

AGARKOV, L., inzhener.

Device for welding steel flanges to pipes. Mor.flot 15 no.3:31
Mr '55. (MIRA 8:5)

(Pipe flanges--Welding)

AGARKOV, L. A.

Dock repairs of brass screw propellers by electric arc welding.
Trudy NTO sud. prom. no.33:125-126 '59. (MIRA 13:9)
(Propellers--Maintenance and repair) (Electric welding)

AGARKOV, L.A., inzh.

Welding Br. Mts5 bronze. Svar. proizv. no.3:36-37 Mr '61.

(MIRA 14:3)

(Bronze--Welding)

AGARKOV, L.A., inzh.; KOSORUCHENKO, A.G., inzh.

First Crimean conference on welding. Svar. proizv. no.4:42 Ap '61..
(MIRA 14:3)

(Welding—Congresses)

KODOLBENKO, D.V., agronom (Belgorodskaya oblast'); KALINOVSKIY, N.V.,
agronom (Belgorodskaya oblast'); AGARKOV, P.D., agronom
(Belgorodskaya oblast'); YAKOVIEV, V.

New discoveries break the old stereotype. Zemledelie 26
no. 4-88-89 Ap '64. (MIRA 17:5)

AGARKOV, V.

Work of the grain drying and cleaning tower has been improved.
Muk.-elev. prom. 24 no.10:28 0 '58. (MIRA 11:12)

1.Makinskiy khlebopriyemnyy punkt Akmolinskoy oblasti.
(Akmolinsk Province--Grain elevators)

AGARKOV, V.

Strong wheats should not be rejected on the basis of varietal purity.
Muk.-elev. prom. 29 no.2:11-12 F '63. (MIRA 16:8)

1. TSelinnoye krayevoye upravleniye Gosudarstvennoy khlebnoy
inspektsii Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh
produktov Kazakhskoy SSR.
(Virgin Territory--Wheat--Grading)

AGARKOV, V.

Fraternal union and friendship forever. Vnesh. torg. 43 no.12:13-15
'63. (MIRA 17:2)

AGARKOV, V. A.

AGARKVO, V. A. "Hot Water Treatment of Spring and Winter Wheat Seeds against Smut,"

Seleksiia i Semenovodstvo, vol. 14, no. 2, 1947, pp. 67-69. 61.9 Se5

SO: SIRA, SI 90-53, 15 Dec. 1953

AGARKOV, V. A.

"Parasitization of the Botrytis Fungus on Buckwheat and Esparsette", Selection and Seed Growing, No. 10, p 6, 1950.

AGARKOV, V. A.

AGARKOV, V. A. "Bacteriosis of Barley Endosperm" Seleksija i Semenovodstvo.

vol. 17, no. 6, 1950, pp. 48-50. 61.9 Se 5

SO: SIRA, SI 90-53, 15 Dec. 1953

AGARKOV, V. A.

AGARKOV, V. A. "Parasitism of Botrytis cinerea on Buckwheat and Sainfoin,"

Seleksiia i Semenovodstvo, vol. 17, no. 10 1950, p. 67. 61.9 Se5

SO: SIRA, SI 90-53, 15 Dec. 1953

AGARKOV, V. A.

AGARKOV, V. A. "Morphology of the Manifestation and Early Diagnosis of Smut in Millet," Selektsiia i Semenovodstvo, vol. 18, no. 10, 1951, pp. 21-28 61.9 Se5

SO: SIRA, SI 90-53, 15 Dec. 1953

Agarkov, V.A.

USSR / Plant Diseases. Diseases of Cultivated Plants.

N

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 57, 69519

Author : Agarkov, V.A.

Title : Virus Wheat Diseases in Vinnits Region

Orig Pub : Zashchita rast. ot vredit. i boleznei, 1956, No 3, 31-34

Abstract : These are results of experiments conducted by the author in Uladovo-Lyulinetsk and other regional experimental stations and on some collective farms. Three types of disease are described. The first is found in the spring on plants in stages of sprouting or stem formation. The plants lag in growth, turn yellow, become bushy. The second appears beginning with the flowering stage in healthy plants. In addition to dwarfishness and bushiness, the characteristic manifestation is sterility and proliferation of flowers, which are transformed into shoots, and the flower pelticles which form small leaves. The third type is observed

Card 1/2

USSR / Plant Diseases. Diseases of Cultivated Plants.

N

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 57, 69519

Abstract : at the time of wheat ear formation in winter wheat and is characterized by the presence of longitudinal (the whole length of the leaf and of varied width) lines of lemon-yellow and whitish flowers. The appearance of bushiness without proliferation of flowers is noted. The losses of crops caused by these diseases are very great. In the author's opinion, the 1st type of disease is caused by a winter wheat mosaic virus. The two other forms of the disease are virus diseases, and their carriers are cicadas.

Card 2/2

AGARKOV, V. A.

USSR/Plant Diseases - Disease of Cultivated Plants.

0-3

Abs Jour : Ref Zhur - Biol., No 15, 1958, 68549

Author : Agarkov, V.A.

Inst :

Title : The Dry Method of Treating Sugar Beet Transplants.

Orig Pub : Agrobiologiya, 1957, No 3, 146-148.

Abstract : In Vinnitskaya Oblast' a dry method of fungicide treatment of sugar beet roots for transplantation has been adopted in rust control which attacks the sugar beet in the end of vegetation; the root bunches, after being cleaned of shoots, are immersed in a mixture of granosan and slaked lime. If the maternal roots are not severely infected, a mixture of one part granosan to 15-17 parts lime can be used. About three kilograms of granosan and 42-45 kilograms of slaked lime should be enough per single hectare of transplants. In the case of average or severe infection it is necessary to use a mixture of one

Card 1/2

COUNTRY : USSR C-3
CATEGORY :
VOL. NO. : REBiol., No. 19, 1958, No. 97526
AUTHOR : Yarkov, V. D.
INST. :
TITLE : On Treatment of Barley Seed with Granosan
for the Control of Helminthosporiosis.
ORIG. PUB. : Agrobiologiya, 1958, No 2, 125-128

ABSTRACT : At the Ulagovo-Lyulinetskaya selection station (Vinitskaya Oblast'), of all the treatment procedures tested to control black germ of seed and root rot induced by *Helminthosporium sativum* M et B, the best results were obtained on treatment of barley seeds with Granosan. On sowing of strongly infested seed treated with Granosan, the yield is increased by 35-40% over the controls. Field test data have shown the possibility of successfully combining vernalization with Granosan treatment at a dosage of 1 g/kg. The experiments of 1949-1951 have revealed that Granosan dosage recommended in the directions should be decreased from 1.5 to 1 g/kg,

CARD: due to high sensitivity of barley seed.
Ye. D. Yakimovich.

AGARKOV, V.A., kand. sel'skokhozyaystvennykh nauk.

Treating barley seeds with granosan to control helminthosporiasis.
Agrobiologiya no.1:125-128 Ja-F '58. (MIRA 11:2)

1. Uladovo-Iyulinetskaya opytno-seleksiionnaya stantsiya,
Vinnitskaya oblast'.
(Granosan) (Barley--Diseases and pests) (Seeds--Disinfection)

AGARKOV, V.A., kand.sel'skokhozyaystvennykh nauk

Recent data on determining the rot-resistance of sugar beet roots. Agrobiologiya no.4:583-587 J1-Ag '60. (MIRA 13:8)

1. Sel'skokhozyaystvennyy institut, g. Kamenets-Podol'sk.
(Sugar beets--Disease and pest resistance)

AGARKOV, V.A., kand.sel'skokhoz.nauk

Erroneous recommendations. Zashch. rast. ot vred. i bol. 6
no.3:61 Nr '61. (MIRA 15:6)

1. Kamenets-Podol'skiy sel'skokhozyaystvennyy institut.
(Sugar beets--Diseases and pests)

AGARKOV, V. A., kand. sel'skokhoz. nauk, dotsent

Sugar beet rust. Zashch. rast. ot vred. i bol. 5 no.11:36-38
N '60. (MIRA 16:1)

1. Kamenets-Podol'skiy sel'skokhozyaystvennyy institut.

(Sugar beets--Diseases and pests)
(Rusts(Fungi))

AGARKOV, V.A., kand.sel'skokhoz.nauk, dotsent (Kasnets-Podol'sk)

Dwarf bunt of wheat in Khmel'nitskiy Province. Zashch.
rast. ot vred. i bol. 6 no.8:20-21 Ag '61. (MIRA 15:12)
(Khmel'nitskiy Province--Wheat--Diseases and pests)
(Khmel'nitskiy Province--Smuts)

AGARKOV, V.A., kand. sel'skokhoz. nauk

The sugar beet miner *Gnorimoschema ocellatella* Boyd. in
Kamenets-Podol'skiy District. Zashch. rast. ot vred. i bol. 6
no.11:54 N '61. (MIRA 16:4)

(Kamenets-Podol'skiy District—Sugar beets—Diseases
and pests)

(Kamenets-Podol'skiy District—Leaf miners—Extermination)

NOZDRINA, T.M.; ISMAILOV, M.G.; TIMCHENKO, V.I., aspirant; /
ABBASOV, Ya.M., aspirant; KOROSTELEVA, Z.G., entomolog;
AGARKOV, V.A., kand.sel'skokhoz.nauk

Brief reports. Zashch. rast. ot vred. i bol. 7 no.2:53-54
F '62. (MIRA 15:12)

1. Agronom po zashchite rasteniy Khar'kovskogo rayona (for Nozdrina).
 2. Azerbaydzhanskiy institut zashchity rasteniy, Kirovabad (for Ismailov).
 3. Ukrainskiy institut ovoshchevodstva i kartofelya, Khar'kov (for Timchenko).
 4. Azerbaydzhanskiy institut khlopkovodstva, Kirovabad, (for Abbasov).
 5. Tambovskiy entomofitouchastok, Sovkhoz "Komsomolets" (for Korosteleva).
 6. Kamenets-Podol'skiy sel'skokhozyaystvennyy institut, Khmel'nitskaya obl. (for Agarkov).
- (Plants, Protection of)

AGARKOV, V.A., kand. sel'skokhoz. nauk

Pale-green dwarfness of winter wheat. Zashch. rast. ot vred. i
bol. 9 no.7:17 '64. (MIRA 18:2)

1. Laboratoriya rastitel'nykh virusov Ukrain'skogo nauchno-issle-
dovatel'skogo instituta zerna i produktov yego pererabotki,
Chernigov.

AGARKOV, V.A.

Viral light-green dwarf of winter wheat in Khmel'nytskyi Province.
Russh. dokl. vys. shkoly; biol. nauki no.2:201-206 '66.

(MIM 19:1)

1. Rekomendovana laboratorijey rastitel'nykh virusov Ukrain'skogo
nauchno-issledovatel'skogo instituta zashchity rasteniy. Sub-
mitted July 20, 1964.

Agarkov, V.F.

AUTHORS: Kochetov, I.M. and Agarkov, V.F. 130-58-2-12/21

TITLE: Rationalisation of Roll-pass Designs on a 280 Mill
(Ratsionalizatsiya kalibrovok na stane 280)

PERIODICAL: Metallurg, 1958, Nr 2, pp 22 - 23 (USSR)

ABSTRACT: The 280-mill at the Saldinsk Metallurgical Works is in two lines: the roughing line has two three-high 375 stands and one two-high, while the finishing line has five two-high 280 stands. Among the products of the mill are 35 x 35 x 4 mm and 45 x 33 x 4 mm angles and 55 x 25 x 4 mm window-frame channel. The author gives diagrams (Figs. 2, 3 and 4, respectively) of the old and new roll-pass designs for these sections and enumerates the advantages resulting from the adoption of the new system, including higher productivity (15-20%), fewer operatives, better quality (10% less of second quality) product and decreased roll consumption in the finishing line. There are 4 figures.

ASSOCIATION: Saldinskiy metallurgicheskiy zavod (Saldinsk Metallurgical Works)

AVAILABLE: Library of Congress
Card 1/1

1. Rolling mills-Operation

PLSARK60

69530
E/135/60/000/05/011/025
2071/2235

12.5100

AUTHORS: Morozov, I. N., Enikain, V. P., Kabanovich, I. N.,
Kushnkevich, G. A., and Asarkov, V. P.

TITLE: Mastering the Technology of Rolling on a Merchant Mill¹⁴
of Rods from Titanium Alloys on a Metallurgical Works

PERIODICAL: Tsvetnyye metally, 1960, No. 5, pp 57-61 (USSR)

ABSTRACT: The possibility of rolling rods from titanium and its alloys (OTa and VT2-1) on a merchant mill and the quality of the products made were investigated. Chemical analyses of the ingots rolled are given in Table 1. Ingots of OTa alloy were obtained by a vacuo-argon melting and those of VT2-1 by a double vacuo melting. As semis for rolling forged squares 80 x 80 to 230 x 230 mm, 1100 to 1400 mm long were used. The rolling was done on a mill 600 with water cooling of bearings and rolls at a rolling velocity 2 to 2.7 m/sec (Table 2). Temperature of the beginning of rolling 1020 to 1070°C and that of the end of rolling 950 to 980°C. The main parameters of roll passes for rolling rods of 16 mm diameter are given in Table 3; mechanical properties of rolled and annealed products are given in Table 4; examples of the microstructure of rods are reproduced in Figs 1 to 3, a comparison of the

Card 1/2

appearance of the surface of forged, pressed and rolled rods from VT2-1 alloy is shown in Fig 4. It is concluded that rolling of titanium alloys is feasible. Under works conditions, semis for rolling should be forged squares 230 x 230 mm 1100 to 1400 mm long. In order to obtain the best structure in finished products, rolling should be finished at a lower temperature, i.e., below the range of the β phase. There are 4 figures and 4 tables.

Card 2/2

GREEN', K.A.; KUDRYAVAYA, N.A.; MAL'CHENKO, T.V.; AGARKOV, Ya.Ye.

New method of using compressed air in open-hearth practice.

Stal' 22 no.11:997-999 N '62.

(MIRA 15:11)

(Open-hearth process)

(Compressed air)

KLYUGHNIKOV, A.D.; AGARKOV, Ye.Ye.

Generalization of some studies of radiative heat transfer in
a flame furnace. Inzh.-fiz. zhur. 6 no.6:78-84, Je '63.
(MIRA 16:6)

1. Energeticheskiy institut, g. Moskva.
(Heat—Radiation and absorption)
(Furnaces)

AGARKOVA, A.P.

Movement of southern cyclones to the Kamchatka area during
the cold season of the year. Trudy Dal'nevost.NIEMI no.10:
68-92 '60. (MIRA 15:8)
(Kamchatka region--Cyclones)

ACC NR: AP6019028

(N)

SOURCE CODE: UR/0153/65/008/006/1029/1030

AUTHOR: Proshenkova, N. N.; Salova, A. I.; Agarkova, G. A.

15
B

ORG: Department of Analytical Chemistry and Department of Physicochemical Studies of Metallurgical Processes, Chelyabinsk Polytechnic Institute (Kafedra analiticheskoy khimii i kafedra fiziko-khimicheskikh issledovaniy metallurgicheskikh protsessov, Chelyabinskiy politekhnicheskii institut)

TITLE: Rapid method of determining germanium in polymetallic sulfide materials

27 27

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 8, no. 6, 1965, 1029-1030

TOPIC TAGS: germanium, hydrogen peroxide, chemical decomposition, quantitative analysis, SULFIDE

ABSTRACT: In order to speed up the decomposition of polymetallic sulfide samples used in the determination of germanium, the authors propose that a 6% solution of hydrogen peroxide be added to the mixture of sulfuric and nitric acid usually employed. Comparative experiments involving the use of different decomposition methods were carried out on material of the following composition (%): Zn, 52.0; Pb, traces; S, 17.45; SiO₂, 17.56; Cu, 1.98; Fe, 0.36; Mn, 0.36; Ag, traces; other, 4.99. Germanium was separated by extraction with CCl₄ and determined colorimetrically, with phenylfluorone as the indicator. The addition of

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UDC: 546.289:543.06

63 192-26
ACC NR: AP6019028

H₂O₂ was found to reduce the time of the decomposition by a factor of 10 to 20. The improvement in the conditions of decomposition thus achieved is due to the oxidizing action of the intermediate compounds formed (H₂SO₅, Na₂O₂, NH₄NO₃), and to the direct action of the peroxide on the sulfides. Orig. art. has: 1 table.

SUB CODE: 07/ SUBM DATE: 27Apr64/ OTH REF: 001

Card 2/2 11b

EPSHTEYN, F.G., prof.; AGARKOVA, L.G., kand.med.nauk; DREYZIN, R.S.;
SOROKINA, Ye.Yu.; LYARSKAYA, T.Ya., kand.med.nauk

Acute respiratory diseases in children caused by the 7a type
of adenovirus. Sov. med. 25 no.2:81-85 F '62. (MIRA 15:3)

1. Iz Instituta virusologii AMN SSSR (dir. - prof. P.N.
Kosyakov) i Doma rebenka No.2 (zav. Ye.S. Zhuchina).

(ADENOVIRUS INFECTIONS)
(RESPIRATORY ORGANS--DISEASES)

KUPERMAN, P.I.; GRYAZNOV, N.S.; MOCHALOV, V.V.; FROLOV, V.V.; MUSTAFIN, P.A.;
PUSHKASH, I.I.; SLAVGORODSKIY, M.V.; LAZAREV, B.L.; BORISOV, V.I.;
Prinimali uchastiye: CHERKASOV, N.Kh.; ZABRODSKIY, M.P.; RYTCHENKO,
A.I.; RUTKOVSKAYA, Ye.N.; SAITBURGANOVA, N.I.; SHTAGER, A.A.;
SHISHLOVA, T.I.; BUDOL', Z.P.; MEN'SHIKOVA, R.I.; GORELOV, L.A.;
AGARKOVA, M.M.; KOUROV, V.Ya.; KOGAN, L.A.; BEZDVERNIY, G.N.;
POKROVSKIY, B.I.

Effect of the lengthening of the coking time on the coke quality and
testing of coke in the blast furnace process. Koks i khim. no.9:
23-28 '63. (MIRA 16:9)

1. Vostochnyy uglekhimicheskiy institut (for Kuperman, Gryaznov,
Mochalov, Kogan, Bezvernnyy, Pokrovskiy). 2. Ural'skiy institut
chernykh metallov (for Frolov). 3. Nizhne-Tagil'skiy
metallurgicheskiy kombinat (for Mustafin, Pushkash, Slavgorodskiy,
Lazarev, Cherkasov, Zabrodskiy, Rytchenko, Rutkovskaya,
Saitburganova, Shtager, Shishlova, Budol', Men'shikova).
4. Koksokhimstantsiya (for Borisov, Gorelov, Agarkova, Kourov).
(Coke—Testing)

AGARKOVA, M.I.

Department of technical information and introduction of new
equipment. Biul. tekhn.-ekon. inform. Gos. nauch.-issl. inst. nauch. i
tekhn. inform. 18 no. 1:67-68 Ja '65. (MIRA 18:4)

VOINOV, S.G.; KALINNIKOV, Ye.S.; TOPIL'SKIY, P.V.; BOBKOVA, O.S.;
KUKHAROV, V.G.; BAIKO, V.P.; KOSOY, L.P.; SHALIMOV, A.G.;
Prinimali-uchastiye: IOFFE, V.N.; CHABORENKO, N.I.;
KOROTKIY, M.; BOBKOVA, N.A.

Developing a procedure for the making of limestone and alumina
semifinished products for the preparation of synthetic slag.
Stal' 22 no.2:128-132 F '62. (MIRA 15:2)

(Slag)
(Electric furnaces)

SHMEL'KOV, V.I.; SHCHEDROVITSKIY, Ya.S.; KADARMETOV, Kh.N.; ERIKOVA, O.V.;
SHIRYAYEV, Yu.S.; AGARKOVA, N.A.; KRAVCHINSKIY, R.V.; TAMBOVTSEV, V.A.

Material and power balance in melting carbon ferrochromium
in a large furnace. Stal' 24 no.12:1094-1096 D '64.
(MIRA 18:2)

KOPYRIN, I.A.; RANNEV, G.G.; SMIRNOV, Yu.D.; CHERNOV, G.I.;
BOGATENKOV, V.F.; BOKOV, I.I.; TSIPUNOV, A.G.; RISPEL', K.N.;
AGARKOVA, N.A.; DAYKER, A.L.

Research by the Chelyabinsk Metallurgical Research Institute.
Stal' 22 no.7:604,620-621,667,670 JI '62. (MIRA 15:7)
(Metallurgical research)

BOBKOVA, O.S.; AGARKOVA, N.A.; RABUKHIN, A.N.; TOPIL'SKIY, P.V.; RYSS, M.A.

Producing refined ferrochromium by the mixing of melts. Stal' 23 no.4:
331-333 Ap '63. (MIRA 16:4)
7 (Iron-chromium alloys--Metallurgy)

ACC NR: AP7002300

SOURCE CODE: UR/0133/66/000/001/0046/0049 23

AUTHOR: Dubrovin, A. S.; Agarkova, N. A.; Shestakov, S. S.; Lastovitskaya, K. S.; Klokotina, L. I.

ORG: Chelyabinsk Scientific Research Institute of Metallurgy and Chelyabinsk Electrometallurgical Combine (Chelyabinskiy n.-1. institut metallurgii i Chelyabinskiy elektrometallurgicheskiy kombinat)

TITLE: Optimal conditions for melting ferromolybdenum ✓

SOURCE: Stal', no. 1, 1966, 46-49 16

TOPIC TAGS: iron alloy, molybdenum alloy, metal melting

ABSTRACT: The optimal average temperature for melting ferromolybdenum is 1850-1950°C in which the heating process is determined to a large degree by duration of the process.

Control of process rate and, consequently, process temperature for metallo-thermal melting of ferromolybdenum can be achieved by changing size of charge components. Grinding ferrosilicon to less than 0.1 mm helps to accelerate the process and to reduce consumption of aluminum by a factor of 1.5-2. Maximum extraction of molybdenum into an ingot of suitable metal (up to 97.5%) and a significant lowering of the amount of tailings are simultaneously during grinding of the concentrate. Optimal conditions of the melting process.

Card 1/2

0925

0570

ACC NR: AP7002300

are insured at a concentrate particle size to ferrosilicon particle size ratio of 1.5-1.7. Orig. art. has: 4 figures, 8 formulas and 1 table. [JPRS: 35,526]

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 008 / OTH REF: 002

Card 2/2 nst

AGARKOVA, N.Ya.

The determination of polythionates in the sulfur sols of Sven Oden by the method of Freundlich. A. N. Kharin, P. N. Protasov, N. Ya. Agarkova and M. G. Yuster. J. Gen. Chem. (U.S.S.R.) 11, 232-8 (1941).- Freundlich's method (C.A.17, 1358) for the detn. of the no. of equivs. of polythionates in the sols of S is exact only for desorbed polythionates, found in the filtrate after the coagulation of the sols. The desorbed polythionates are pentathionates which Freundlich assumes to be stabilizers of Oden's sols of S. The no. of the equivs. of $S_5O_6^{2-}$ in the coagulates and sols by Freundlich's detn. appears to be larger than the actual no. of equivs. of micellary polythionates detd. by the method of Bassett and Durrant (C.A.26, 2102), modified by the authors. The divergence of the results of $S_5O_6^{2-}$ detn. by Freundlich's method from the actual no. of equivs. of micellary polythionates depends on: the age of the sols, the length of time it has been in coagulated state, the kind of coagulating salt, the duration of the action of NH_4OH upon the sol, etc. This divergence is explained by the fact that there is a reaction between the polythionates and NH_4OH as well as an oxidation. 8 references. S. Machelson

AGARKOVA, N. Ya.

Equivalence of ion exchange in sulphur sols. A. N. Charin, M. H. Juster, and N. J. Agarkova (Acta Physicochim. U.R.S.S., 1940, 13, 715-722; cf. A., 1941, I, 111).- Experiments on S. sols prepared by Raffo's method and aged by exposure to sunlight shows exact equivalence between Mg^{++} absorbed and H^+ displaced. Similar experiments with Ba^{++} are complicated by the formation of $BaSO_4$ from SO_4^{--} present in the intermicellar liquid; but when this is allowed for the Ba^{++} absorbed are equiv. to the H^+ displaced. The results are therefore in agreement with those obtained with freely prepared and purified sols. F. L. U.

(Krasnodar Pedagogic Institute)

AGARKOVA, N.Ya.

The effect of various factors on the changes of colloidal solutions of sulfur. A. N. Kharin, M. G. Yuster and N. Ya Agarkova. J. Gen. Chem. (U.S.S.R.) 11, No. 3, 259-65 (1941); cf. C. A. 35, 2392⁸. - The changes taking place in the S sols obtained according to Raffo and Rossi (C.A.6,3235) were investigated. The sols were kept for as much as 1.5 yrs. under various conditions in regard to the action of various outside factors, such as air and light. Exptl. results showed that in sols (1) a desorption of the polythionates takes place which stabilizes the colloidal particles, (2) their decompn. occurs according to $3S(5+z) - O_6 -- + 2H_2O \rightarrow 5SO_4^{2-} + 4H^+ + (10+3x)S$ and (3) sunlight accelerates considerably these processes and the effect of air is insignificant. The expts. confirmed the conclusions of Kharin (C. A. 35, 2392⁸) of the processes taking place in the S sols with time and the facts detd. by Raffo and Rossi. The method for detg. the polythionates according to Freundlich and Scholz (C.A. 17, 1358) expressed in equivs. of $S_5O_6^{2-}$ produced increased values, especially for fresh S sols. Besides the increased values the no. of equivs. of $S_5O_6^{2-}$ detd. according to Freundlich is always greater in the sol. than the sum of $S_5O_6^{2-}$ in the coagulate and filtrate of the same sol. On aging of these sols this difference decreases. The reasons for these differences are explained in the previous paper. Twelve references.

W. R. Henn

116-AR KOVA, V. N.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1579
AUTHOR KLINGER, M. I., NOVIKOVA, V. G., AGARKOVA, V. N.
TITLE On the Theory of the HALL- and NERNST Effects in a Semiconductor
with an Admixture Zone.
PERIODICAL Žurn. techn. fis, 26, fasc. 10, 2185-2194 (1956)
Issued: 11 / 1956

The present work is a continuation of that by A. G. SAMOJLOVIČ and M. KLINGER, Žurn. techn. fis, 25, 12, 2050 (1955) and investigates the HALL effect in a semiconductor with narrow (donorlike) admixture zone with univalent admixture. However, at first the same effect is investigated for a metal with narrow conductivity zone. HALL'S constant R of such a metal is derived by means of the general formula for any dispersion law of the energy of an electron. A simple cubic atomic lattice is assumed on this occasion. With $n/n_0 > 1$ and $n/n_0 < 1$ R is positive or negative respectively. HALL'S constant is then determined by the holes or by the electrons respectively. If $n = n_0$ (i.e. if the zone is half filled up) $R = 0$. Here n denotes the number of electrons in the narrow zone and n_0 the density of the atoms in the lattice corresponding to the narrow zone. Now the constant R of a semiconductor with a narrow admixture zone is computed for the case of two zones. In the case of electronic conductivity in both zones it is true, as expected, that $R(T) < 0$. Naturally, the results obtained here hold also if the valence zone and the acceptor admixture zone are

• Zurn. techn. fis., 26, fasc. 10, 2185-2194 (1956) CARD 2 / 2

PA - 1579

taken into account. Also in this case the dependence $|R(T)|$ is determined by a curve with a maximum, but it applies that $R(T) > 0$. The maximum of $|R(T)|$ is near the temperature T at which the electric conductivity $\sigma(T)$ has a minimum. The non-additivity of R is increased by the influence exercised by the finite width of the zone and by the nonquadratic dispersion law.

The transversal NERNST effect in a semiconductor with admixture zones is next dealt with. For this purpose a formula for the NERNST constant Q for any dispersion law of the zone electrons must be found. The time τ needed for the passage through the free length of path is here assumed not to depend on energy. At first Q is investigated for electrons in a "metal" with a narrow energy zone, and a diagram shows a typical curve for Q . At low temperatures Q diminishes with increasing T , where $Q > 0$. At a certain T Q then changes its sign after which it diminishes down to a certain value of T with increasing T . With increasing T the terms characterizing the contribution made by the electrons of the conductivity zones in the formula for Q become more and more important. The deviation of the dispersion law from the quadratic law, at least in the case under investigation, influences the dependence $Q(T)$. It is of essential importance that this deviation be taken into account.

INSTITUTION: State University CERNOVIC.

LYUBOMUDROV, V. Ye., kand. med. nauk; AGARKOVA, S. V.; D'YAKONENKO, Ye. K.;
MATEYEVA, K. M.; PAVLOVA, O. A.; SIROTA, G. M.; EYDIS, L. Z.

Combined forms of pneumoconioses in patients with collagenoses.
Terap. arkh. no.9:95-101 '61. (MIRA 15:2)

1. Iz Stalinskogo nauchno-issledovatel'skogo instituta fiziologii
truda.

(LUNGS—DUST DISEASES) (COLLAGEN DISEASES)

BYALIK, V.G.; LEBEDEVVA, V.V.; LYUBOMUDROV, V.Ye.; NAVAKATIKYAN, A.O.; AGARKOVA,
S.V.

Chronic bronchitis in workers of the Donets Basin coal mines. Sov. med.
27 no.11:133-137 N '64. (MIRA 18:7)

1. Donetskij nauchno-issledovatel'skiy institut fiziologii truda (dir.
B.N.Cnopko).

L 42876-66 EWT(m)/EWP(1) IJP(c) RM
ACC NR: AR6024953 (A) SOURCE CODE: UR/0081/65/000/006/0003/0003

AUTHOR: Kovrizhko, L. F.; Eryantseva, Yu. V.; Rayevskaya, V. I.; Agarkova, T. P.

TITLE: Isolation of trans-piperylene from the piperylene fraction obtained in the production of synthetic rubber 16

SOURCE: Ref. zh. Khimiya, Part II, Abs. 6N17 32
B

REF SOURCE: Tr. Labor. khimii vysokomolekul. soyedinoniy. Voronezhsk. un-t, vyp. 3, 1964, 78-82

TOPIC TAGS: piperylene, synthetic rubber, *hydrocarbon*

ABSTRACT: The conditions for the isolation of trans-piperylene (I = piperylene) from the piperylene fraction obtained in the production of synthetic rubber were determined. The isolation of trans-I from a mixture containing (in wt. %) 0.00-0.07 butylenes, 8.01-24.91 amylenes, 1.00-2.50 ethyl ether, 3.08-6.58 isoprene, 42.98-64.03 trans-I, 17.2-36.77 cis-I, 0.17-0.59 cyclopentadiene, 0.22-1.12 C₆ hydrocarbons was achieved by fractionating and isomerizing the cis-I present. Ethyl ether is first removed from the piperylene fraction by washing repeatedly with water, then cyclopentadiene is removed by treatment with a 27% solution of maleic acid at a 1:1 ratio of I to maleic acid for 30 min at 30-40°. The purified fraction is dried for 24 hr over active Al₂O₃ and fractionated on a column of 20 theoretical plates with a reflux ratio of 40-45; the fraction with b. p. 41-43° is removed. After a second fractional distillation of

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ACC NR: AR6024953

this fraction on a column with 66 theoretical plates and a reflux ratio of 70-80, a fraction with b. p. 41.5-42.3 containing 97-99% trans-I is removed in 60-64% yield. Cis-I, whose content in the bottoms after the first and second rectification amounts to ~80%, is isomerized to trans-I in the presence of crystalline iodine (36.8 g of iodine per 500 g of bottoms), which is added in portions for 20-30 min. The mixture is kept for 24 hr at 20°C and distilled on a fractionating column of 60 theoretical plates and a reflux ratio of 60-70; the fraction with b. p. 41.5-42.3°, containing 99-99.9% trans-I, 0.4-0.08% amylenes, and traces of cyclopentadiene, is removed. The trans-I obtained is used as a copolymer for the synthesis of 1,4-cis-polybutadiene-perylene rubber. A. Grigor'yev. [Translation of abstract]

SUB CODE: 07

Card

2/2 *bdh*

LITVINENKO, M.S.; KHVAT, M.B.; BRODOVICH, A.I.; PERTSEVA, N.Ya.;
PERMAN, N.M.; Prinimali uchastiye: LOPATINSKIY, D.K.; AGARKOVA, V.I.;
SAMOKHVALOVA, N.N.; KRONIK, I.L.

Obtaining sodium thiocyanate for the manufacture of nitron fibers.
Koks i khim. no.6:34-40 '63. (MIRA 16:9)

1. Ukrainskiy uglekhimicheskiy institut (for Livinenko, Khvat,
Brodovich, Kronik, Pertseva). 2. Khar'kovskiy koksokhimicheskiy
zavod (for Perman).
(Textile fibers, Synthetic) (Sodium thiocyanate)

BOYAROV, A.T.; Primala uchastivo AGARMIRYAN, T.T.

Using ultrasound to accelerate the extraction of oil from oil saturated rock samples. Nefteprom. delo no.12:29-32 '63.

(MIRA 17:4)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti (for Boyarov). 2. Sozdaniya laboratorii ul'trazvuka Kuybyshevskogo aviatsionnogo instituta (for Agarmirya.

S/776/62/000/025/002/025

AUTHORS: Gromov, N. P., Zusman, Sh. I., Agaronik, V. Ya., Barkaya, D. S.

TITLE: On the lengthwise uniformity of the resistance of an extremely thin wire.

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov. no. 25. Moscow, 1962. Pretsizionnyye splayy. pp. 104-116.

TEXT: This paper reports the results of an experimental investigation, performed at the TsNIIChM (Central Scientific Research Institute of Ferrous Metallurgy) intended to develop a methodology and construct equipment for the continuous inspection of the uniformity of the electrical resistance (ER) of extremely thin wires in the source of their motion. The problem is of the greatest importance for a variety of calculating and telemechanical devices in which the uniformity of the electrical resistance of potentiometer wire is a decisive element in determining the accuracy of measurements and telemetered information. The equipment newly constructed was used for the determination of the uniformity of the resistance of Ni-Cr wire 20-50 μ in diam. The experimental equipment comprises an idling feed spool and motor-driven take-up spool, between which the wire is guided by textolite guide rollers while in contact with a pair of spaced-apart contact rollers made of stainless steel

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On the lengthwise uniformity of the resistance S/776/62/000/025/007/025

with a Cr-plated surface. Diam of the contact rollers is 50 mm, that of the guide rollers 20 mm. A braking load is applied to the feed spool. Measurements can be made at contact distances of 1 m or 0.5 m. The linear velocity of the wire is 23-25 m/min. The resistance measurements were performed by means of a DC bridge of the type MBY (MVU) 49, a high-speed potentiometer of the type БП102 (BP102), and various auxiliary equipments. The theory of the dependence of the ER of the wire on the mechanical stresses prevailing therein is briefly outlined for given values of the Poisson coefficient and the Young modulus of elasticity. The results of an experimental illustrative test are shown graphically, illustrating the linear variation of the dependence up to the elastic limit for a 0.04-mm diam Ni-Cr wire. The conditions necessary to avoid any plastic bending stresses that may arise in contact with the guide and contact rollers are specified. Problems arising from the characteristics of the measuring equipment, the contact equipment, and the deformations of the wire while passing through the contact equipment, and the verification of the functioning of the entire equipment are discussed. It is found that the method and the equipment adopted here are suitable for the continuous measurement of the uniformity of the ER of micron wire along its length in the course of its motion. It is established that the degree of uniformity of the ER becomes less favorable with decreasing thickness of the wire. It is shown that cold-hardened wire exhibits a significantly better uniformity of the ER along its length as compared with

Card 2/3

On the lengthwise uniformity of the resistance S/776/62/000/025/007/025
wire that has been subjected to heat treatment. The source of the impairment of the
uniformity in the latter is attributed primarily to the quenching of the wire in the
furnace system. It is shown that significant impairments in the uniformity of the
ER of a wire along its length can be produced by careless unwinding and rewinding.

Card 3/3

ACC NR: AP6002903

SOURCE CODE: UR/0286/65/000/024/0071/0072

INVENTOR: Semenova, N. V.; Pankratova, L. S.; Agaronik, V. Ya.;
Platova, S. N.; Gorshkov, A. I.

ORG: none

TITLE: Nickel-base alloy. ^{44.55} Class 40, No. 177073. [announced by the
Central Scientific Research Institute of Ferrous Metallurgy im.
I. P. Bardina (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii)] 44
13

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 71-72

TOPIC TAGS: alloy, nickel base alloy, molybdenum containing alloy,
chromium containing alloy, aluminum containing alloy, copper containing
alloy

ABSTRACT: This Author Certificate introduces a Ni-base alloy containing
20-28% Ni. In order to improve the physical and mechanical proper-
ties, 1-10% Cr, 0.5-5% Al, and 0.5-2% Cu are added. [WW]

SUB CODE: 11/ ¹⁶ ²⁷ SUBM DATE: 26May64/ ²⁷ ATD PRESS: 4187

Card 1/1 *CD*

UDC: 669.245.018.5

AGARONOV, A.Kh.

Means of reducing the consumption of reagents in the production of a spherical aluminosilicate catalyst. Khim.i tekhn. i masel 6 no.6:11-15 Je '61. (MIRA 14:7)

1. Novogroznenskiy neftezavod.
(Aluminosilicates)

AGARONOV, A.M.; DUBOVYY, Ye.D.

Roentgenotherapy of cancer of the ovaries. Sovet. Med. 16 no. 10:
17-21 Oct 1952. (CIML 23:3)

1. Professors. 2. Of the Obstetric-Gynecological Clinic (Director
-- Prof. A. M. Agaronov) and of the Department of Roentgenology
(Head -- Prof. Ye. D. Dubovyy), Odessa Medical Institute imeni N. I.
Pirogov. (Director -- Prof. I. Ya. Deyneka).

AGARONOV, A.M., professor

Injuries of the urinary tract in extended extirpation of the uterus
in cancer, and their therapy. Akush. i gin. no.6:62-65 N-D 154.
(MIRA 8:2)

1. Iz kafedry akusherstva i ginekologii (zav.-prof. A.M.Agaronov)
Odeskogo med. instituta imeni N.I.Pirogova.

(UTERUS, neoplasms

surg., hysterectomy causing inj. of urinary tract)

(URINARY TRACT, wounds and injuries

caused by hysterectomy in cancer of uterus, ther.)

(WOUNDS AND INJURIES

urinary tract, caused by hysterectomy in cancer of
uterus, ther.)

AGARONOV, A.M., professor (Yerevan, ul. Bagramyana, d.2, kv.22)

Carrying out district preventive examinations. Vop.onk. 1 no.3;
19-25 '55. (MIRA 10:1)

1. Iz akushersko-ginekologicheskoy kliniki Odesskogo meditsinskogo
instituta im. N.I.Pirogova.
(GENITALIA FEMALE, neoplasms,
prev. exam., regional organix. in Russia)

AGARONOV, A.M.

4467. AGARONOFF A. M. and KHARAL-SHARAL L. S. Med. Inst., Odessa
Clinical importance of lipolytic activity in malignant tumours of the female genitals (Russian text) Akuš. i Ginek. 1955, 6: 41-44 Tables 1

Among the female genital tumours the lipolytic activity of the tissues and serum lipase is lowest in carcinoma; in fibromyomas the values are slightly under the normal level. Low values were also found in ovarian tumours.

Szirmai - Budapest

Iz Kafedry Biokhimi (Lav. prof. D. A. Lennickalov) i
Abstrakoginekologičeskoy N. Lenki (Dir. prof. A. M. Agaronov),
Odesskogo med. Inst. im. N. I. Pirogova.

AGARONOV, A.M.

Some results of the 17th International Congress of Surgeons.
Akush. i gin. 35 no.1:121-122 Ja-F '59. (MIRA 12:2)
(MEXICO(CITY)--SURGERY--CONGRESSES)

AGARONOV, A.M., prof., zasluzhennyy deyatel' nauki Bashkirskey ASSR

Therapy of ovarian cysts in pregnancy. Akush.i gin. 35 no.6:
91-95 N-D '59. (MIRA 13:4)

1. Iz kafedry akusherstva i ginekologii (zaveduyushchiy - prof.
A.M. Agaronov) lechebnogo fakul'teta Yerevanskogo meditsinskogo
instituta (direktor - prof. L.B. Arutyunyan).
(PREGNANCY compl.)
(OVARYneopl.)
(CYSTS in pregn.)

AGARONOV, A.M., prof.; BEKZADYAN, A., red.; GALSTYAN, V., tekhn.red.

[Prescriptions in gynecology and obstetrics] Retsepty v ginekologii i akusherstve. Izd.3., ispr. i dop. Erevan, Gos.nauchno-tekhn.izd-vo Armianskoi SSR, 1960. 78 p.

(MIRA 14:3)

(GINECOLOGY)

(MEDICINE--FORMULAE, RECEIPTS, PRESCRIPTIONS)

AGARONOV, A.M., prof.

Present-day methods of performing a cesarian section. Trudy Erev.
med.inst. no.11:305-309 '60. (MIRA 15:11)

1. Iz Akushersko-ginekologicheskoy kliniki (dir. kliniki - prof.
A.M.Agaronov) Yerevanskogo meditsinskogo instituta.
(CESAREAN SECTION)

AGARCHOV, Ashot Moiseyevich, prof.

[Surgical obstetrics; a brief manual for physicians and students] Operativnoe akusherstvo; kratkoe rukovodstvo dlia vrachei i studentov. Izd.3. Erevan, Armianskoe gos. izd-vo, 1963. 149 p. (MIRA 17:10)

ACC NR: AR6035050

SOURCE CODE: UR/0058/66/000/008/E070/E070

AUTHOR: Mirzoyev, B. R.; Agaronov, B. S.; Lebedeva, N. I.; Pototskaya, N. P.

TITLE: Derivation and investigation of some electrical properties of the new semiconducting compound In_4S_5

SOURCE: Ref. zh. Fizika, Abs. 8E535

REF SOURCE: Uch. zap. Azerb. un-t, Ser. fiz.-matem. n., no. 4, 1965, 57-60

TOPIC TAGS: electric property, ~~temperature dependence~~, indium sulfide, semiconductor, ~~semiconducting material~~, indium compound, sulfide, electric conduction, thermoelectromotive force, photoconductivity, forbidden band

ABSTRACT: The In_4S_5 phase is obtained by alloying In and S, taken in a stoichiometric ratio. Investigations of the relationship between temperature and electrical conductivity (σ), thermoelectromotive force, and photoconductivity indicated that In_4S_5 is a p-type semiconductor with a forbidden-band width of 0.8 eV, with $\sigma = (2 \text{ to } 5) \times 10^{-5} \text{ ohm}^{-1}\text{cm}^{-1}$, and with a maximum photosensitivity lying within a 1.2-1.3- μ range. [Translation of abstract] [NT]

SUB CODE: 20/

Card 1/1

LYAMBAKH, R.V.; ZAREZANKOV, G.Kh.; INDENBAUM, A.G.; AGARONOV, D .A.

Automatic measurement of strip elongation in temper mill rolling.
Stal' 24 no.12s1104-1106 D '64. (MIRA 18:2)

1. Tsentral'naya laboratoriya avtomatiki.

1. AHARONOVA, D. A.
2. USSR (600)
4. Mycosis
7. Effect of mycosis, produced in laboratory animals by the fungus *Penicillium crustosum*, upon the course of experimental staphylococcal infection. *Mikrobiol. zhur.* 14, No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

AGARONOVA, D.A.

Effect of small concentrations of penicillin on staphylococci. Mikrobiol.
shur. 14 no.3:35-41 '52. (MLBA 6:11)

1. Z Odes'kogo medichnogo institutu. (Penicillin) (Staphylococcus)

AGARONOVA, D.A.

Sensitizing effect of penicillin on Staphylococcus aureus. Mikrobiol.
zh., Kiev 15 no.1:43-51 1953. (GIML 25:5)

1. Of the Department of Microbiology of Odessa Medical Institute.

AGARONOVA, D.A.

Sensitizing effect of penicillin on Staphylococcus aureus in vivo studies. Mikrobiol. zhur. 17 no.3:26-30 '55 (MLRA 10:5)

1. Z kafedri mikrobiologii Odes'kogo derzhavnogo medichnogo institutu im. M.I. Pirogova.

(PENICILLIN, effects,
on exper. Micrococcus aureus infect., sensitizing
response) (Uk)

AGARONOVA, D.A.

Effectiveness of penicillin therapy for experimental infection produced in rabbits by a culture of Staphylococcus aureus and by its so-called sensitized strain. Mikrobiol. zhur. 17 no.4:59-63 '55 (MLRA 10:5)

1. Z Odes'kogo medichnogo institutu im. Pirogova.

(MICROCOCCAL INFECTIONS, experimental, eff. of penicillin on infect. prod. by normal & sensitized M. aureus strains) (Uk)

(PENICILLIN, effects, on exper. Micrococcus aureus infect. prod. by normal & sensitized strains) (Uk)

AGARONOVA, D.A., dotsent

Experimental data on the pathogenesis of salmonellosis; report
No. 2. Trudy Erev.med.inst. no.11:163-167 '60. (MIRA 15:11)

1. Iz kafedry mikrobiologii (zav.kafedroy prof. V.G.Mikaelyan)
Yerevanskogo meditsinskogo instituta.
(SALMONELLA INFECTIONS)

ANNONOV, . . K. --

"Observations on the Formation of Antibiotics in an Animal Organism
and on the 'Sensitizing' Action of Penicillin on Staphylococcus aureus."
Sov. Med Sci, Gerasov State Medical Inst, Odesa, 1953. (Radiobiol, No 3, Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (10)

SO: Sov. No. 481, 5 May 55

KOCHARYAN, N.M.; PACHADZHIAN, Kh.B.; NALBANDYAN, N.A.; AGARONYAN, A.A.

Physical properties of polymethylmethacrylate. Dokl. AN Arm.
SSR 40 no.3:145-150 '65. (MIRA 18:12)

1. Tsentral'naya nauchno-issledovatel'skaya fiziko-tekhnicheskaya
laboratoriya AN ArmSSR. 2. Chlen-korrespondent AN ArmSSR (for
Kocharyan). Submitted July 12, 1964.

AGARONYAN, Dzh.A.

ARUTYUNOV, A.A., professor; GYULKHASYAN, A.A.; SHUKURYAN, K.G., kandidat meditsinskikh nauk; AGARONYAN, Dzh.A., kandidat meditsinskikh nauk; BEGLARYAN, A.G., dotsent

[Some experimental data on the pathogenesis of tonsillitis. Vest. oto-rin. 18 no.5:17-22 S-0 '56. (MLRA 9:11)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof. A.A.Arutyunov), iz kafedry mikrobiologii (zav. - dotsent V.T.Gabriyelyan) Brevanskogo meditsinskogo instituta.

(TONSILLITIS, exper.

pathogen, develop. in dogs & rabbits)

~~L 54682-65~~

ACCESSION NR: AP5010062

UR/0143/65/000/003/0007/0013
621.318.435.001.21

AUTHOR: Agaronyan, G. N.

TITLE: Transients in the circuit of a steel-core coil

3
B

SOURCE: IVUZ. Energetika, no. 3, 1965, 7-13

TOPIC TAGS: inductance coil, steel core coil, transients

ABSTRACT: A round-cross-section air-gap steel toroid with a uniformly wound coil is investigated; the coil is energized from zero magnetism in the core; the magnetizing force is insufficient to saturate the core; the permeability is constant

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L 54682-65

ACCESSION NR: AP5010062

oscillograms show the current build-up in a demagnetized core and in a core with remanence; in the first case, the process takes a much longer time due to the eddy-current effect. Formulas are derived which...

~~eddy-current effect. formulas are derived which describe the transient process.~~
Orig. art. has: 5 figures and 35 formulas.

ASSOCIATION: Leningradskiy politekhnicheskii institut im. M. I. Kalinina
(Leningrad Polytechnic Institute)

SUBMITTED: 25 May 64

ENCL: 00

SUB CODE: EE

NO REF SOV: 005

OTHER: 002

gws
Card 2/2

AGARONYAN, Grayr Nerayrovich, aspirant

Experimental study of a transient process in a circuit containing
a coil with a solid ferromagnetic core. Izv.vys.ucheb.zav.;
elektromekhanika 8 no.6:628-634 '65. (MIRA 18:8)

1. Kafedra teoreticheskikh osnov elektrotehniki Leningradakogo
politehnicheskogo instituta.

PHASE I BOOK EXPLOITATION 1049

Kabardino-Balkar A.S.S.R. Statisticheskoye upravleniye

Narodnoye khozyaystvo Kabardino-Balkarskoy ASSR; statisticheskiy sbornik.
(National Economy of the Kabardino-Balkar A.S.S.R.; Collection of
Statistics) Nalchik, Kabardino-Balkarskoye knizhnoye izd-vo, 1957. 112 p.
1,000 copies printed.

Additional Sponsoring Agency: U.S.S.R. Tsentral'noye statisticheskoye
upravleniye

Compilers: Leshchenko, Ye. V., Zakharov, G. V., Akimova, A. G., Mol'kov, I. P.,
Zhiveynova, L. F., Sukhova, N.N., and Agaronyan, P.K.; Chief Ed.: Zimovnov, L. I.,
Chief, Kabardino-Balkar SSR. Statistical Administration; Ed.: Sukhova, N.N.;
Tech. Ed.: Tkhakakhov, B.Zh.

PURPOSE: This book is intended for economists and economics statisticians.

COVERAGE: This is a statistical compilation containing the conventional statistical data on the development of the national economy within the present-day limits of this Republic. Recent statistical data are contrasted with those for 1940, and in some cases also with those for 1923 and 1913.

Agaronyants, R.A.

COMPONENTS

"Grapho-Analytic Method of Calculation of Transients in DC Electromagnetic Mechanisms", by R.A. Agaronyants, Elektrosvyaz, No 1, January 1958, pp 34-42.

A rigorous grapho-analytical method is given for solving the dynamic equations involved in transients of moving-armature dc electromagnetic mechanisms. A solution is obtained by numerical integration. As an example, the calculations are carried out for a telephone relay.

Card 1/1

8(5), 12(5)

AUTHOR:

Agaronyants, Mibem Aramovich, Instructor

SOV/161-58-4-22/28

TITLE:

Dynamic Traction Characteristics of Electro-magnetic Direct-current Mechanisms (Dinamicheskiye tyagovyye kharakteristiki elektromagnitnykh mekhanizmov postoyanogo toka)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika, 1958, Nr 4, pp 175 - 187 (USSR)

ABSTRACT:

The dynamic traction-characteristic is the dependence of the tractive effort, developed by the armature during its movement, on the armature slide. So far no analytical methods were known for computing the dynamic traction characteristics. Such a method is shown here. The equations (1), (2) and (3) for an armature with linear motion, and (3') for a rotating armature respectively, are given. There are three non-linear differential equations which were considered so far unsolvable. The solution is very complicated and extensive. Only the final results are given here. The equation (12) for the dynamic traction characteristic of a rotating armature and the equation (13) for an armature with linear motion are given. The equations (17) and (18) respectively, correspond to these equations in relative units. The dynamic traction characteristics can be built up in relative units with

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Dynamic Traction Characteristics of Electro-magnetic
Direct-current Mechanisms

SOV/161-58-4-22/28

the help of the equations (4) for $i=f(t)$, (5) for $\dot{i}=f(t)$ and (6) for $\varphi=f(t)$, as well as (17) and (18). The approximate equation (23) for the dynamic traction characteristic of an armature with linear motion is derived and compared with the static electro-magnetic (traction) characteristic. It is shown that both differ strongly. Finally the equation (28) is derived. This is the optimum to be adhered to when designing electro-magnetic mechanisms. In 1954 and 1955, the experimental verification of the equation (28) was carried out for a number of electro-magnetic mechanisms in the Laboratory for the Elements of Automation and Telemechanics of the Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the Academy of Sciences of the USSR). The experiments proved the validity of the equation. The relay RM Nr 3012 is shown in figure 6 and the oscillograms for the current-increase in the exciter-winding of the relay are shown in figures 7-15. The publication of this article was recommended by the Kafedra telefonii Moskovskogo elektrotekhnicheskogo instituta svyazi (Chair for Telephony at the Moscow Electrical Engineering Institute for Communications). There are 15 figures and 4 Soviet references.

Card 2/3

Dynamic Traction Characteristics of Electro-magnetic
Direct-current Mechanisms

SOV/161-58-4-22/28

ASSOCIATION: Tekhnikum legkoy promyshlennosti Mosgorispolkoma (Tekhnikum
of the Light Industry of the Executive Committee of the
Moscow City Soviet of Workers' Deputies)

SUBMITTED: September 9, 1958

Card 3/3

SOV/110-58-7-11/21

AUTHOR: Agaronyants, R.A., Engineer.

TITLE: The static tractive characteristics of d.c. electro-magnetic mechanisms.
(Statische tyagovyye kharakteristiki elektromagnitnykh mekhanizmov postoyannogo toka)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958. Nr 7, pp 37-40
(USSR)

ABSTRACT: The formulae commonly used to determine the static tractive characteristics of direct-current electro-magnetic mechanisms are given. Ridiculous conclusions are derived by strict mathematical reasoning from these formulae and, therefore, the formulae themselves are incorrect. A more accurate expression for the tractive force of an electro-magnetic device is then derived. The recommended formulae are numbers 16 and 29. The laboratory of Elements of Automatics and Telemechanics of the Institute of Automatics and Telemechanics of the Academy of Science of the USSR checked these formulae by tests on a step-by-step motor manufactured by Siemens. An outline drawing of the armature and pole piece of the

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The static tractive characteristics of d.c.
electro-magnetic mechanisms.

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motor is given in Fig 2. The solid and dotted outlines of the armature indicate respectively its position with and without excitation applied. The time-constant of the electric and magnetic circuits as a function of current is plotted in Fig 3. It is concluded that with certain limitations the new equations give good agreement with practice. Static tractive characteristics of the step-by-step motor for various points on the field winding are given in Fig 5. It will be noticed how much the magnetic reluctance of the core influences these characteristics. There are 5 figures, and 2 references, both of which are Soviet.

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SUBMITTED: January 29, 1957.

1. Electromagnetic equipment--Theory
2. Mathematics--Applications

AGARONYANTS, R.A.

AUTHOR: Agaronyants, R.A., Engineer

110-3-10/22

TITLE: Transient Processes in Direct-current Electro-magnetic Mechanisms under Dynamic Conditions (Perekhodnyye protsessy elektromagnitnykh mekhanizmov postoyannogo toka v dinamicheskom rezhime)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Vol.29, No.3, pp. 44 - 52 (USSR)

ABSTRACT: Complex processes occur when a direct voltage is applied to electro-magnetic mechanisms. An electro-magnetic mechanism with a moving and a hinged armature are shown schematically in Figs. 1a and 1b, respectively. Current growth in the field winding of an electro-magnetic mechanism is shown in Fig.2.

The first case considered is that of an electro-magnetic mechanism with rotating armature, but what is said is also applicable to mechanisms with moving armatures. During the initial time, whilst the armature remains at rest, the torque of the various forces acting on the armature is not sufficient to move it. When the current exceeds a certain value, the armature begins to move, and the transient processes become more complicated. Then the armature meets the stop, and the laws governing change of current are again altered. Whilst the

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Transient Processes in Direct-current Electro-magnetic Mechanisms
under Dynamic Conditions

armature is moving, the magnetic reluctance changes greatly. When the armature is attracted, the inductance and time-constant are greater than when it is not. Therefore, after the armature has touched the stop, the current rises more slowly than during the initial period before it starts to move. The dynamic processes in the mechanism are characterised by the three non-linear differential equations of voltage, magnetomotive force and motion. They are valid provided there are no eddy-currents, the magnetic system is unsaturated, there is no remanent magnetisation in the steel, and resistance forces are proportional to the first power of the speed. It is difficult enough to solve one non-linear differential equation, but here is a system of three such equations. Hitherto, the task has been considered insoluble, but the author has succeeded in finding a solution. The various functions and the expression for the magnetic reluctance of the system are resolved into McLaren series. The principles of the resolution are explained and the transition from series to normal functions is given in an appendix. The relationships that are derived were verified experimentally in the laboratory of elements of automatics and telemechanics

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of the IAT of the Ac.Sc. USSR by taking oscillograms of operating-coil currents during the process of operation. The procedure is described. Unless special care is taken, the errors can be additive and excessive. With the method used, the only error was that associated with the determination of the time-constant of the electro-magnetic mechanism with stationary armature. Sketches of the magnetic circuits of a relay type PM, of a valve-type electro-magnetic relay, and of a step-by-step motor are given in Figs. 3, 4 and 5, respectively. Data about the magnetic materials used and the windings are given in Tables 1 and 3, respectively. The latter was used to construct a curve relating the mean value of the damping force and the mean value of the "starting current reserve factor". The graphs are plotted in Figs. 6 and 7. The conditions under which different methods of calculation are applicable are considered.

The operating current in slowly moving electro-magnetic mechanisms is often thought to be comparable to the current at which motion starts, but this view is erroneous. Therefore, the present methods of designing and testing electro-magnetic

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mechanisms from the static characteristics are unsatisfactory. The only sound method is to design from the dynamic characteristics. These characteristics can be constructed by equations which are given. A worked example of calculations on a valve is compared with test results. There are 9 figures, 3 tables and 4 Russian references.

SUBMITTED: April 17, 1947.

AVAILABLE: Library of Congress

Card 4/4

1. Electromagnetic equipment 2. Armatures 3. Mathematical analysis

AGARONYANTS, R.A.

Design of hinged-armature contours for d.c. electromagnetic mechanisms.
Nauch.dokl.vys.shkoly; elektromekh. i avtom. no.1:60-71 '59.

(MIRA 12:11)

1. Rekomendovana kafedroy telefonii Moskovskogo elektrotekhnicheskogo
instituta svyazi.

(Electric machinery)

AGARONYANTS, R. A., Cand Tech Sci -- "^{DC}~~Towards~~ the dynamics
of electromagnetic mechanisms ~~of the direct current.~~" Mos,
1961. (Min of Higher and Sec Spec Ed RSFSR. Mos Order of
Lenin and Order of Labor Red Banner Higher Tech School im
N. E. Bauman) (KL, 8-61, 240)

- 192 -
~~- 191 -~~

AKHSHARUMOV, R.T., red.; AGARORTSYAN, Z.A., red.; POTEYAN, V.A., red.

[Russian--Armenian polytechnical dictionary] Russko-armianskii politekhnicheskii slovar'. Sost.kollektiv spetsialistov. Obraboteli i redaktirovali R.T.Akhsharumov, Z.A.Atsagortsian, V.A.Poteian. Erevan, 1957. 436 p. (MIRA 11:2)

1. Akademiya nauk Armyanskoy SSR, Erivan.
(Russian language--Dictionaries--Armenian)
(Technology--Dictionaries)

AUTHORS: Agarov, A. I. and Polotnikov, V. V. 94-13-7-9/25

TITLE: Reconnection of a motor generator set to supply two electrolysis circuits (Pereklyucheniye dvigatel'-generatora na pitaniye dvukh tsepey elektroliza)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol 13, Nr 7, pp 17-18 (USSR)

ABSTRACT: In an electrolytic copper factory some of the motor generators supplying electrolytic baths were lightly loaded; it was found possible to shut one set down and to operate two sets of baths on one generator. This effected considerable power economies. This suggestion was awarded a fifth premium in an All-Union Power Economy Competition. There is one figure.

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1. Electrolysis - Circuits 2. Motor generators - Operation

HIGAROV, V.A.

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S/021/60/000/011/004/009
D204/D302

AUTHORS: Ventsel', N.O., and Ahar'ov, V.A.

TITLE: Applying the method of initial functions to determining the frequency of flexural vibrations in rectangular plates

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 11, 1960, 1485 - 1491

TEXT: The free oscillations of a rectangular plate may be written

$$\frac{\partial^4 w}{\partial x^4} + 2 \frac{\partial^4 w}{\partial x^2 \partial y^2} + \frac{\partial^4 w}{\partial y^4} - \rho w = \frac{p}{D},$$

$$\theta_y = \frac{\partial w}{\partial x}, \quad \theta_x = \frac{\partial w}{\partial y}, \quad (1)$$

$$M_x = -D \left(\frac{\partial^2 w}{\partial y^2} + \nu \frac{\partial^2 w}{\partial x^2} \right).$$

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Applying the method of initial ...

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$$\begin{aligned}
 M_y &= -D \left(\frac{\partial^2 w}{\partial x^2} + \mu \frac{\partial^2 w}{\partial y^2} \right), \\
 V_x &= -D \left[\frac{\partial^3 w}{\partial x^3} + (2 - \mu) \frac{\partial^3 w}{\partial x \partial y^2} \right], \\
 V_y &= -D \left[\frac{\partial^3 w}{\partial y^3} + (2 - \mu) \frac{\partial^3 w}{\partial x^2 \partial y} \right], \\
 R &= 2M_{xy} = -2(1 - \mu) D \frac{\partial^2 w}{\partial x \partial y},
 \end{aligned} \tag{1}$$

where $D = \frac{D_0^3}{12(1 - \mu^2)}$ is the cylindrical rigidity, $\nu = \frac{\gamma \rho \omega^2}{gD}$ (2)

is the oscillation parameter, and ω is the frequency. [Abstractor's note: Symbols not explained, see P.F. Papkovich (Ref.1: Stroitel'naya mekhanika korablya (Structural Mechanics of a Ship) ch. II, 1941)]. The system is solved by the method of initial functions.

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