/006/040
A006/A001

Investigation of the Heterogeneity of 7-ton and 16.5-ton Killed Steel Sheet Ingots

are segregational streaks, enriched with P and sulfide impurities, occuring at the side of the ribs and penetrating into the body to a depth of 50-80 mm. The authors established the high isotropic degree of the mechanical properties of the sheet ingot cast metal. The mechanical properties of the metal in flat sheet ingots show a higher relative homogeneity than those of multi-face ingots. The distribution of C, S and P is characterized by their moderate segregation on the upper levels of the ingot and considerable negative segregation in the zone of the precipitation cone. A higher conicity of the ingots will reduce the negative segregation of carbon. The amount of non-metallic impurities and the ability to pickling of the specimens, characterizing the compactness of the metal, increase from the surface to the axis of the ingot. The mechanical properties of the metal decrease in the same direction, which indicates their direct connection with the amount of non-metallic impurities and the compactness of the metal. The average content of non-metallic impurities in the 7-ton syphon-cast ingots is somewhat higher than in top-cast 16.5-ton ingots.

Ye.K.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

30879
S/148/61/000/009/001/012
E071/E135

18.3200

AUTHORS: Yavoyskiy, V.I., Chernega, D.F., Dudko, D.A., Tyagun-Beloun, G.S., Bektursunov, Sh.Sh., Bocharov, V.A., Agamalova, L.L., Molotkov, V.A., Yakobshe, R.Ya., and Potanin, Ye.M.

TITLE: Electrolytic phenomena in the process of electroslag heating of ingots

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no.9, 1961, 32-43

TEXT: Electroslag heating of ingots is based on the ionic nature and structure of slag. On passing a current through the slag, situated on the surface of the shrinkage head, a considerable amount of heat is evolved, sufficient to maintain the slag and metal in the upper part of the ingot during its crystallisation in the molten state. The object of the present investigation was to elucidate the influence of the kind of electric current on the processes taking place during electroslag heating of ingots. It is advantageous to carry out the heating of the ingot tops in such

Card 1/5

Electrolytic phenomena in the process...

a manner that in addition to increasing the yield of good metal there should be an improvement in the metal quality resulting from the electrolytic effect and also from the transfer of a part of the segregating elements into the slag. The experiments were made with four ingots of a square cross-section, weighing 3.4 tons of steel 10Г 2СД (10G2SD), smelted in 75 ton basic open hearth furnaces. The electroslag heating was with direct and alternating current. For the first ingot the electrode introduced into the head part was connected to the cathode and the plus to the ingot (straight polarity); the second ingot was heated with direct current of reverse polarity (minus to the bottom of the mould, plus to the electrode in the head part); the third ingot was heated with a 50 c.p.s. alternating current; the fourth ingot was cast by the usual practice and was used as a blank experiment. The first three ingots were top poured through an intermediate funnel and the fourth ingot was bottom poured. A generator capable of producing 1000 A at 60 V was used for heating with direct current. The heating conditions were as follows: voltage 48 V, current for the first 60 minutes 950 A and then

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E071/E135

Electrolytic phenomena in the process...

700 A; the duration of heating 90 minutes. The flux for the formation of slag consisted of 25% fluorospar, 45% finely crushed freshly ignited lime, 30% chamotte powder. The ingots were rolled into slabs 500 x 250 mm. Four templets were cut from each slab and then cut into strips from which test specimens were made. Non-metallic inclusions were determined metallographically and electrolytically. It was found that the distribution of non-metallic inclusions in the ingot was the most advantageous on heating it with direct current of "straight" polarity. This type of heating lowers chemical non-uniformity in comparison with ingots cast by the usual works technology and heated with alternating current, or direct current of reverse polarity. There is a tendency for sulphur to be shifted towards the positive pole, whereupon sulphur near the positive pole is distributed unevenly along the cross-section of the ingot in the form of segregation "spots". No shift of carbon towards the negative pole was established. During the heating with direct current of straight and reverse polarity, in addition to electrolytic phenomena, the Perrin-Tochinskiy effect leading to the refining

Card 3/5

Electrolytic phenomena in the process...

of the metal of the head part of the ingots was observed. No noticeable effect of direct current on changes in the content and distribution of nitrogen in the rolled metal was observed. It was established that the content of hydrogen in the shrinkage head decreases during crystallisation of the ingot heated with a direct current of reverse polarity and increases with direct polarity (minus on the electrode). The mechanical properties of the metal of the ingot teemed with heating by current of direct polarity are most uniform throughout the whole volume of the slab. The specific gravity of the metal of all the ingots was almost the same. The pickling ability of the metal (weight loss of cylindrical specimens in a solution of 65 wt. parts of HCl, 25 wt. parts of H_2SO_4 and 10 wt. parts of water at 70 °C during 40 minutes) along the whole slab is the highest on heating with direct current of "straight" polarity and lowest on heating with direct current of reverse polarity. On heating with alternating current of an industrial frequency the quality of the ingot metal was better than that of the "blank" ingot and was nearly the same as on heating with direct current of "straight" polarity.

Card 4/5

30879
S/148/61/000/009/001/012
E071/E135

Electrolytic phenomena in the process...

There are 6 figures, 4 tables and 9 references: 8 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Moskovskiy institut stali
(Moscow Steel Institute)

SUBMITTED: May 24, 1961

Card 5/5

S/148/61/000/009/004/012
E071/E135

AUTHORS: Molotkov, V.A., and Fetisov, S.G.

TITLE: An investigation of the non-uniformity of sheet ingots of an alloy steel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, no.9, 1961, 71-78

TEXT: The results of an investigation of the structure, chemical and physical non-uniformity of two sheet ingots (9 and 8.2 tons) of a chromiumnickelmolybdenum steel are described. The steel was smelted from a cold charge in a 75 ton basic open hearth furnace. The metal was preliminarily deoxidised in the furnace with a blast furnace ferrosilicon (calculated to introduce 0.24% of Si) and finally in the ladle with 75% ferrosilicon and aluminium (400 g/t). Both ingots were teemed from the same heat (0.32% C, 0.017% S and 0.013% P) and were top teemed with an addition of 15 kg of lunkerite. The ingots differed in their conicity (8.2 ingot: wide face 1.4%, narrow 3.5%. 9-ton ingot, 2.07 and 5.15% respectively). One longitudinal and three transverse templets were cut from each ingot for testing.

Card 1/2

S/148/61/000/009/004/012
E071/E135

An investigation of the non- ....

It was found that the two ingots were similar as regards the nature of the crystallisation zones. The chemical composition of the metal and the distribution of oxide inclusions was sufficiently uniform in the upper and middle levels along the ingot height. At the bottom level a noticeable decrease in the carbon concentration and an increase in the concentration of oxide inclusions was observed. The axial and non-axial segregation was insignificant in both ingots. The mechanical properties were highest for the surface layers of the ingots (tensile and impact strength). In the central zones of the upper and middle levels a decrease in the mechanical properties, particularly plasticity, was observed. The structure and the quality of both ingots were satisfactory. In view of the similarity of the quality of both ingots, the use of 8.2 ton ingots (with lower conicity) is recommended; it gives a higher yield of rolled metal. There are 4 figures, 1 table and 3 Soviet-bloc references.

ASSOCIATION: Zhdanovskiy metallurgicheskiy institut
(Zhdanov Metallurgical Institute)

SUBMITTED: December 2, 1961

SOKOLOVSKIY, P.I.; MOLOTKOV, V.A.; KATS, T.M.

Heat-treated rolled sections of low-carbon steel. Standartizatsiia 25 no. 5:36-38 My '61. (MIRA 14:5)
(Steel, Structural—Testing)

IAVOISKI, V.I. [Yavoyskiy, V.I.]; CERNEGA, D.F. [Chernega, D.F.]; DUDKO, D.A.; TEAGUN-BELOUS, G.S. [Tyagun-Belous, G.S.]; BEKTURSUNOV, S.S. [Bekturaunov, Sh.Sh.]; BOCIAROV, V.A. [Bocharov, V.A.]; AGAMALOVA, L.L.; MOLOTKOV, V.A.; IAKOBSE, R.I. [Yakobshe, R.Ya.]; POTANIN, E.M. [Potanin, Ye.M.]

Electrolytic phenomena during the slag electric heating of the ingots. Analele metalurgie 16 no.2:5-18 Ap-Je '62.

MOLOTKOV, V.A.; FETISOV, S.G.

Nonhomogeneity of the sheet ingots of alloyed steel. Analele metalurgie 16 no.2:36-44 Ap-Je '62.

YAVOYSKIY, V.I., prof., doktor tekhn.nauk; BEKTURSUNOV, Sh.Sh., inzh.; CHERNEGA, D.F., kand.tekhn.nauk; TYAGUN-BELOUS, G.S., kand.tekhn.nauk; DUDKO, D.A., kand.tekhn.nauk; Prinimali uchastiye: KOLOTKOV, V.A.; BELYAYEV, Yu.P.; YAKOBSHA, R.Ya.; AGAMALOVA, L.L.; CHEKALENKO, G.A.; BOCHAROV, V.A.; KISSEL', N.N.; POTANIN, Ye.M.; SYTOVA, N.M.

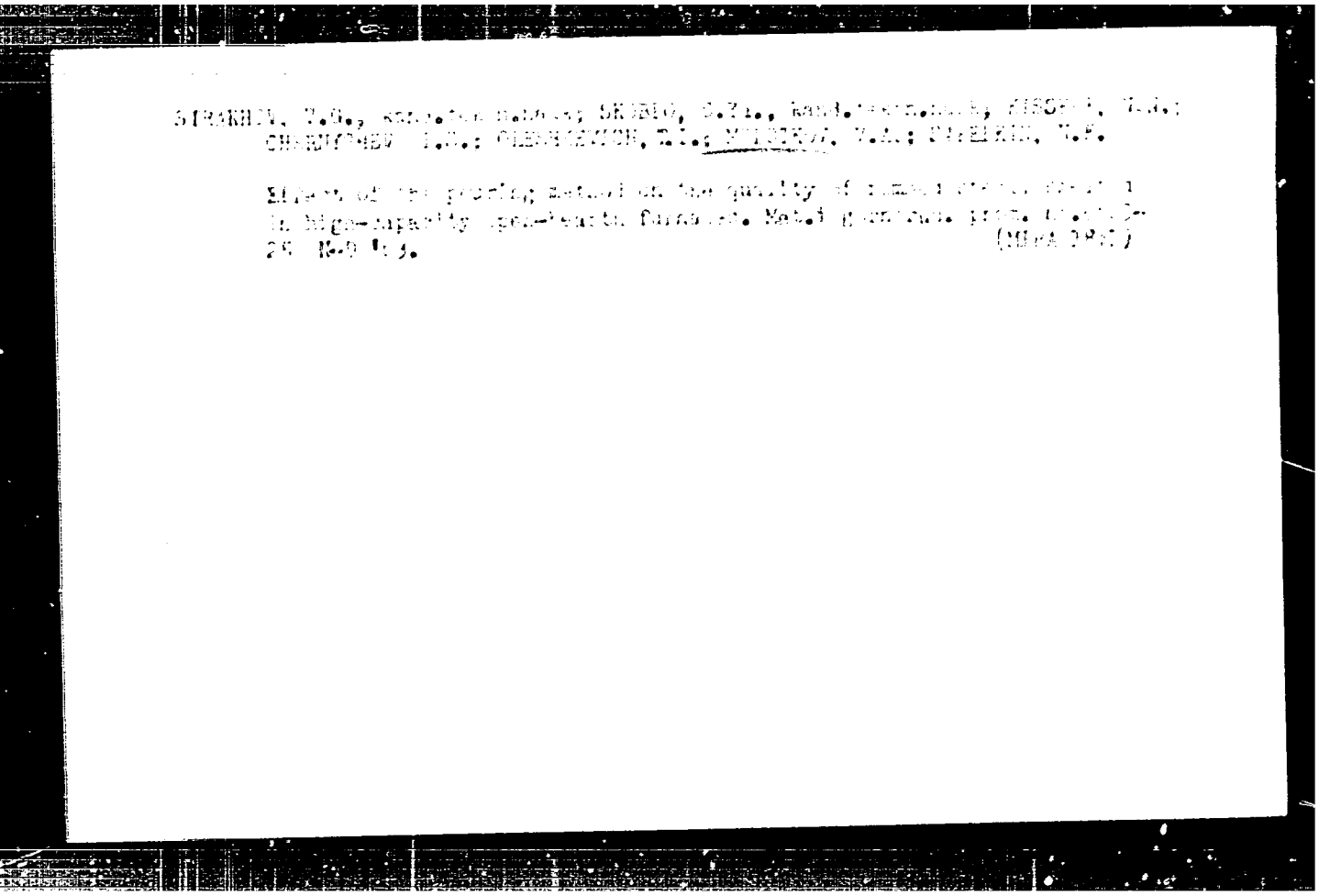
Electric slag heating and additional feed of large sheet billets made of 10G2SD steel. Stal' 22 no.7:611-615 Jl '62. (MIRA 15:7)

(Steel ingots) (Rolling (Metalwork))

KOZ'MINA, O.P.; KURLYANKINA, V.I.; ZHDANOVA-PUSHKINA, S.I.; MOLOTKOV, V.A.

Mechanism of the oxidation of cellulose ethers by oxygen. Part 12: Synthesis and oxidation of ethyl cellulose based on cellulose tagged with radiocarbon at the glucoside C atom. Vysokom.soed. 5 no.4: 492-495 Ap '63. (MIRA 16:5)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR i Leningradskiy gosudarstvennyy universitet.
(Cellulose ethers) (Oxidation) (Carbon isotopes)



YAVOYSKIY, V.I.; BEKTURSUNOV, Sh.Sh.; BELYAYEV, Yu.P.; MOLOTKOV, V.A.; DUDKO, D.A.

Metal distribution by consumable electrodes in the volume of an ingot during additional electric slag feeding. Avtom. svar. 16 no.11:40-43 N '63. (MIRA 17:1)

1. Moskovskiy institut stali i splavov (for Yavoyskiy).
2. Karagandinskiy politekhnicheskiy institut (for Bektursunov).
3. Zhdanovskiy metallurgicheskiy zavod imeni Il'icha (for Belyayev, Molotkov). 4. Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (for Dudko).

KUZ'MA, I.D., kand. tekhn. nauk; PROKHOROV, P.A.; MOLOTKOV, V.A.; KATS, T.M.; RUSETSKAYA, M.I.; BELOUSOVA, N.G.

Characteristics of the production of sheet for extra-large boilers. Met. i gornorud. prom. no.5:38-40 S-O '64. (MIRA 18:7)

KOZ'MINA, O.P.; KURLYANKINA, V.I.; KOLATKOV, V.A.; SLAVETSKAYA, P.A.

Synthesis and oxidation of ethyl xylan. Vysokom. soed. 7 no.6:958-961 Je '65. (MIRA 18:9)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.

KOLOTKOV, V. G.

PETRYAYEVA, A. T., KOLOTKOV, V. G., and YUDENICH, V. A. "The inhalation method of tuberculosis prophylaxis with the BTsZh vaccine", (Report 1), Trudy Sverdl. obl. med. in-ta, Vol. II, 1948, p. 46-46.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 12, 1949).

PETRIAEVA, A. T.; KOLOTKOV, V. G.; LUDERICH, V. A.

Modifications of the myocardium in experimental tuberculosis.
Pediatriia, Moskva No. 4, July-Aug. 50. p. 40-9

1. Of the Department of Children's Diseases and Pathological Anatomy, Smolensk Medical Institute (Director—M. A. Batanov) and of the Institute of Microbiology (Director—S. G. Khanin), Smolensk.

CLML 19, 5, Nov., 1950

PETRIAYEVA, A.T.; MOLOTKOV, V.G.; YUDENICH, V.A.

Reproduction of an experimental model of rheumatic fever. Vop.okh. mat. i det. 4 no.4:34-41 Jl-Ag '59. (MIRA 12:12)

1. Iz kafedry detskikh bolezney, patologicheskoy anatomii i mikrobiologii Smolenskogo meditsinskogo instituta.
(RHEUMATIC FEVER)

MOLOTKOV, V.G.

Pathological anatomy in colienteritis. Trudy Inst. eksp. morf. AN Gruz. SSR 11:147 152 '63. (MIRA 17:11)

1. Kafedra patologicheskoy anatomii Smolenskogo meditsinskogo instituta.

MOLOTKOV, V.G., prof.; YEMEL'YANOV, V.A., dotsent

Pathomorphological changes in the lungs resected due to chronic tuberculosis. Trudy SMI 16:37-51 '63. (MIRA 18:1)

1. Iz kafedry patologicheskoy anatomii (zav. - kafedroy prof. V.G. Molotkov) i gospital'noy khirurgii (zav. - kafedroy prof. A.N.Kartavenko) Smolenskogo gosudarstvennogo meditsinskogo instituta.

ACCESSION NR: AR4036349 S/0299/64/000/007/M017/M018

SOURCE: Referativnyy zhurnal. Biologiya, Abs. 7M122

AUTHOR: Molotkov, V. G.; Larionov, V. G.

TITLE: Pathological-anatomical changes in the kidneys of dogs after autotransplantation of a preserved right kidney

CITED SOURCE: Tr. Smolenskogo med. in-ta, v. 16, 1963, 119-137

TOPIC TAGS: organ transplant, autotransplantation, kidney transplant

TRANSLATION: It was shown in experiments on 21 dogs that a stable graft was established after autotransplantation of kidneys preserved up to 28 hours (voiding of urine was observed after 2-7 days). One obstacle to a perfect graft was the appearance of anatomical changes (pyelonephritis, stenosis or flexion of the ureter, causing hydronephrosis with atrophy of the kidney). After transplantation of kidneys preserved more than 28 hours (up to 1000 hours), necrosis of the nephrons, thrombosis of the renal vein and other changes occurred. Upon removal of the second kidney, preserved no more than 28 hours and transplanted to the neck, urine formation continued. After the appearance

Card 1/2

ACCESSION NR: AR4036349

pathological changes in the transplanted kidney, compensatory adaptive processes, in the form of hypertrophy of individual nephrons and regeneration of the canaliculi, appeared quite early. N. S.

DATE ACQ: 17Apr64 SUB CODE: LS ENCL: 00

Card 2/2

MOLOTKOV, V.G., prof.; ZARUDIN, V.V.; kand.med. nauk

Work of the Smolensk Province Scientific Society of Patho-anatomists for 1959-1962. Arkh. pat. 25 no. 8:89-92 '63. (MIRA 17:4)

1. Predsedatel' Smolenskogo oblastnogo nauchnogo obshchestva patologoanatomov (for Molotkov). 2. Sekretar' Smolenskogo oblastnogo nauchnogo obshchestva patologoanatomov (for Zarudin).

MOLOTKOV, V.I.

Investigation of the propagation of surface waves along cylindrical conductors. Trudy LPI no.181:60-67 '55. (MLRA 10:1)
(Electric waves) (Electric conductors)

LOLOTKOV, V.I., Cand Tech Sci— (diss) " Study of the performance of the magnetic ~~power~~ amplifier with ~~the~~ capacity filter at the outlet of the rectifying bridge." Len, 1958. 11 pp (Min of Higher Education USSR. Len Polytech Inst im M.I.Kalinin), 100 copies (KL,44-58, 120)

S/112/59/000/014/031/085
A052/A001

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 14, PP. 141-142, # 29574

AUTHOR: Molotkov, V. I.

TITLE: Method of Determining Dynamic Hysteresis Loop by Means of Two Voltmeters

PERIODICAL: Tr. Leningr. Politekhnich. in-ta, 1958, No. 194, PP. 85-87

TEXT: The dynamic hysteresis loop, like the dynamic magnetization curve, is determined as a locus of peaks of non-symmetrical hysteresis cycles. The model for taking characteristics is executed in the form of a toris with three windings: direct current magnetizing winding, alternating current magnetizing winding and measuring winding. On the diagram OA is dynamic magnetization curve $B_{max}=f(H_{max})$, H_{m_1} and H_{m_2} - the maximum magnetic field intensities produced by the alternating current winding, and $H_{m_1} > H_{m_2}$ on account of the core magnetization by direct current. At first the point K on the main magnetization curve is determined; the abscissa of this point is $H_- + H_{m_1}$, where H_- is a constant component of magnetic

Card 1/3

S/112/59/000/014/031/085
A052/A001

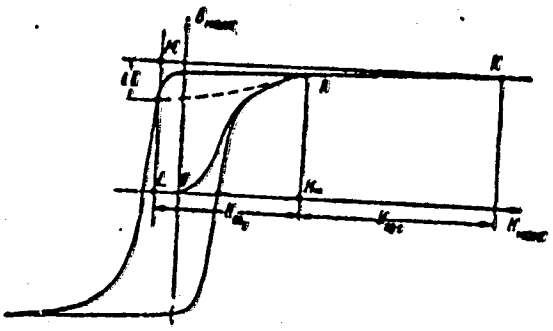
Method of Determining Dynamic Hysteresis Loop by Means of Two Voltmeters

field intensity. Through the point K a line is drawn parallel to X-axis until it cuts the straight line drawn from the point L parallel to the Y-axis (the abscissa of L is $H_{m_2} + H_{m_1}$). From the point M of intersection of these lines on the line ML the maximum increment of magnetic induction ΔB during an antisymmetric cycle is plotted. The point P lies on the front of the dynamic loop $\Delta B = l_{av}/(2fw_2S10^{-8})$, where l_{av} is reading of the voltmeter of detector system connected to the measuring winding, f is frequency in the alternating current circuit, w_2 is number of turns of the measuring winding, S is the cross-section of the core. Magnetic field intensities are calculated by the formula $H = \frac{0.4\omega}{D_{av}} I$, where ω is number of turns of the magnetizing coil. 2 D_{av} is mean diameter of the core and I is current circuits for a separate measurement of I_{m_1} and I_{m_2} are suggested.

Card 2/3

S/112/59/000/014/031/085
A052/AC01

Method of Determining Dynamic Hysteresis Loop by Means of Two Voltmeters



Ts. M. S.

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

PETRUN'KIN, V.Yu.; MOLOTKOV, V.I.; PAKHOMOV, L.N.; PELLIKAN, S.G.

Low-power ferrite-equipped magnetic amplifiers for audio frequencies. Trudy LPI no.194:69-74 '58.
(Magnetic amplifiers) (MIRA 11:11)

MOLOTKOV, V.I.

Magnetic amplifier connected to a rectifier bridge equipped with a capacitor filter. Trudy LPI no.194:75-84 '58. (MIRA 11:11)
(Magnetic amplifiers)

9,2520 (1003,1040,1154)

32925

S/194/61/000/011/060/070
D271/D302

AUTHOR: Molotkov, V.I.

TITLE: A method of power summation by transistors

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 11, 1961, 14, abstract 11 K105 (Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1960, no. 9, 43-44)

TEXT: A method is proposed of adding powers in transistors, not by their parallel connection, but by connecting the necessary number of separate amplifiers (proper phasing must be preserved) to a common magnetic core. Amplifiers are coupled only for a.c. by the magnetic circuit. Input and output circuits can be d.c. separated. The advantage of the proposed method consists in reducing the influence of the spread of transistor parameters on the operation of the amplifier, by comparison with the parallel connection, and hence in a considerably increased operational reliability of the amplifier.

Card 1/2

3295

A method of power summation...

S/194/61/000/011/060/070
D271/D302

The use of three amplifiers with 6 transistors permitted one to obtain a power of 65-70 W in the load, with 24 V supply; amplitude and frequency characteristics were satisfactory. The amplifier worked continuously during 8 hours; the form factor was < 10%. It is noted that disconnecting one of the transistors in one arm of any amplifier, operating in class C, does not substantially upset the operation of the stage concerned; the proposed method can also be applied in building amplifiers with common emitter and with common base operating in various classes of amplification. [Abstracter's note: Complete translation]

Card 2/2

S/194/61/000/011/052/070
D271/D302

AUTHORS: Molotkov, V.I. and Konyushev, A.I.

TITLE: A filament voltage stabilizer with a magnetic amplifier for electron tubes

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 11, 1961, 23, abstract 11 E149 (Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1960, no. 9, 65-72)

TEXT: In an a.c. voltage stabilizer with a closed control loop a magnetic amplifier, controlled by an electronic amplifier, is used as the regulating element. The sensor - a diode with tungsten filament 4Ц6С (4Ts6S) is connected to the output terminals of the system and reacts to the variations of the voltage. Theoretical analysis of the output voltage stability takes into account the parameters of the amplifier, the sensor and the regulating element; the analysis is based on the theory of ideal magnetic amplifier which

Card 1/2

A filament voltage stabilizer... S/194/61/000/011/052/070
D271/D302

presupposes application of high quality magnetic materials. The stability factor of the system is ~100-200 and the efficiency is 70-80%. 8 references. [Abstracter's note: Complete translation]

Card 2/2

MOLOTKOV, V.I.

Some data on the state of supplying elderly and senile persons with thiamine and riboflavin. Vop. geron. i geriat. 4:225-230 '65.
(MIRA 18:5)

1. Institut gerontologii AMN SSSR, Kiyev.

MOLOTKOVA, A. S.

"Determination of Free Acid in Tin Salt Solutions",

Zavod. Lab., 14, No. 1, 1948. Lvov State Univ. im.

I. Franko, -c1948-.

CA

Permanganate method of determination of formaldehyde and formic acid. A. N. Molotkova and V. K. Zolotukhin (State Univ., Lvov). *Zavodskaya Lab.* 15, 1280 (1949).—Detn. of CH_2O with $KMnO_4$ in Na_2CO_3 soln. is unsatisfactory because of the uncertain endpoint, but in strongly acid H_2SO_4 soln. is worse from dec..npn. of $KMnO_4$. $KMnO_4$ is stable in Na_2CO_3 solns. for only 1 hr. in the cold. The best procedure is to add excess $KMnO_4$ to the Na_2CO_3 soln. of the unknown, let stand 20-30 min., acidify with 7 N H_2SO_4 and immediately back titrate with 0.1 N Mohr's salt soln. with an excess of the latter; the excess of Mohr's salt is then back titrated with 0.1-0.05 N $KMnO_4$. Results check within 0.01%. MeOH interferes with the analysis.

G. M. Kosolapoff

MOLOTKOVA, A.S., assistant.

Permanganatometric determination of certain organic hydroxy acids. Dop.ta pov.L'viv.un. no.3 pt.2:32-33 '52. (MLRA 9:11)

(Permanganates) (Acids, Organic)

MOLOTKOVA A.S.

3

USSR

Permanganate determination of some organic hydroxy acids. V. K. Zolotukhin and A. S. Molotkova. *Trudy Komissii Anal. Khim., Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 5(8), 179-86(1954).—The influence of inorg. salts on the oxidation of tartrates, citrates, and salicylates by $KMnO_4$ in alk. soln. was studied. Ca^{++} and Cu^{++} catalyzed tartrate oxidation. Citrates and salicylates behaved the same with or without added cations. K Na tartrate, K citrate, and salicylic acid, with equiv. wts. 0.1, 0.055, 0.036 M, resp., were used. Kolthof's method was adapted and cations were added as 0.1 N solns. of their nitrates or sulfates. To 10-ml. sample (0.2-0.25 N) add 2-5 ml. of cation soln., then 25 ml. 0.2-0.25 N $KMnO_4$, and 10 ml. 4 N NaOH. Let the mixt. stand in a closed flask in the dark for varying times. Then add 15 ml. 7 N H_2SO_4 and 0.1 N Mohr salt soln. until the ppt. is completely dissolved. After a few min. titrate the excess Mohr salt with 0.1 N $KMnO_4$. Without catalyst, oxidation of tartrate took 24 hrs., but with Ca^{++}, tartrate was 98.7-% oxidized after 1 hr., 99.62% after 2 hrs. Cu^{++} was a catalyst but it affects the $KMnO_4$ titer. When Cu salts are used as the catalyst the titer must be detd. in the presence of Cu^{++} ions. Cr^{++} increased oxidation time. K citrate was oxidized 79.15% after 1.5 hrs., 79.20% after 24 hrs. Inorg. salts did not have much effect. With Ca^{++}, after 2, 2.5, 3, and 24 hrs., the percent oxidized was 77, 79.5, 80.0, and 80.15, resp. It is suggested to omit the catalyst and use an empirical titer detd. by standardization with K citrate. After 3 hrs. salicylic acid was 99.45% oxidized and cations had no influence.

Barilla Mayerle

MOLOTKOVA, A. S.

USSR/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61830

Author: Molotkova, A. S., Zolotukhin, V. K.

Institution: None

Title: On Acidi-Alkalimetric Determination of Zirconium and Titanium

Original Periodical: Nauk. zap. L'vivs'k. un-tu, 1955, 34, 125-133

Abstract: Zr is determined in its salts by titration with NaOH in the presence of salts of tartaric, citric and salicylic acid (concentration of solutions of Zr $\geq$ 0.1 N) or without them (concentration of solutions $\leq$ 0.025 N). With an excess of anions of hydroxy acids even large amount of KNO_3 and K_2SO_4 are without effect; cathions reacting with caustic alkalies interfere. In basic salts Zr is determined from the sum of basicity of solutions of salt and amount of caustic alkali used up for its neutralization, the basicity being determined on the basis of the reaction $ZrO^{2+} + 6F^- + H_2O \rightarrow (ZrF_6)^{2-} + 2OH^-$. In neutral tartrate solutions Zr cannot be determined by the

Card 1/2

USSR/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61830

Abstract: potassium fluoride method, in salicylate solutions the error of determination ~0.8%. Ti cannot be determined by the above described method since the fluoride complex of Zr are more stable toward alkalies than the fluoride complex of Ti.

Card 2/2

69023

5.2620

AUTHORS: Zolotukhin, V. K., Molotkova, A. S. S/078/60/005/04/018/040
B004/B007

TITLE: The Relative Stability of the Tartrate-, Citrate-, Malate-, and Salicylate Complexes of Iron and Aluminum

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 4, pp 879 - 881 (USSR)

ABSTRACT: The authors mention the fact that published data on the constitution of complex salts of organic oxy acids are insufficient and contradictory. They chose the compounds mentioned in the title, because they play a part in analytical chemistry. Relative stability was determined according to I. V. Pyatnitskiy's method (Ref 2). A mixture of potassium-aluminum-alum and iron-ammonium-alum was treated with the sodium salt of the organic acid, after which Al and Fe were precipitated - partly after addition of NaOH - with oxyquinoline. In the solution of the organic acid the non-precipitated Fe and Al, the degree of binding $\alpha = c_{complex}/c_{Me^{n+}}$ as well as the ratio α_{Fe}/α_{Al} was determined.

The results obtained are given in a table. The tartrate-, citrate-, malate-, and salicylate-complexes of iron are more stable than the corresponding complexes of aluminum. The ratio

Card 1/2

69023
S/078/60/005/04/018/040
B004/B007

The Relative Stability of the Tartrate-, Citrate-, Malate-, and Salicylate Complexes of Iron and Aluminum

α_{Fe}/α_{Al} of the degrees of binding of the complexes of these oxy acids increases with the pH of the solution. The stability of the investigated complex compounds of Fe and Al is in a reciprocal ratio to each pH, at which the precipitation of Fe and Al as hydroxide begins. There are 1 table and 7 Soviet references.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet (L'vov State University)

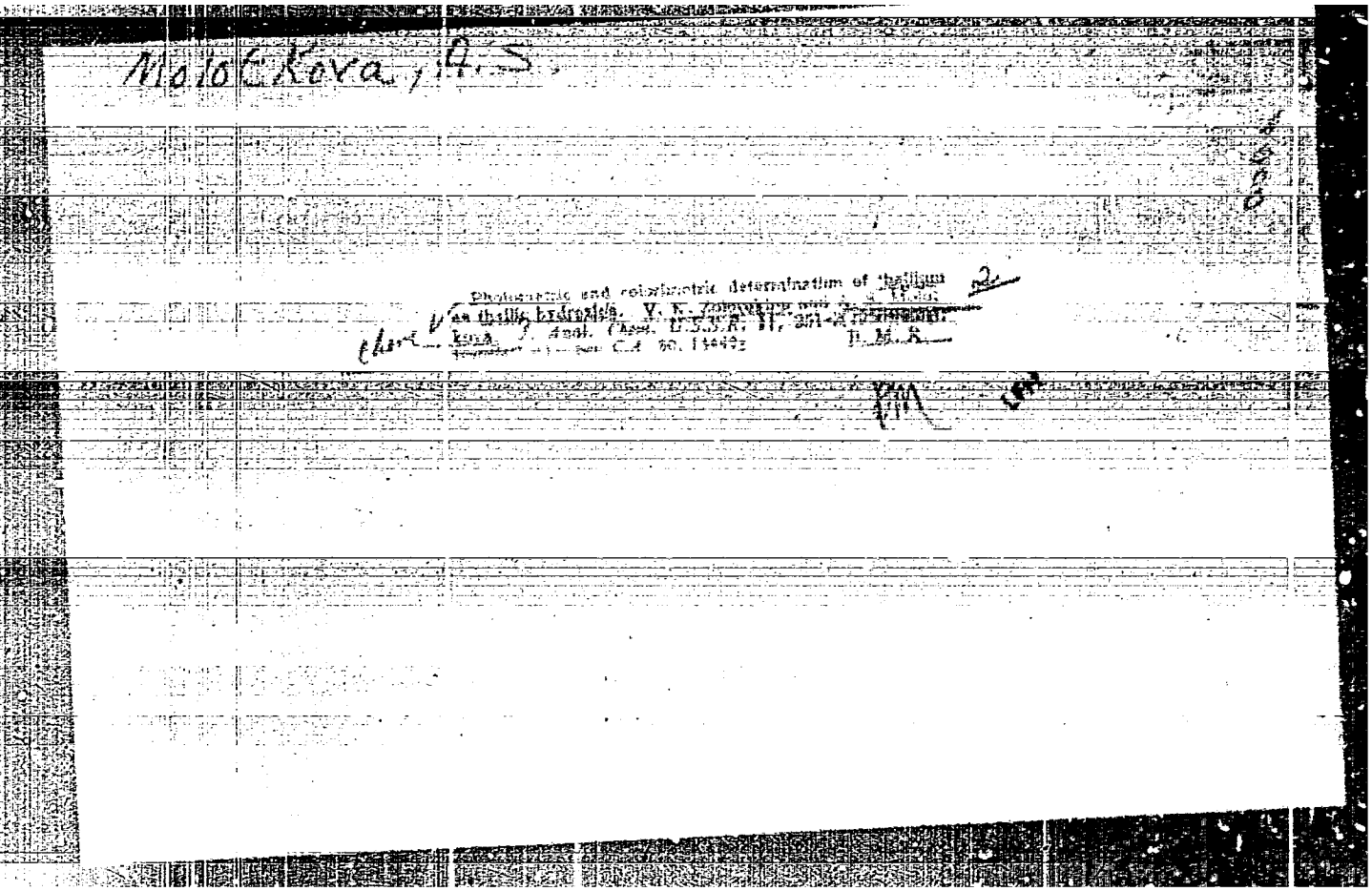
SUBMITTED: January 30, 1959

Card 2/2

ZOLOTUKHIN, V.K.: MOLOTKOVA, A.S.

Photometric and colorimetric determination of thallium in the form of thallic hydroxide. Zhur.anal.khim. 11 no.2:248-249 Mr-Ap '56. (MLRA 9:8)

1. L'vovskiy gosudarstvennyy universitet.
(Thallium)



MOLOTKOVA, G.S. [Molotkova, H.S.]; ZOLOTUKHIN, V.K.

Reaction of thallium trichloride with sodium tartrate. Nauk. zap. L'viv. un. 46:155-160 '58. (MIRA 12:7)
(Thallium chlorides) (Sodium tartrate)

KOLOTKOVA, I. A.

"Changes in the Higher Nervous Activity of Oligophrenics Due to the Effects of Bromine and Prolonged Sleep." Cand Med Sci, Inst of Experimental Medicine, Acad Med Sci USSR, Leningrad, 1953. (RZhBiol, No 7, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

GAKKEL', L.B.; ZAGRUBSKAYA, A.L.; MEYYER, M.N.; MOLOTKOVA, I.A.

Prolonged sleep therapy of temporary disturbances occurring in oligophrenia. Zhur.nevr.i psikh. 54 no.2:149-152 F '54. (MLRA 7:3)

1. Institut eksperimental'noy meditsiny i Dom invalidov im. K.Marksa v Leningrade. (Sleep) (Inefficiency, Intellectual))

MOLOTKOVA, I. A.

V-8

USSR/Human and Animal Physiology - The Nervous System.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 18590

Author : I.A. Molotkova.

Inst : The Institute of Experimental Medicine of the Academy of Medical Sciences of the USSR.

Title : Certain Peculierities in the Establishment of Conditioned Responses to Simultaneous Complex Stimuli in Oligophrenic Patients.

Orig Pub : Yezhegodnik. In-t eksperim. med. Akad. med. nauk SSSR, 1955, Leningrad, 1956, 48-51.

Abstract : In oligophrenic patients positive conditioned responses were established to images of animals by exhibiting a picture of one for 7 seconds. The motor technique was employed with feeding reinforcement. Removal required 5 seconds. In imbeciles conditioned resonses were obtained only for

Card 1/2

USSR/Human and Animal Physiology - The Nervous System. T

Abs Jour : Ref Zhur Biol., No 3, 1959, 13291

Author : Molotkova, I.A.

Inst : Institute of Experimental Medicine, Academy of Medical Sciences USSR

Title : The Study of Higher Nervous Activity in Patients in Later Stages of Hypertension

Orig Pub : Yezhegodnik. In-t eksperim. med. AMN SSSR, 1956, t. 2 (M), 1957, 79-84

Abstract : No abstract.

Card 1/1

MOLOTKOV, I.A.

Conditioned reflexes to compound trace stimuli in oligophrenia [with summary in English]. Zhur.vys.nerv.deiat. 7 no.1:58-62 Ja-F '57. (MIRA 10:10)

1. Laboratoriya patofiziologii vysshey nervnoy deyatel'nosti cheloveka Instituta eksperimental'noy meditsiny AMN SSSR.

(MENTAL DEFICIENCY, physiology,
conditioned reflexes to trace compler stimuli (Rus))
(REFLEX, CONDITIONED,
to trace compler stimuli in oligophrenia (Rus))

GAKKEL', L.E.; MOLOTKOVA, L.A.; TROFIMOV, N.N.

Study of disorders of neural processes in oligophrenia [with summary in English]. Zhur.vys.nerv.deiat. 7 no.4:494-500 Jl-Ag '57. (MIRA 10:12)

1. Laboratoriya patofiziologii vysshey nervnoy deyatel'nosti cheloveka Fiziologicheskogo otdela im. I.P.Pavlova Instituta eksperimental'noy meditsiny AMN SSSR.

(MENTAL DEFICIENCY, physiology,
conditioned reflex determ. of neural funct. (Rus))
(REFLEX, CONDITIONED,
in ment. defic., determ. of neural funct. (Rus))

MOLOTKOVA, I.A., kand.med.nauk

Comparative study of age-related aspects of conditioned motor reflexes in man under various unconditioned reinforcements. Trudy LIETIN no.4:55-62 '60. (MIRA 16:2)
(GERIATRICS) (CONDITIONED RESPONSE)

MOLOTKOV, P.I.; KAPLUNOVSKIY, P.S.; GAVRUSEVICH, A.N.; MOLOTKOVA, I.I.; PASTERNAK, P.S.; CHUMATYY, O.V.; POLYANOVSKIY, A.A., otv. za vypusk; PANCHENKO, V., red.; LUCHKIV, M., tekhn. red.

[Mountain forest types] Tipy gornykh lesov. Uzhgorod, Zakarpatskoe obl. knizhno-gazetnoe izd-vo, 1961. 79 p. (MIRA 15:7)
(Transcarpathia--Forests and forestry)

GASANENKO, L.B.; MOLOTKOVA, M.N.; SAFONNIKOV, B.G.

Normal field of an infinite straight cable (field in the air).
Uch. zap. LGU no.324:43-64 '64. (MIRA 18:4)

VASIL'YEV, P.I.; MOLOTKOVA, M.N.

Disturbances caused by the shifting of the gondola in airborne electromagnetic prospecting by the induction method. Uch. zap. LGU no.324:65-69 '64. (MIRA 18:4)

S/081/62/000/004/068/087
B158/B110

11C171

AUTHORS: Mardanov, M. A., Beliyev, K. G., Molotkova, V. K.

TITLE: Improving diesel fuel by the use of additives

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1962, 481, abstract 4M172 (Azerb. neft. kh-vo, no. 6, 1961, 35-37)

TEXT: A technology has been developed for the production of diesel fuel additive on the basis of the high-molecular products of thermal cracking. Its physical and chemical properties have been determined. An addition of 2 % of this additive to Baku diesel fuels will raise the cetane number from 44 to 48, without deterioration of the basic qualities of the fuel. The additive is quite stable; in the course of ten months no drop in cetane number is observed. Tests carried out on a 1-4 (1-Ch) motor by the method developed by INKhP AS Azerbaydzhanskaya SSR have shown that the additive causes no wear of components of the piston group and does not increase carbon deposition. The production process for this additive is not complicated and may be introduced in one of the plants of the "Azneftekhimzavody" administration. [Abstracter's note: Complete translation.]

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DANIAKHIY, M.A., prof.; PAVKINA, A.G.; SUMOVSKAYA, A.Ye.; MOLOTKOVA, V.V.; ILOVAYSKAYA, K.S.

Cytological picture of vaginal secretion in normal and patholgical pregnancy. Akush. i gin. 34 no.6:23-26 N-D '58. (MIRA 12:1)

1. Iz akusherako-ginekologicheskoy kliniki Saratovskogo meditsinskogo instituta.

(PREGNANCY, physiol.
vaginal secretion, cytol. (Rus))
(VAGINA, physiol.
secretion in pregn., cytol. (Rus))

ROTINYAN, A.L.; MOLOTKOVA, Ye.N.; DANILOVICH, O.M.

Connection between cathodic polarization and the crystal structure of a galvanic iron - cobalt alloy. Izv. vys. ucheb. zav.; tsvet. met. 3 no.4:49-51 '60. (MIRA 13:9)

1. Leningradskiy tekhnologicheskiy institut. Kafedra tekhnologii elektrokhimicheskikh proizvodstv.
(Iron-cobalt alloys—Electrometallurgy)

MOLOTKOVA, YE. N.

Cand Chem Sci, Diss -- "Cathodic polarization in the formation of an iron-cobalt alloy". Novocherkassk, 1961. 12 pp, 21 cm (Min of Higher and Inter Spec Educ RSFSR. Novocherkassk Order of Labor Red Banner Polytec Inst imeni Sergo Ordzhonikidze), 180 copies, Not for sale (KL, No 9, 1961, p 177, No 24278). [61-54087]

S/076/61/035/001/010/022
B004/B060

AUTHORS: Rotinyan, A. L. and Molotkova, Ye. N.

TITLE: Cathodic polarization at a joint discharge of ions of iron, cobalt, and hydrogen

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 1, 1961, 158-163

TEXT: A study has been made of the cathodic polarization during the formation of an Fe - Co alloy under conditions where hydrogen is already liberated. Curves of partial polarization were drawn for the purpose. The curve of total polarization was drawn, and the current fraction of the two components was determined for each potential by a chemical analysis. The curve of partial polarization was drawn therefrom for each component. The electrolyte was a solution of 0.63 mole/l $CoSO_4$, 0.62 mole/l $FeSO_4$, 10 g/l NaCl, 30 g/l boric acid. The experiments were conducted for pH 3.5, 1.8, and 1.5. The volume of hydrogen liberated was measured. In addition to determining the current fraction consumed for the separation of the metals and of H_2, the authors also calculated, from the difference,

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S/076/61/035/001/010/022
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Cathodic polarization at a joint ...

the current consumption for the $Fe^{3+} \longrightarrow Fe^{2+}$ reduction. It was found that in the whole potential range investigated, the alloy deposited under depolarization of iron and superpolarization of cobalt. Electrolysis follows the Tafel equation $\varphi = a + (2.3RT/\alpha zF)\log i$ (1) (φ = cathode potential, a = cathode potential for i = 1, α = constant). The values for a and α are given in Table 1 for 1 a/dm^2, various pH and temperatures. Experimental results fit the assumptions of the theory of slow ion discharge. The polarization curve of H_2, as a function $\varphi = f(\log i_{H_2})$, was found to be a straight line with the inclination angle $2.3RT/\alpha zF$. The exchange current on the cobalt-iron alloy was calculated, and the following results were obtained for log I_0 (a/cm^2): -5.55 at 25°C; -5.23 at 40°C; -4.92 at 55°C. The activation energy of the discharge of H^+ ions amounted to 9.1 kcal/mole. At pH = 3.5 the whole current is consumed for the discharge of Co and Fe ions. An increase of acidity entails not only the liberation of H_2, but also a further process, which was identified as $Fe^{3+} \longrightarrow Fe^{2+}$. The appearance of Fe^{3+} in the solution is caused by an increase of the oxidation potential of O_2 in strongly acid solution. A. N. Frumkin and L. I. Antropov are mentioned. There are 6 figures, 3 tables,

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S/076/61/035/001/010/022
B004/B060

Cathodic polarization at a joint ...

and 5 Soviet-bloc references.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Institute of Technology imeni Lensovet)

SUBMITTED: May 6, 1959

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S/076/61/035/001/010/022
B004/B060

Cathodic polarization at a joint ...

Table 1

Table 1

Выделяющийся компонент a)	pH	25°		40°		55°		70°	
		a	e	a	e	a	e	a	e
Fe	3,5	0,620	0,49	0,566	0,56	0,500	0,62	0,445	0,75
	1,8	0,630	0,48	0,572	0,50	0,525	0,50	0,478	0,69
	1,5	0,650	0,43	0,585	0,54	0,535	0,50	0,500	0,54
Co	3,5	0,627	0,41	0,560	0,46	0,517	0,48	0,442	0,60
	1,8	0,656	0,37	0,583	0,[illegible]	0,557	0,38	0,493	0,43
	1,5	0,710	0,33	0,[illegible]98	0,44	0,557	0,38	0,520	0,37
H_2	1,8	0,634	0,50	0,629	0,50	0,620	0,50	—	—
	1,5	0,592	0,50	0,577	0,50	0,563	0,50	—	—

Legend to Table 1. a) liberated component

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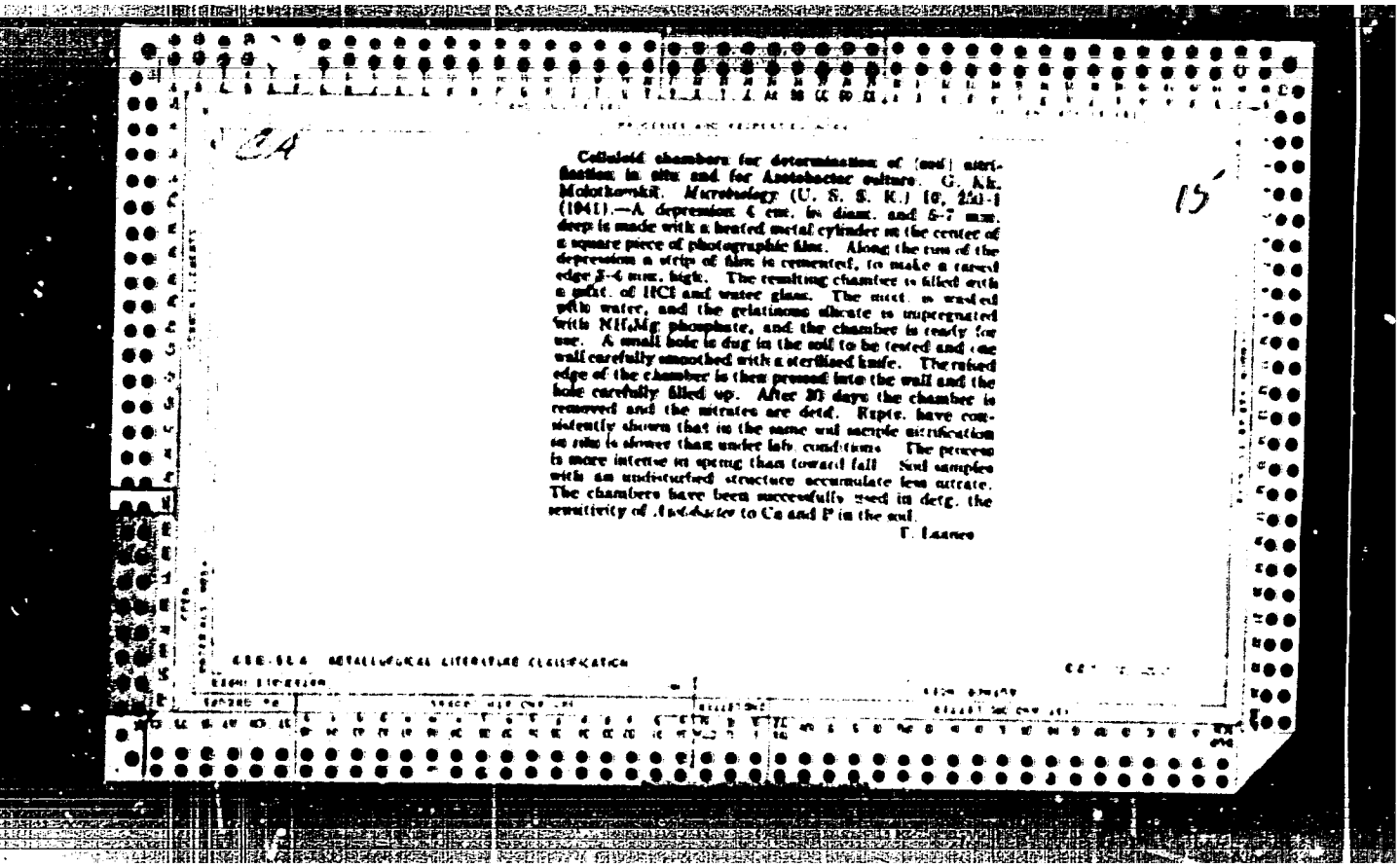
CA

11 L

Hormonization of plants. G. Molotkovskii and G. V. Porutskii. *Zhur. Inst. Botan. Akad. Nauk. Kazakh. S. S. R.* No. 1. 179-88(1954); *Herbage Abstracts* 10, No. 20 (28), ... (1954). —The soaking of wheat, barley and millet seeds in an oil soln. of pregnant mare urine where concn. does not exceed 50% and smearing potato tubers with a paste comprising the soln. promoted growth rate and development of plants. Stronger concns. were less effective and even depressed the plants. S. Solovchik

Kazakh Inst. Agric. Res., Alma-Ata



Cellsloid chambers for determination of (soil) nitrification in situ and for Azotobacter culture. G. A.K. Molotkovskii. *Microbiology* (U. S. S. R.) 10, 251-4 (1941).—A depression 6 cm. in diam. and 5-7 mm. deep is made with a heated metal cylinder on the center of a square piece of photographic film. Along the rim of the depression a strip of film is cemented, to make a raised edge 3-4 mm. high. The resulting chamber is filled with a paste of HCl and water glass. The moist is washed with water, and the gelatinous silicate is impregnated with NH_4Mg phosphate, and the chamber is ready for use. A small hole is dug in the soil to be tested and one wall carefully smoothed with a sterilized knife. The raised edge of the chamber is then pressed into the wall and the hole carefully filled up. After 20 days the chamber is removed and the nitrates are detd. Rapts. have consistently shown that in the same soil sample nitrification in situ is slower than under lab. conditions. The process is more intense in spring than toward fall. Soil samples with an undisturbed structure accumulate less nitrate. The chambers have been successfully used in detg. the sensitivity of *Azotobacter* to Ca and P in the soil.

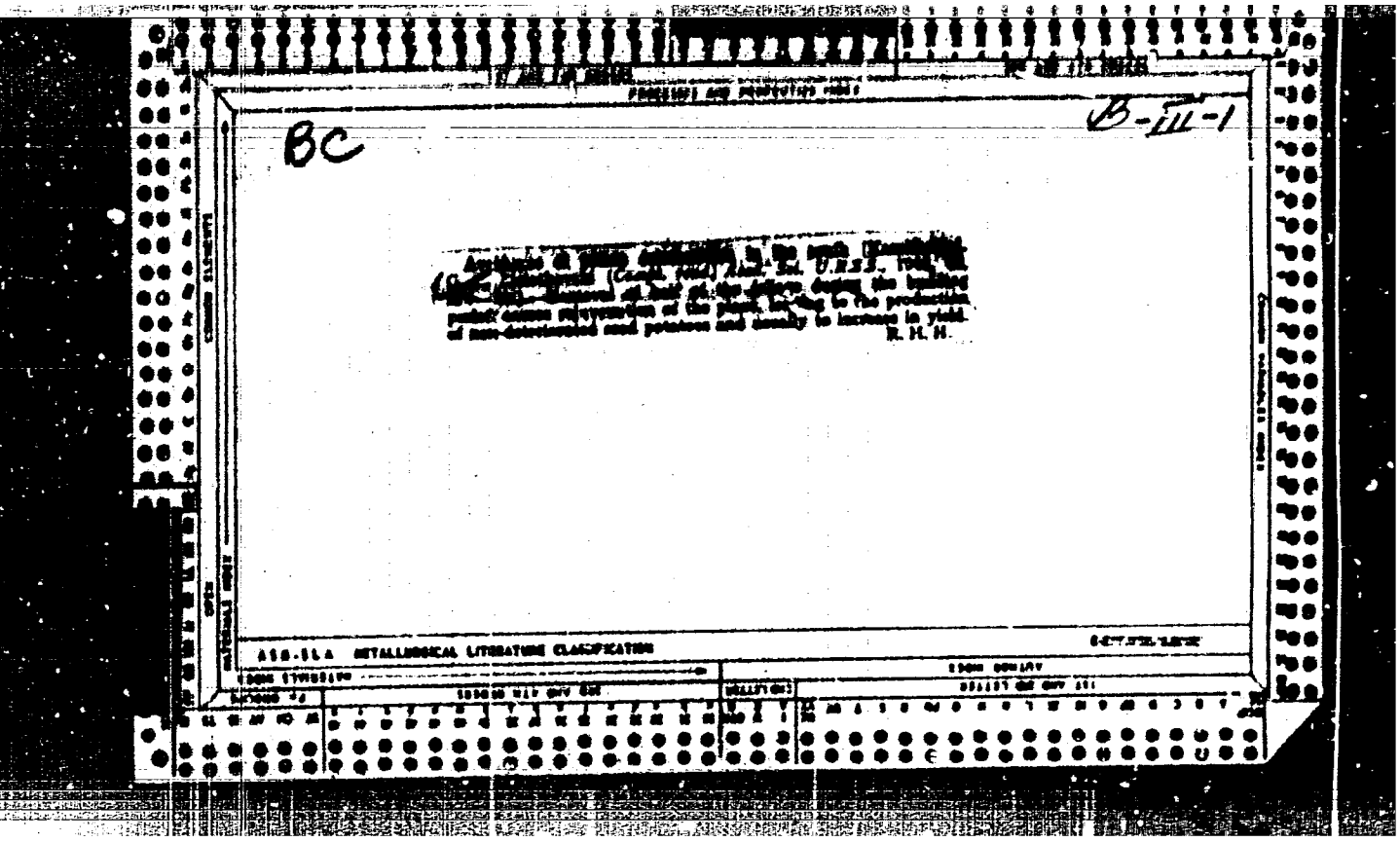
T. Isaacs

5.C L.

A; Planting

On the vegetative propagation of the rubber plants kok-saghiz, tau-saghiz, and krim-saghiz. G. K. [illegible] (Compt. Rend., Doklady, Acad. Sci., U.R.S.S., 1945, [illegible]; Plant Breeding Abs., 1946, [illegible]).—A note is given on the efficiency of regeneration of root cuttings of these rubber plants. Krim-saghiz forms roots the most readily, kok-saghiz does so less readily, and tau-saghiz only with difficulty. [illegible]

1946



Physiological nature of the reversion of polarity in the cuttings of kok-saghiz. G. II. [illegible] (Compt. Rend. Acad. Sci. U.S.S.R., 1946, 52, 561 2; Hort. Abs., 1947, 17, [illegible]). Reproduction of cuttings is often observed in experiments on vegetative propagation of kok-saghiz. Cuttings of one-year-old plants were cultivated vertically upside down. The basal parts of the cuttings reproduced the leaf rosette with the same frequency as in the field. The formation of the leaves at the basal part of the cutting was preceded by their appearance at its apical end which was directed downwards. The physiology of the phenomenon is discussed. The author concludes that polarity is a property of the protoplasm.

[illegible]

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135110003-6"

USSR/Medicine - Rubber Dec 1947
Medicine - Regeneration

"Decapitation as a Factor for Changing the Nature of the Kok- and Krym-Sagyz," G. Kh. Molotkovskiy, Chernovitskiy State U, Chernovits, 3 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVIII, No 7

Describes studies made on 2-year-old plants which decapitated after 2 years. Describes anatomic investigations of regenerators of kok- and krym-sagyz. Accumulation of couchouc kok-sagyz regenerants. Submitted by Academician N. A. Maksimov, 8 Jul 1947.

60T58