the controlled parameter exceeds or falls below a preset limit. The instrument can operate with any type of pick-ups in which the pneumatic output signal varies from 0.2 to 1 kg/cm^2. The signaller operates on the principle of displacement compensation, the control point being set-up by differential levers. The output signal for pneumatic signal is the compressed air at 1.4 kg/cm^2; for electric signal a voltage not exceeding 20-30V. Resistive load current 0.2 10A, inductive load current 0.2-5A. The absolute error and backlash not exceeding ±1%. 4) Pulse time relay type PVR-5297 (IRV 5297) for transmitting a pneumatic signal at 1.4 kg cm^2 pressure of a given duration at a given repetition frequency, may be used in sampled data control systems. 5) Storage relay type PVR-5223 (RL-5223) used as a storage element for input signal with the command signal applied in the form of a 1.4 kg/cm^2 pressure. 6) Pressure relay PVR-5271 (RD 5271) for converting an input air pressure into a standard air pressure. The sensitivity is better than 0.001 kg/cm^2 (0.1% of max. output pressure). Absolute error less than ± 1% of the input air pressure range; additional error due to a change of ± 10% of supply pressure not exceeding 0.2%. There are 6 figures.

Card 2/2

L 10107-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD
ACCESSION NR: AP3001951 S/0226/63/000/003/0018/0024

AUTHOR: Kudryavtsev, N. T.; Mikhaylov, N. I.; Novikov, A. A.

TITLE: Production of very fine copper powder

SOURCE: Poroshkovaya metallurgiya, no. 3, 1963, 18-24

TOPIC TAGS: very fine copper powder, cupric sulfate reduction, reduction with titanous sulfate, batch-type process, continuous process, solution acidity, current density, lead anodes, titanic sulfate reduction

ABSTRACT: Very fine, pure copper powder with particles of spheroidal shape were produced by the reaction between titanous sulfate ($Ti_2(SO_4)_3$) and cupric sulfate ($CuSO_4$) in an aqueous solution containing 200-250 g/dm sup 3 of sulfuric acid. With cupric sulfate added in excess of the stoichiometric amount, yields of 99.5--99.9% of the theoretical were obtained. Particle size varied depending on the concentration of titanous sulfate; at a concentration of about 1.0 g-equiv/dm sup 3, particles were 1- to 10-micron in diameter. At concentrations of less than 0.1 g-equiv/dm sup 3, particles were nearly colloidal

Card 1/2

L 10107-63
ACCESSION NR: AP3001951

and formed a stable suspension with water. The higher the acidity of the titanous sulfate solution, the purer the copper powder obtained; in a 6--10% solution 200--250 g/dm sup 3 of sulfuric acid produced the optimum acidity. Titanic sulfate produced by the reaction was reduced to titanous sulfate by electrolysis with direct current; the best results were obtained with a cathode current density of 1--3 amp/dm sup 2 and lead anodes. The reduction of cupric sulfate to copper powder and the reduction of titanic sulfate to titanous can be done in the same vessel by either a batch-type method -- dripping a saturated solution of cupric sulfate into a solution of titanous sulfate -- or a continuous method -- anodic dissolution of metallic copper in a solution of titanous sulfate. In both, the reduction of titanic sulfate on lead or copper cathodes occurs simultaneously with copper reduction of cupric sulfate. The batch-type method yields particularly high-purity powders. The advantages of the continuous method are that 1) copper waste products can be used as anodes, 2) there is no loss of titanium and copper salts, and 3) the process may be automated. Laboratory units for both processes have been built, and procedures for treating, drying, and controlling the quality of the powders produced are described. Orig. art. has: 1 table and 3 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology)

Card 2/2

ACCESSION NR: AR4018306 S/0137/64/000/001/G033/G034

SOURCE: RZh. Metallurgiya, Abs. 1G235

AUTHOR: Kudryavtsev, N. T.; Mikhaylov, N. I.; Novikov, A. A.

TITLE: Preparation of highly dispersed powders of iron and copper

CITED SOURCE: Tr. Kuyby*shevsk. aviats. in-t, vy*p. 16, 1963, 5-9

TOPIC TAGS: iron powder, copper powder, electrolytic reduction cell

TRANSLATION: A description is given of laboratory methods of preparing pure, finely dispersed Fe and Cu powders. Fe is obtained in a conical glass electrolytic reduction cell with anodes of low-carbon steel strip and a cathode of Ni or Ti. The electrolyte consists of $FeSO_4 \cdot 7H_2O$ (55-75 g/l) and K_2SO_4 with pH=3.0-3.5. Current density is 15-35 a/dm^2 and temperature is 18-22°. The Fe sponge formed at the cathode is loosened by the evolving H_2 and collects as a pulp in the bottom part of the cell. Acidity of the electrolyte is maintained by adding H_2SO_4. The recovered pulp is treated with 3-6% H_2SO_4 containing 1 g/l of Na arsenite inhibitor to remove the hydroxide. The Fe powder is then washed with water and acetone, and dried in air at room temperature. The purity of Fe powder is 97%, and its specific surface,

Card 1/2

ACCESSION NR: AR4018306

30 m^2/g. The Cu powder is obtained by the homogeneous reduction of $CuSO_4$ in acid medium by Ti sulfate in an electrolytic reduction cell containing a 5% solution of $Ti_2(SO_4)_3$ (200-250 g/l) acidified with H_2SO_4. The cell has Cu anodes, a soluble Cu cathode (source of Cu ions in solution), and an insoluble Pb cathode for regenerating Ti which is enclosed in a ceramic diaphragm with a 10% solution of H_2SO_4. The current density is 6 a/dm^2. The Cu powder forming in the bulk of the electrolyte deposits on the bottom of the bath is filtered, washed with water and dried.
V. Reshpor

SUB CODE: MM ENCL: 00

Card 2/2

OMEL'CHENKO, V.S., inzh.; NOVIKOV, A.A., inzh.

Reducing the consumption of arc furnace electrodes. (MIRA 18:12)
Lit. proizv. no.11:10-12 N '65.

L 2972-66 EWA(k)/FBD/EWT(1)/EEC(k)-2/T/EWP(k)/EWA(m)-2/EWA(h) SCTB/LJP(c) WG
ACCESSION NR: AP5021726 UR/0386/65/002/002/0058/0063

AUTHOR: Yeliseyev, P. G.; Novikov, A. A.; Fedorov, V. B. 44 44 44 57 55 13

TITLE: The effects of optical interaction of two diode lasers 25,44

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 2, 1965, 58-63

TOPIC TAGS: laser, diode laser, gallium arsenide, gallium arsenide laser, injection laser, semiconductor laser, optical interaction

ABSTRACT: The optical interaction of two diode lasers placed less than 5 μ apart was studied experimentally. The gallium arsenide p-n diodes obtained by cleaving a single crystal into two parts 425 and 1450 μ long, were placed in the same plane in liquid nitrogen and pumped by square-wave current pulses with an amplitude of 0.5—2.5 amp and a duration of 1.5 μsec from two oscillators. The emission spectra were observed by means of ISP-51 and DFS-8 spectrographs and were recorded by an FEU-22 photomultiplier. The emission spectra of the 425-μ (short) and 1450-μ (long) diodes were in the λ_{short} = 8420—8435 Å and λ_{long} = 8465—8478 Å regions, respectively, and consisted of modes spaced 1.7 Å and 0.8—0.9 Å apart, respectively. The optical interaction was evidenced when during the pulse coincidence the relative

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L 2972-66

ACCESSION NR: AP5021726

2

maxima of the λ_{short} and λ_{long} lines changed correspondingly; moreover, a decrease in the λ_{short} and an increase in the λ_{long} line intensities were observed from the short diode side, while an increase in the intensity of both lines was observed from the long diode side. Thus, the optical interaction effect, as observed from the short diode side, was the decrease in line intensity from the short diode side due to the introduction of an external emission into its active medium, and, from the long diode side, an increase in the intensities of both lines due to the time coincidence of pumping pulses. The optical interaction is further explained in terms of the effect of coupled modes on the population of the energy levels. Orig. art. has: 2 figures.

[YK]

ASSOCIATION: Institut tochnoy mekhaniki i vychislitel'noy tekhniki Akademii nauk SSSR (Institute of Pure Mechanics and Computer Technology, Academy of Sciences, SSSR)

SUBMITTED: 25May65 ENCL: 00 SUB CODE: EC, OP

NO REF SOV: 000 OTHER: 005 ATD PRESS: 4109

BVK

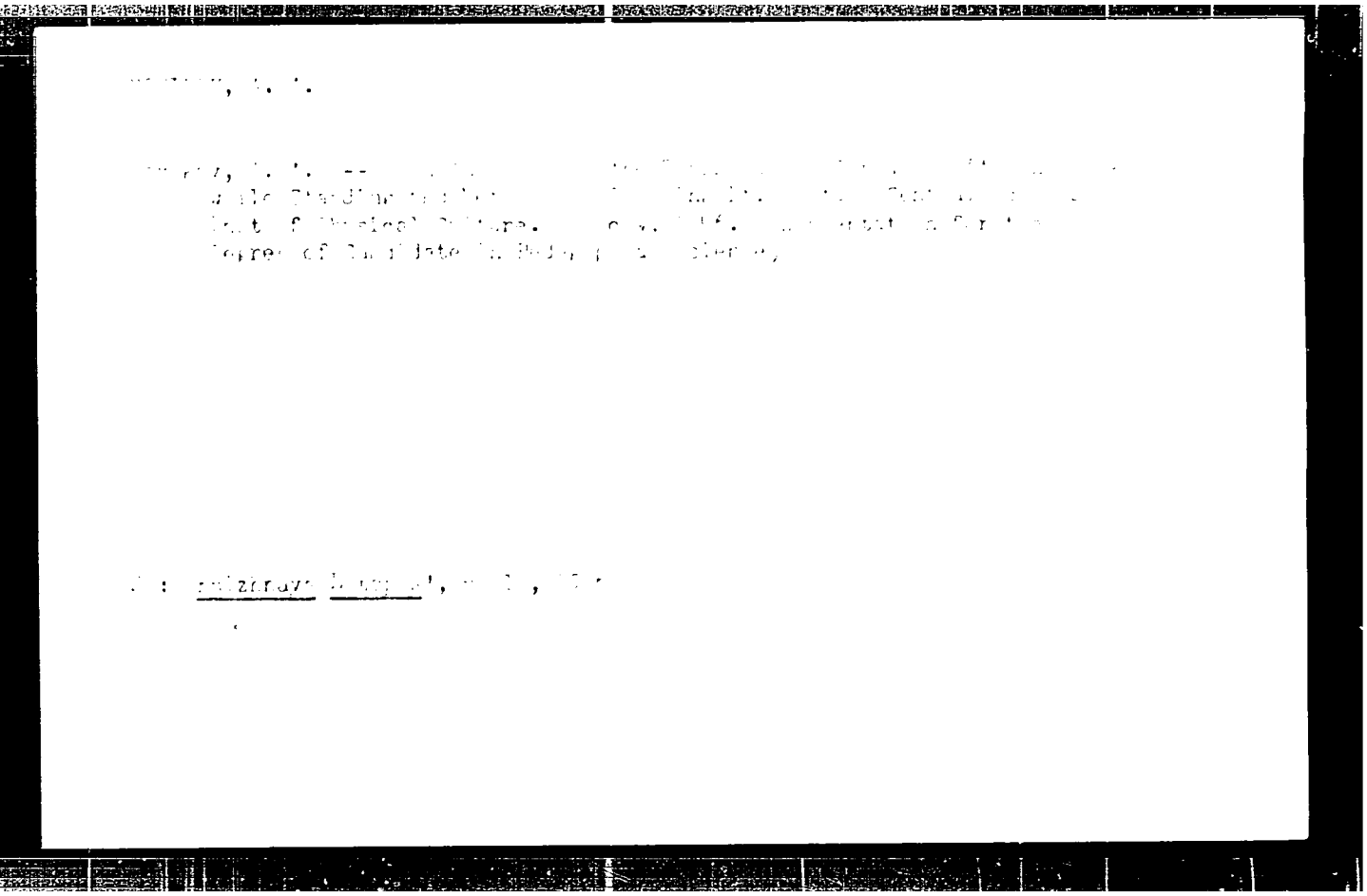
Card 2/2

NOVIKOV, Aleksandr Aleksandrovich, dvazhdy geroy Sovetskogo Soyuza; SHIROKOV, B.A., red.; GURDZHIYEVA, A.M., tekhn. red.

[Jet equipment in commercial aviation] Reaktivnaia tekhnika v transportnoi aviatsii. Leningrad, Ob-vo "Znanie" RSFSR, 1963. 64 p. (MIRA 17:3)

MAKSIMOV, Vitaliy Ivanovich; NOVIKOV, Aleksandr Alekseyevich; PROKOF'YEV, Oleg Pavlovich; TARSKIY, Yu.S., red.

[Special-purpose undersea fleet; means of mastering the ocean depths] Podvodnyi flot spetsial'nogo naznacheniia; sredstva osvoeniia morskikh glubin. Moskva, Voenizdat, 1965. 103 p. (MIRA 18:6)



NOVIKOV, A.A.

Using the S-492 dumping and piling machine. Mekh. stroi. 18 no. 3:16 Mr '61. (MIRA 14:5)
(Loading and unloading)

BELOKHONOV, I.V., kand.sel'skokhoz.nauk; LOBANOV, G.A., kand.sel'skokhoz. nauk; NOVIKOV, A.A., kand.sel'skokhoz.nauk; STEPANOV, S.N., kand.sel'skokhoz.nauk; CHIGRIN, V.N., kand.sel'skokhoz.nauk; OZEROV, V.N., red.; DEYEVA, V.M., tekhn.red.

[Fruit culture] Plodovodstvo. Moskva, Gos.izd-vo sel'khoz. lit-ry, 1960. 334 p. (MIRA 14:1)

1. Nauchno-issledovatel'skiy institut sadovodstva imeni I.V. Michurina (for Belokhonov, Lobanov, Novikov, Stepanov, Chigrin). (Fruit culture)

NOVIKOV, A.A., RUSSEV, V.V.

Recording electroencephalograms with an EKP-4M electrocardiograph.
Vrach.delo no.3:283 Mr'58 (MIRA 11:5)

1. Kafedra infektsionnykh bolezney (zav. - prof. L.K. Korovitskiy) i kafedra normal'noy fiziologii (zav. - prof. F.N. Serkov) Odesskogo meditsinskogo instituta.
(ELECTROENCEPHALOGRAPHY)
(ELECTROCARDIOGRAPHY)

KARNAUKHOV, Ivan Prokof'yevich, dots.; IVANKIN, Vasiliy Kirillovich, prof.; VELESOV, Konstantin Nikolayevich, dots.; BOLDAREV, Nikolay Vasil'yevich, dots.; LEBEDEV, Konstantin Georgiyevich, dots.; LANGE, K.F., kand. sel'khoz. nauk, dots., retsenzent; MERKULOV, M.P., kand. sel'khoz. nauk, dots., retsenzent; NOVIKOV, A.A., kand. sel'khoz. nauk, dots., retsenzent; OSUL'KO, I.I., st. prepod., retsenzent; SAFRONOVA, O.G., st. prepod., retsenzent; VERNOV, A.L., ed.

[Fundamentals of agriculture] Osnovy sel'skogo khozyaistva. 3. perer. izd. Moskva, Prosveshchenie, 1965. 624 p. (MIRA 18:9)

1. Kuybyshevskiy pedagogicheskiy institut (for Lange, Merkulov).
2. Orlovskiy pedagogicheskiy institut (for Novikov, Osul'ko, Safronova).

NOVIKOV, A.B.

Investigating the wear resistance of VK2 and TZOK4 alloys during machining of modified cast iron. Stan.i instr. 29 no.1:24-25 Ja '58. (MIRA 11:1)
(Alloys--Testing)

NOVIKOV, A.B.; SOLOV'YEV, N.A.; POTEMKIN, N.A.

Pneumatic mandrel for gripping thin-walled parts. Avt.prom. 28 no.1:43 Ja '62. (MIRA 15:2)

1. Yaroslavskiy motornyy zavod.
(Lathes)

NOVIKOV, A.B.

Extrusion instead of machining. Avt. prom. 29 no.11:41-42 N '63. (MIRA 16:12)

1. Yaroslavskiy motornyy zavod.

AID P - 3678

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 5/22

Author : Novikov, A. D., Guards Lt. Col., Pilot Class II

Title : Carefulness of the technical and flying personnel

Periodical : Vest. vozd. flota, 1, 18-22, Ja 1956

Abstract : This article belongs to the series "Notes of a commander of a unit without accidents." The author describes, in several simple examples, how to avoid accidents by training and good organization. Names are mentioned.

Institution : None

Submitted : No date

NOVIKOV, A.E.

Propaganda sel'skokhoziaistvennykh
znanii (Popularizing agricultural knowledge). Mo-
skva. Goskul'tprosvetizdat, 1953. 59 p. (B-chka
sel'skogo klubnogo rabotnika. no. 14)

SO: Monthly List of Russian Accessions, Vol. 7, No. 1, August 1954.

NOVIKOV, A.F., inzh.

Testing and checking of electropneumatic brakes. Elek. i tepl. tiaga 7 no.6:41-43 Je '63. (MIRA 16:9)

(Railroads—Brakes)

GORYUNOV, B.F., kandidat tekhnicheskikh nauk; GUDANETS, N.A., kandidat tekhnicheskikh nauk; ZLATOVERKHOVNIKOV, L.F., kandidat tekhnicheskikh nauk; KAGAN, Ya.Kh., kandidat tekhnicheskikh nauk; KRIVOV, A.K., inzhener; KUROCHKIN, S.N., inzhener; LYAKHNITSKIY, V.Ye., doktor tekhnicheskikh nauk, professor; NOVIKOV, A.F., kandidat tekhnicheskikh nauk; ROMASHOV, D.G., inzhener; SHTEMTSEL', V.K., kandidat tekhnicheskikh nauk; KUZ'MIN, T.P., redaktor; ZAYTSEV, N.N., redaktor; MELIDOVA, E.S., redaktor izdatel'stva; TIKHONOVA, Ye.A., tekhnicheskiy redaktor

[Port hydrotechnical installations; construction and disign] Portovye gidrotekhnicheskie sooruzheniia; konstruirovanie i raschet. Moskva, Izd-vo "Morskoi transport," 1956. 537 p. (MLRA 9:11)
(Harbors)

NOVIKOV, A.F., kand.tekhn.nauk; SHPARBERG, B.I.

Actual measurements of the elastic line of a metal groove. Trudy TSNIIMF 7 no. 32:41-47 '61. (MIRA 14 5)
(Elasticity--Measurement)

SHKOL'NIK, E.V.; PINSKIY, G.B.; NOVIKOV, A.F.

Experimental hydraulic generator at the Volga Hydroelectric Power Station "22d Congress of the CPSU). Biul.tekh.-ekon.inform.Gos.-nauch.-issl.inst.nauch.i tekh.inform. no.11:69-72 '62. (MIRA 15:11)
(Volga Hydroelectric Power Station (22d Congress of the CPSU))

SHKOL'NIK, E.V., inzh.; PINSKIY, G.B., inzh.; NOVIKOV, A.F., inz.

Experimental hydrogenerator of the Volga Hydroelectric Power Station (22d Congress of the CPSU). Vest. elektroprom 34 no.6:1-4 Je '63. (MIRA 16:7)

(Volga Hydroelectric Power Station (22d Congress of the CPSU)

NOVIKOV, A.F., inzh.

Testing of oil supply systems and automatic control of the glands of the TGV-200 generator. Energ. i elektrotekh. prom. no.4:49-51 O-D '64. (MIRA 18:3)

22880

S/089/61/010/005, 006/015
B102/B214

26.2240

AUTHORS: Doil'nitsyn, Ye. Ya., Novikov, A. G.

TITLE: Measurement of spectra and temperature of neutron gas in a graphite-moderated water-cooled reactor

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 517-519

TEXT: In the present "Letter to the Editor" experiments are described on

Measurement of spectra and temperature of...

efficiency of about 8 %; the selector background was 2-3 % of the effect. It was assumed that the neutron spectrum in the beam is identical with that in the reactor. The thermal neutron spectrum (for 0.05 % to 70 % reactor power) was Maxwellian for cold as well as hot graphite in the range of 0.1 ev to the lower limit of measurement. The neutron temperature was determined from the spectrum and according to the method of the boron filter. The results are shown in Fig. 2. The difference of the neutron and graphite temperatures can be described by the formula $T_n - T_{gr} = 0.8\ T_{gr}^{0.72}$. There are 2 figures and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: G. Leibfried. Nucl. Sci. Engng. 4, No. 4, 470 (1958).

SUBMITTED: January 17, 1961

Card 2/3

42558

S/089/62/013/005/011/012
B102/B104

AUTHORS: Doil'nitsyn, Ye. Ya., Novikov, A. G.

TITLE: Measurement of thermal neutron spectra in boric acid solutions

PERIODICAL: Atomnaya energiya, v. 13, no. 5, 1962, 491-493

TEXT: The thermal neutron spectra in water and aqueous solutions of boric acid were measured anew since the results obtained by other authors are inconsistent and disagree with theory (M. Pool, J. Nucl. Energy, 5, 323, 1957; R. Walton et al., MAGATE Symposium, Vienna 1960; H. Amster, Nucl. Sci. and Engng. 3, 394, 1957). The measurements were carried out in a cylindrical tank, 60 cm long and 50 cm in diameter. A neutron beam from a graphite reactor was passed through a Cd plate and a tube, and thence to a lead sphere placed in the middle of the tank. It served as a spherical neutron source with Fermi spectrum. The spectra were measured using a mechanical selector with a 256-channel time analyzer. With a rotor speed of 3000 rpm, the time resolution of the apparatus was 40μsec/m. Correction was made for the deviation of the detector sensitivity from the 1/v law, the transmission function of the rotor and the neutron absorption

Card 1/2

Measurement of thermal neutron ...

in the air. The measurements were made at two absorber concentrations per hydrogen atom: σ_c=1.5 b (1) and σ_c = 2.9b(2). The experimental curves agreed with the corresponding Maxwell distributions for a neutron temperature $T_n=(333\pm15)^\circ K$ for pure water; $T_n=(358\pm15)^\circ K$ for (1) and $T_n=(382\pm15)^\circ K$ for (2) with a water temperature of 320°K. The spectra measured coincide with those calculated by G. I. Marchuk et al. (Atomnaya energiya, 13, no. 6, 600, 1962). There are 2 figures.

SUBMITTED: June 9, 1962

Card 2/2

DOIL'NITSYN, Ye.Ya.; NOVIKOV, A.G.; STAKHANOV, I.P.; STEPANOV, A.S.

Temperature relaxation of a neutron gas. Atom. energ. 15 no.3: 255-258 S '63. (MIRA 16:10)

(Neutrons—Spectra)

BOLSHINSKIY, Ye. Ya.; NOVIKOV, A. G.; NAZAROV, Yu. V.

"The study of neutron thermalization in water and graphite-water [illegible] lattices."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva, 31 Aug-9 Sep 64.

NOVIKOV, A.G.

Climatology and the Requirements of Industry. Meteorol. i gidrologiya, No 5, 1953, pp 16-19

The author reports on the construction of the climatic atlas of Orlovskaya Oblast. In his opinion, "climatology" is the science that studies the intersections of climate-forming factors at a certain geographical latitude. (RZhGeol, No 5, 1954)

SO: Sum. No. 568, 6 Jul 55

NOVIKOV, A.G.; SINITSYN, F.Ye.; SKVORTSOV, I.V.

Prospects for finding oil and gas in southern and southeastern Kazakhstan, northern Kirghizia, and the eastern Ural Mountain region. Trudy VNIGNI no.35:288-301 '61. (MIRA 16:7)
(Petroleum geology) (Gas, Natural--Geology)

NOVIKOV, A.G.; SINITSYN, F.Ye.; ZAGORUYKO, V.A.

Geology, porspects for finding oil and gas, and trends in geologic studying of the Kyzyl Kum. Izv.AN Kazakh.SSR. Ser.geol. no.5:16-26 '62. (MIRA 15:12)

(Kyzyl Kum--Geology, Economic)

NOVIKOV, A.G.

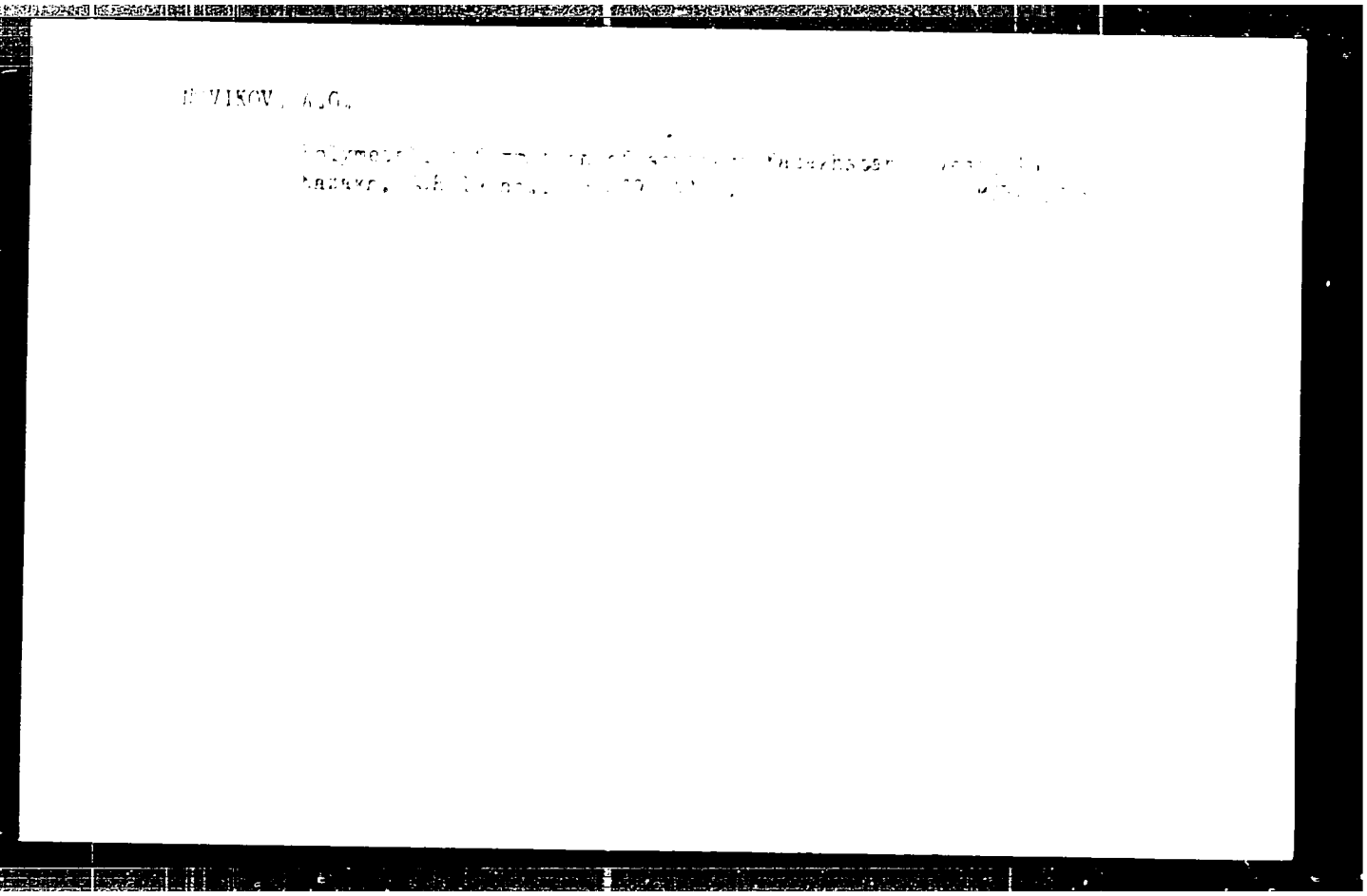
Association of the mercury-complex metal mineralization of the Talas-Ala-Tau with the volcanic complexes. Trudy Lab. paleovulk. Kazakh. gos. un. no.56:224-226 '63.
(MIRA 16:6)

1. Yuzhno-Kazakhstanskoye geologicheskoye upravleniye.
(Talas-Ala-Tau--Mercury ores)
(Talas-Ala-Tau--Volcanoes)

NOVIKOV, A.G.; SINITSYN, F.Ye.; FILIP'YEV, G.P.;

Tectonics of troughs in southern Kazakhstan in relationship with oil and gas potentials. Izv.AN Kazakh.SSR. Ser.geol.nauk no.4:3-14 '63. (MIRA 16:9)

1. Yuzhno-Kazakhstanskoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr KazSSR, g. Alma-Ata.



NOVIKOV, A.G., inzh.

Problem of determining loss of pressure in grates. Gidr.stroi. 26 no.10:50-51 O '57. (MIRA 10:10)
(Hydraulic turbines)

14(2)

SOV/99-59-3-7/10

AUTHOR: Novikov, A.G., Engineer

TITLE: Trench Digger "Howard" (Transheyekopatel' "Govard")

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 3, pp 38-41 (USSR)

ABSTRACT: The article deals with testing an English trench digger of the "Howard" type, for laying drain pipes made by the firm Rotary Hodge in Great Britain. The tests took place at the Kolkhoz "Ledurga" ("Ledurga" Kolkhoz), Sigulda rayon, Latvian SSR, during September-October 1957. The trench digger has also been tested at the testing farms of the Pribaltiyskaya MIS (Baltic MIS) and the Nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii Akademii nauk Latviyskoy SSR (Research Institute of Hydraulic Engineering and Melioration of the AS Latvian SSR) located in the Baldone rayon. During the testing period, a total of 1,900 m of trenches was dug, yet the trench digger's performance was found inadequate

Card 1/2

Trench Digger "Howard" SOV/99-59-3-7/10

for the following reasons: 1) its maximal digging depth proved too shallow (only 1,180 mm instead of 1,500 mm according to Soviet requirements) and 2), there were frequent breakdowns due to stony ground as the trench digger was designed for work on stoneless terrain. There are 2 photos.

Card 2/2

14(6) SOV/99-58-7-11/17

AUTHOR: Novikov, A.G., Engineer

TITLE: The Calculation of the Capacity of the Receiver and the Productivity of the Compressor for Compensatory Operating Conditions of GES Hydro-Aggregates (Opredeleniye yëmkosti resivera i proizvoditel'nosti kompressora dlya kompensatornogo rezhima gidroagregatov ges)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 7, pp 52-53 (USSR)

ABSTRACT: In this article, written in response to an article by Engineer Ya.S. Degtyarev in "Kotlostroyeniye", 1952, Nr 5, the author challenges the universality of the formula for determining the receiver's volume $V_p = \frac{V_k(1+p_k)n-V_{kc}}{p_p-p_k}$ suggested by Degtyarev because it contains a coefficient of air leakage (

Card 1/3 which in the author's opinion, ought not to be in

SOV/98-59-3-12/22

The Calculation of the Capacity of the Receiver and the Productivity of the Compressor for Compensatory Operating Conditions of GES Hydro-Aggregates

a formula for calculating compressor productivity. He recommends to use the following two formulae: 1) For calculation of the receiver's capacity:

$$V_p = \frac{V_k p_k - V_e}{p_p - p_o} \quad ; \quad 2) \text{ For calculation of compressor's productivity: } \varkappa = \frac{V_p(p_p - p_o)}{t} + \frac{nV_k\eta}{60} \quad ,$$

wherein V_p is receiver capacity in m^3, V_k is the volume of air space in the chamber of the turbine's work wheel after forcing out the water, plus the volume of air space of the spiral and the section before the emergency stopper after forcing out the water when the emergency stopper is closed (expressed in m^3), p_k is air pressure (in ata) in the work wheel

Card 2/3

The Calculation of the Capacity of the Receiver and the Productivity of the Compressor for Compensatory Operating Conditions of GES Hydro-Aggregates

chamber, corresponding to the difference in water level between the lower water of the GES and the forced-out, kg/cm^2·l. V_k is the total air space volume, expressed in m^3, of water-free space in the work wheel's chamber and in the turbine's spiral chamber; p_k is the maximal work air pressure in the receiver in kg/cm^2, p_o is the residual air pressure in the receiver after removal of water, accepted to be greater than p_k by 0.5-1 kg/cm^2. α is the compressor's productivity in m^3/min; n is the total number of aggregates being transferred into compensatory conditions; t is time interval needed for restoration of normal air pressure in the receiver in minutes; q is the coefficient of air leakage in m$_3$/hour which has to be ascertained experimentally

Card 3/3

NOVIKOV, A.G., inzh.

Heads of turbine water inlets. Gidr.stroi. 31 no.4:48-50 Ap '61.
(MIRA 14:5)

(Hydroelectric power stations)

ACC NR: AP7000313 SOURCE CODE: UR/0413/66/000/022/0030/0030

INVENTOR: Novikov, A. G.

ORG: none

TITLE: Multilayer spiral-joint tube. Class 7, No. 188471

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 30

TOPIC TAGS: metal tube, ~~multilayered metal tube, spiral joint tube~~ metal forming

ABSTRACT: This Author Certificate introduces a multilayer spiral-joint tube formed from step-shaped skelps. To increase the tube strength and to obtain uniform wall thickness, the skelp steps are of equal width and are joined on the whole surface in such a way that the analogous steps form a corresponding layer. Orig. art. has: 1 figure. [TD]

SUB CODE: 13/ SUBM DATE: 04Feb63/ ATD PRESS: 5109

Card 1/1 UDC: 621.774.21: :621.643.23/24

MATVEYEV, Yu.M., doktor tekhn. nauk; VYDRIN, V.N., doktor tekhn. nauk, FINKEL'SHTEYN, Ya.Z., kand. tekhn. nauk; KAUFMAN, M.M., kand. tekhn. nauk; GLEYBERG, A.Z., kand. tekhn. nauk; NOVIKOV, A.G., inzh.; SITNIKOV, L.L., inzh.; NODEV, E.O., inzh.; STOLETNIY, M.F., inzh.; STERN, V.A., inzh.; FRIDMAN, D.S., inzh.

Operating conditions and wear of mandrels on the continuous billet mill of a 30-102 pipe rolling unit. Stal' 25 no.10: 930-934 O '65. (MIRA 18.11)

ACC NR: A6014578 (A,N) SOURCE CODE: UR/0144/65/[illegible]/0069/0073

AUTHORS: Vydrin, V. N.; Novikov, A. G.

TITLE: Velocity and length of a floating mandrel in continuous [illegible] of pipes

SOURCE: Ref. zh. Metallurgiya, Abs. 7A61

REF SOURCE: Sb. Proiz. svarn. i beshovn. trub. Vyp. 3. M., Metallurgiya, 1965, 73-78

TOPIC TAGS: pipe, metallurgic process, metal working machine, metal tube, metal rolling

ABSTRACT: The fundamental equation of motion of a floating mandrel during a continuous pipe rolling process was derived. The methodology of calculating the velocity and optimum length of a free floating mandrel was improved. Formulas for determining the advance of the mandrel from the pipe and velocity of the free floating mandrel were derived. The calculated results were compared with experimental data. 2 illustrations, 2 tables. Bibliography of 6 citations. L. Kochenova [Translation of abstract]

SUB CODE: 13

Card 1/1 MLP UDC: 621.774.001

NOVIKOV, A.G.; KONOVALOVA, L.I.; FADEYEVA, T.M.

Continuous dyeing with insoluble azo dyes with partial drying of the fabric after "azotolation." Tekst.prom. 25 no.11:69-70 N '65. (MIRA 18:12)

1. Glavnyy inzhener Ivanovskogo khlopchatobumazhnogo kombinata imeni Samoylova (for Novikov). 2. Zaveduyushchiy khimicheskoy laboratoriyey Ivanovskogo khlopchatobumazhnogo kombinata imeni Samoylova (for Konovalova). 3. Starshiy inzhener-khimik Ivanovskogo khlopchatobumazhnogo kombinata imeni Samoylova (for Fadeyeva).

NOVIKOV, A.G.

Automatic fabric guide for textile printing machines. Tekst. prom. 18 no.2:58-59 F '58. (MIRA 13:3)

1.Nachal'nik pechatnogo tsekha kombinata imeni III Internatsionala (Textile printing) (Automatic control)

NOVIKOV, A.G., elektromekhanik

Improve the climbers for climbing poles. Avtom., telem. i sviaz' 2 no.5:40 My '58. (MIRA 11:5)

1.Stantsiya Ponyri Moskovsko-Kursko-Donbasskoy dorogi.
(Telephone lines--Equipment and supplies)

NOVIKOV, Andrey Grigor'yevich; PETROV, Georgiy Grigor'yevich; POLOSINA, G.V., red.; IL'YUSHENKOVA, T.P., tekhn. red.

[Construction and engineering maintenance of VA-345M and FMR-III billing machines] Konstruktsiia i tekhnicheskoe obsluzhivanie fakturnykh mashin modelei VA-345M, FMR-III; uchebnoe posobie dlia shkol i kursov UPK TsSU SSSR. 3., perer. i dop. izd. Moskva, Gosstatizdat, 1963. 249 p. (MIRA 17:1)

ACCESSION NR: AP4024990 S/0070/64/009/002/0227/0230

AUTHORS: Fomin, V. G.; Malyutina, G. L.; Gurevich, M. A.; Novikov, A. G.

TITLE: Distribution of gold in germanium single crystals

SOURCE: Kristallografiya, v. 9, no. 2, 1964, 227-230

TOPIC TAGS: germanium, gold, antimony, gold alloyed germanium, antimony alloyed germanium, alloy distribution in crystals, spectral germanium analysis, x-ray germanium analysis, GUR-3 x-ray goniometer, URS-501 x-ray apparatus, lattice structure, dislocation density, dispersion, alloy separation, cooling effect

ABSTRACT: The distribution of small quantities of gold in germanium single crystals was studied with the use of a double-crystal spectrometer (Bragg-Bragg orientation) and a special attachment mounted on the GUR-3 goniometer of a URS-501 x-ray apparatus. The n-type germanium served as a crystal-monochromator, while the samples studied were cut from different parts of a germanium ingot alloyed with gold to 10^{15} cm^{-3} and with antimony to 10^{14} cm^{-3}. The concentration of the uncontrolled acceptor-admixtures did not exceed 10^{13} cm^{-3}. Data obtained by the x-ray and metallographic (etching) analyses were compared after the dislocation

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ACCESSION NR: AP4024990

density in the areas studied spectrometrically was determined. It was at first established that defects observed in the Ge crystalline lattice were caused by the presence of Au and Sb. Further study showed that gold rather than antimony atoms were responsible for the presence of these defects. An explanation is offered of two possible causes of the phenomenon: 1) the presence of dispersed eutectic inclusions of Au; 2) dispersion separation of Au from the solid solution during cooling. The authors conclude that gold atoms in a germanium monocrystal are distributed between the undisturbed matrix and dislocations. Orig. art. has: 3 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy proyektnyy institut redkometallicheskoy promyshlennosti (State Scientific Research Institute of Rare Metals Industry)

SUBMITTED: 16May63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: ML, PH NO REF SOV: 004 OTHER: 006

Card 2/2

NOVIKOV, A.G.

[Succulent feed for cows] Sochnye korma v ratsione korov. [Gor'kii] Gor'kovskoe kn-vo, 1953. 53 p. (MLRA 9:11)
(Cattle--Feeding and feeding stuffs)

BOGDASHIN, A.S.; BOGORODSKIY, A.A.; VINGARDT, M.B.; GORBUNOV, V.I.; GORBUNOV, V.R.; DUROV, V.K.; YERMAKOV, A.L.; IVANOV, A.A.; KARAKOVA, M.I.; KOBYLYAKOV, L.M.; KOZLOVSKIY, M.I.; MARAKHTANOV, K.P.; MIRUMYAN, G.M.; NECHETOV, G.P.; NOVIKOV, A.G.; OL'KHOVSKIY, K.I.; PESTRYAKOV, A.I.; POLAPANOV, A.V.; SKLYAREVSKAYA, Ye.Kh.; SOLDATENKOV, S.I.; SOROKIN, Ye.M.; TRUSHINA, Z.V.; FEDOROV, P.F.; FEDOSEYEV, A.M.; FROG, M.P.; SHAMAYEV, G.P.; YANOVSKIY, V.Ya.; ORLOV, A.D., spetsred.; DEYEVA, V.M., tekhn.red.

[Handbook on new agricultural machinery] Spravochnik po novoi tekhnike v sel'skom khozialstve. Moskva, Gos.izd-vo sel'khoz. lit-ry, 1959. 364 p. (MIRA 13:2)
(Agricultural machinery)

GORBUNOV, V.I., inzh.; MIRUMYAN, G.N., inzh.; YANOVSKIY, V.Ya., inzh.; IVANOV, A.A., inzh.; YERMAKOV, A.L., inzh.; FEDOTOV, P.F., inzh.; LARYUKHINA, G.G., inzh.; NECHETOV, G.F., inzh.; NOVIKOV, A.G., inzh.; DUROV, V.K., inzh.; BARSUKOV, A.F., red.; PECHENKIN, I.V., tekhn. red.

[New tractors and agricultural machines; test results of 1957] Novye traktory i sel'skokhoziaistvennye mashiny; rezul'taty ispytanii 1957 goda. Moskva, M-vo sel'.khoz.SSSR. No.3. 1959. 350 p. (MIRA 15:10)

1. Russia (1923- U.S.S.R.)Glavnoye upravleniye mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Agricultural machinery)

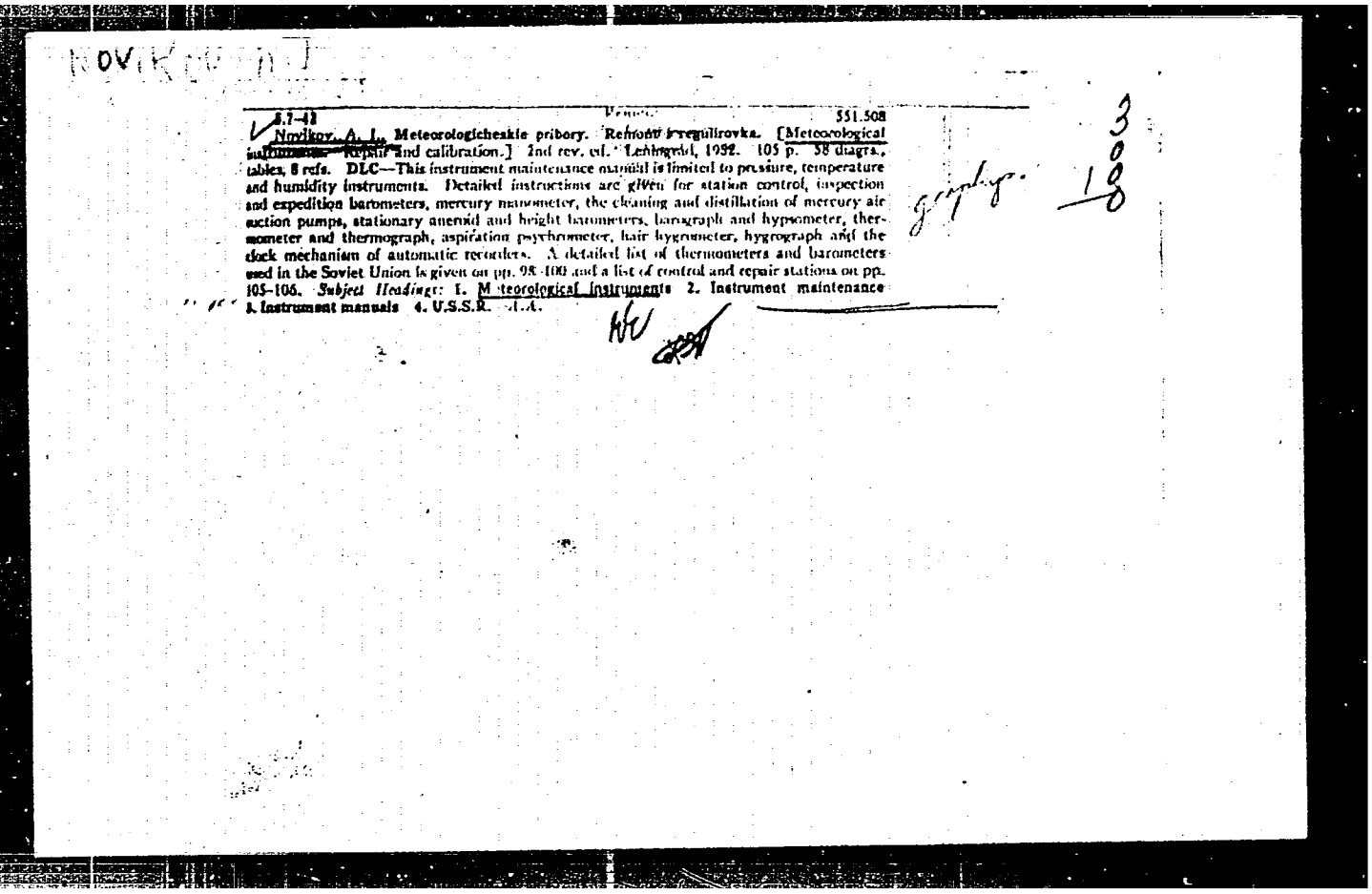
NOVIKOV, A.G.

Experience in using mechanized processing of data of agrometeorological observations for the characteristics of agroclimatic conditions of growing spring wheat. Trudy TSIP no.[illegible]:3-35 '65. (MIRA 18:7)

NOVIKOV, A.I.; STERNZAT, M.S., red.

[Meteorological instruments; repair and adjustment] Meteorologicheskie pribory; remont i regulirovka. Leningrad, Gidrometeor.izd-vo, 1951. 94 p. (MIRA 12:10)

(Meteorological instruments)



NOVIKOV, A. I.

5.7-42 551.508

Novikov, A. I., Meteorologicheskie pribory. Remont i regulirovka. [Meteorological instruments. Repair and calibration.] 2nd rev. ed. Leningrad, 1952. 105 p. 58 diagrs., tables, 8 refs. DLC—This instrument maintenance manual is limited to pressure, temperature and humidity instruments. Detailed instructions are given for station control, inspection and expedition barometers, mercury nanometer, the cleaning and distillation of mercury air suction pumps, stationary aneroid and bright barometers, barograph and hypsometer, thermometer and thermograph, aspiration psychrometer, hair hygrometer, hygrograph and the clock mechanism of automatic recorders. A detailed list of thermometers and barometers used in the Soviet Union is given on pp. 98-100 and a list of control and repair stations on pp. 105-106. *Subject Headings*: 1. Meteorological instruments 2. Instrument maintenance 3. Instrument manuals 4. U.S.S.R. T.A.

graphs. 3 0 10

Novikov, A.I.

USSR/Automatics and telemechanics FD-2666

Card 1/1 Pub. 10-13/15

Author : Demeshin, V. P.; Kostetskaya, I. A.; Novikov, A. I.; Pozin, N. V.; and Kashirin, V. A.

Title : Bibliography. A list of Russian and translated literature on telemetering for 1950-1954

Periodical : A list of 39 works on telemetering, Russian and translated. For 1954: V. D. Ambrosovich and V. S. Malov, "Telemetering apparatus for 400-kv lines," Trudy TsNIEL, No 2, 244-260. N. A. Givartovskaya, "Ways to increase the accuracy of telemeter devices," Sb. statey, Telemekhanizatsiya energosistem, Academy of Sciences USSR Press, pp 70-77. etc. For 1953: N. N. Shumilovskiy and V. N. Mikhaylovskiy, "Design computation of an acoustic communication channel," Voprosy avtomatiki i izmeritel'noy tekhniki [Problems of automatics and measuring techniques], Vol. 2, No 1, Acad. Sci. Ukr. SSR Press. etc.

Institution :

Submitted :

Novikov, A.I.

USSR/Automatics and telemechanics FD-2660

Card 1/1 Pub. 10-7/15

Author : Il'in, V. A., and Novikov, A. I. (Moscow)

Title : Choice of multichannel pulse telemetering systems

Periodical : Avtom. i telem. 16, Jul-Aug 1955, 372-381

Abstract : The authors consider the most characteristic multichannel telemetering systems. They present quantitatives evaluations of them. On the basis of expounded criteria they compare the systems and analyze the trends of their development. They conclude that the development of telemechanization necessitates a wider application of multichannel pulse systems, which in industrial telemechanics permit a more rational transmission of several remote readings from one point to another. In aviation multichannel radiotelemetering systems permit more convenient transmission of information necessary for airplanes and create the possibility of the automatization of take-off, flight, and landing of aircraft. The authors note that some of the most prospective commutators in telemetering systems are commutators based on magnetic elements with rectangular hysteresis loops. Fourteen references, e.g. "Trochotrons and their application," Voprosy raketnoy tekhniki [Problems of rocket techniques], No 1, 1952; "Collection of translation on the techniques of transmission of results of measurements by radio, under the editorship of P. I. Yevdokimov, B. Kh. Krivitskiy and Yu. A. Shumikhin," Military Press, 1955.

Institution :

Submitted : March 16, 1955

Translation 563711

SOV/112-57-9-19291

Translation from: Referativnyy zhurnal Elektrotekhnika, 1957, Nr 9, p 194 (USSR)

AUTHOR Novikov, A. I.

TITLE Matrix Commutator (Matrichnyy kommutator)

PERIODICAL: Sb. rabot po avtomatike i telemekhanike. M., AN SSSR, 1956, pp 245-252

ABSTRACT Matrix commutators with rectangular type matrices are considered. The principle of the construction of matrix commutators is described, definitions are given, and formulae for calculating commutation parameters are presented. The necessity and possibilities are pointed out for selecting an optimum version of matrix construction for a given number of inputs, columns, which should have a maximum number of channels (outputs). A simplified electrical design of rectangular-type matrix commutators is submitted, and its limits of application and accuracy are indicated. There are 6 illustrations. Bibliography: 2 items

V.G.L

Card 1/1

Novikov, A. I.

AUTHOR: NOVIKOV,A.I. 103-8-6/8

TITLE: Exponential Time-Pulse Transformers. (Eksponentsial'nyye vremya-impul'snyye preobrazovateli, Russian)

PERIODICAL: Avtomatika i Telemekhanika, 1957, Vol 18, Nr 8, pp 749-755 (U.S.S.R.)

ABSTRACT: The basic relations for such transformers are investigated. Their schemes are described, and, because exponential transformers make it possible to develop multi-channel telemeter systems without commutators with a subdivision of channels with respect to time, a three-channel telemeter system is described by way of an example. The following may be said as a result of investigations carried out:

1.) In an exponential time-pulse transformer deviation with respect to time does in principle not depend on the modification of the feed voltage, which is a considerable advantage. The schemes of exponential transformers are characterized by their comparative simplicity.

2.) Exponential transformers have a rather wide range within which rapid action is possible. They can be used in telemeter systems which are used for the transmission of fast developing processes, as well as for systems which are able to transmit slowly changing quantities.

Card 1/2

103-19-8-5/11

AUTHORS: Il'in, V. A., Novikov, A.I.(Moscow)

TITLE: New Principles for the Construction of Telemetering Systems With Pulse-Frequency and Pulse-Width Modulation (Novyye printsipy postroyeniya sistem teleizmereniya s vremya-impul'snoy i shirotno-impul'snoy modulyatsiyey)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 8, pp 757-761 (USSR)

ABSTRACT: As a result of the work intended for the construction of highly stable transducers (modulators, demodulators etc.) new, simple highly stable pulse-frequency and pulse-width transducers were proposed and developed at the Institute for Automation and Telemetering of the AS USSR (Institut avtomatiki i telemekhaniki AN SSSR), which were denoted as exponential transducers. They are described and the foundations of their theory are detailed. The exponential pulse-width transducer consists of a bridge, to the one branch of which belong the resistances R_1 and R_2, whereas the other capacitance and a resistance or an inductivity and a resistance. A diode is inserted into the diagonal connection of the bridge. The fundamental formulae are

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New Principles for the Construction of Telemetering Systems With Pulse-Frequency and Pulse-Width Modulation 103-19-8-5/11

written down. A new method for the construction of a multi-channel system with pulse frequency modulation and a time separation of the channels without a commutator is given. Furthermore the diagram of the transmitter (peredatchik) and of the receiver of a one-channel telemetering system BST-1 is given. This is done primarily to replace the outdated system of the Bristol Company (Bristol'). The characteristic particularity of the receiver is the memory element. The characteristics obtained on the basis of the investigation are given. The errors of measurement correspond to those of equipment of first grade. The system operates normally, when the resistance connected in series to the leads is varied from 0 to 10,000 ohms. There are 8 figures.

SUBMITTED: April 1, 1958

1. Telemeter systems--Design 2. Telemeter systems--Equipment
3. Transducers--Design 4. Electric bridges--Performance

Card 2/2

IL'IN, V.K.; NOVIKOV, A.I.; POLYANSKIY, S.V.; KARASIK, Ye.Ya.

The VST-1 pulse-time telemetering system. Biul.tekh.-ekon. inform. no.8:36-37 '59. (MIRA 13:1)
(Telemeter)

S/103/60/0[illegible]/[illegible]/012/XX
B116/B20[illegible]

AUTHOR: N[illegible]v[illegible]kov, [illegible]

TITLE: Exponential transformers with logarithmic [illegible] transformation

PERIODICAL: Avtomatika i [illegible], [illegible]

TEXT: The [illegible] that [illegible] linear [illegible] between [illegible] and assumed parameters may warrant not only linear transformers. The linear transformer is regarded as a special case of a functional transformer. Some types of functional transformers warrant a sufficiently high [illegible] stability and have simple circuit diagrams. The author studies exponential transformers of this type. By means of an exponential transformer with a logarithmic law of transformation a voltage which varies [illegible] the law $Ae^{-t/\tau}$ or $A(1 - e^{-t/\tau})$ is compared to the pick-up voltage. The transformer is a bridge circuit (Fig. 1). A rectangular voltage (Fig. 2a) is periodically applied to the bridge by means of a [illegible]. The voltage at the capacitor C increases according to curves in Fig. [illegible]. Fig. 2c shows the change of the current passing through the capacitor. At the instant of

Card 1/[illegible]

S/103/62/[illegible]

Exponential transformers with a [illegible]

comparison t_c (when the [illegible] the voltage U_R the diode opens [illegible] constant until the [illegible] open diode is [illegible] to it can be determined [illegible] the current [illegible] in the diode circuit with [illegible] H [illegible] H determined the effect of the circuit parameters [illegible] the delay time t_d - t_c and [illegible] at H for this [illegible] the transformer [illegible] obtained.

Card 2/[illegible]

Exponential transformers with a ...

$$t_c = CR_0 \ln \frac{m - q(1 - \lambda n)}{1 - \lambda n - \frac{\Delta E}{Ek}} \qquad (13)$$

where $m = R/R_0$, $q = rk/R_0$, $n = \frac{R_2}{R_1 + R_2}$, $\lambda = \Delta R/R_2$; ΔE is the voltage at which the diode opens; ΔR is the resistance between the slider of the R_2 pick-up and the ground.

$$t_\Phi = \tau_2 \ln \frac{Ek}{U_H(t_\Phi)} \frac{R_H}{R_0} e^{-\frac{t_c}{\tau_1}}. \qquad (21)$$

is obtained for the trailing edge of a pulse, where $U_H(t_c)$ is the voltage at which the readings of the decay time t_c are taken;

$$U_H = Ek \frac{R_H}{R_0} e^{-\frac{t_1}{\tau_1}} e^{-\frac{t_2}{\tau_2}} \quad \begin{array}{l} \text{при } 0 \leqslant t_1 \leqslant t_c, \quad t_2 = 0, \\ \text{при } 0 < t_2 \leqslant \infty, \quad t_1 = t_c. \end{array} \qquad (22)$$

Card 3/6 5

Exponential transformers with a ...

with $0 \leq t_1 \leq t_c$, $t_2 = 0$ and with $0 < t_2 \leq \infty$, $t_1 = t_c$. Formula (22) expresses the change of the voltage at R_H. It follows therefrom that U_H passes two stages at R_H: 1) until it becomes equal to t_c, U_H varies with the time constant τ_1; 2) subsequently, U_H varies with the time constant τ_2. It follows from (13) that the pulse duration depends logarithmically on λ. The author obtains

$$U(\lambda) = E\left[1 - \frac{1 - \lambda n - \frac{\Delta E}{Ek}}{m + q(1 - \lambda n)}\right]. \quad (24)$$

for the voltage $U(\lambda)$ at the back-transformer. It indicates that U as a function of λ, changes nonlinearly (Fig. 5). In order to determine the nonlinearity, the nonlinearity factor $\beta = \Delta U(\lambda_0)/U(\lambda_1)$ (27) is determined.

$$\beta = \frac{\lambda_0 - \lambda_{min}}{1 - \lambda_{min}} - h\left[1 - \frac{1 - \lambda n}{m + q(1 - \lambda_0 n)}\right], \quad (28),$$

$$\lambda_0 = \frac{m+q}{nq} - \frac{1}{nq}\sqrt{hnm(1 - \lambda_{min})}, \quad (29),$$

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Exponential transformers with a ...

$$h = \frac{1}{1 - \frac{1-n}{m + q(1-n)}}. \qquad (32),$$

$$\delta_{\Delta t} = \frac{\tau_2}{\tau_1} \frac{\ln \frac{Ek}{\bar{U}_H(t_\phi)} \frac{R_H}{R_0} e}{\ln \frac{m + q(1-n)}{1 - n - \frac{\Delta E}{Ek}}}, \qquad (33),$$

$$\delta_{\Delta e} = \frac{\tau_2}{\tau_1} \frac{\ln\left(1 \pm \bar{U}_H(t_\phi) \frac{\Delta e}{}\right)}{\ln \frac{m + q(1-n)}{1 - n - \frac{\Delta E}{Ek}}} \qquad (34).$$

In a detailed study of the errors it is demonstrated that to reduce t and the errors caused by t , R_H and R must be reduced and E and R must be increased. Table 2 shows some circuits and formulas for several other types of transformers. The transformers described here can be used for telemetering, remote signaling, and remote control. There are 12 figures, 2 tables, and 4 Soviet-bloc references.

Card 5/[illegible]

NOVIKOV, A.I. (Moskva)

Exponential selector and increase in the interference rejection of time telemetry systems. Avtom.i telem. 23 no.10:1375-1384 O '62. (MIRA 15:11)

(Telemetering) (Pulse techniques (Electronics))

NOVIKOV, A.I., inzh.; ALEKSANDROV, B.S., inzh.

Automatic testing of solutions in ampules. Mekh. i avtom. proizv. 18 no.1:16-18 Ja '64. (MIRA 17:2)

GINDICH, M.G., inzh.; MOSKOV, Yu.A., inzh.; NOVIKOV, A.I., inzh.

Using a vibratory percussion unit for unloading frozen loose materials. Mekh. i avtom. proizv. 18 no.6:19-20 Je '64.
(MIRA 17:9)

L 21785-66 EWT(1)/EWA(h)

ACC NR: AP6002871 SOURCE CODE: UR/0286/65/000/024/0034/0034

AUTHORS: Novikov, A. I.; Polyanskiy, S. V.

ORG: none

TITLE: A pulse selector. Class 21, No. 176950

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 34

TOPIC TAGS: pulse analyzer, circuit design

ABSTRACT: This Author Certificate presents a pulse selector containing an RC ladder network. The device selects pulses with a width larger than a specified value and fixes pulses with delayed fronts. It contains a four-arm bridge of resistors and capacitors (see Fig. 1). One diagonal of the bridge holds an emitter-base junction of the transistor. The base of the transistor is connected with the cathode of a diode. The anode of the diode is connected to the mid-point of a resistance divider included in the input of the selector.

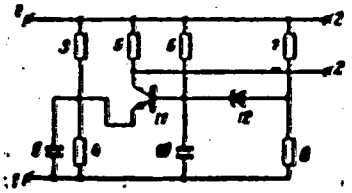

Fig. 1. 1-1 - input; 2-2 - output; 3, 4, 6 - bridge resistors; 5 - load resistor; 7 and 8 - resistors of the divider; 9 and 10 - bridge capacitors; 11 - transistor; 12 - diode.

Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 21Dec62

Card 1/1 UDC: 621.374.33

L 41119-66 EWT(d)/EEC(k)-2

ACC NR: AT6011829 (A) SOURCE CODE: UR/3176/65/000/001/0110/0119

AUTHOR: Karasik, Ye. Ya.; Lozhkomoyev, I. A.; Novikov, A. I.; Polyanskiy, S. V.

ORG: none

TITLE: Narrow-band telemetry system

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut kompleksnoy avtomatizatsii v neftyanoy i gazovoy promyshlennosti. Trudy, no. 1, 1965. Avtomatizatsiya tekhnologicheskikh protsessov (Automation of technological processes), 110-119.

TOPIC TAGS: telemetry system, telemetry technique, NARROW BAND TRANSMISSION

ABSTRACT: Developed by the Institute of Automatics and Telemechanics, AN SSSR, and tested by the Grozny Branch of the VNIIKAneftegas, a new telemetry system is described which: (a) uses a frequency band as narrow as 12 cps, (b) sends signals over a 6/0.4-kv electric-power distribution network, (c) uses no 280-cps carrier isolating choke coils, and (d) employs transmitters of only 1—3-w capacity. The signal transducer at the sending end and the pulse-time signal selector at the receiving end are based on a special bridge-type semiconductor exponential converter. The transmitter generates two pulses: a sync pulse and a parameter

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L 27663-66 EWT(k)-2/EWP(e)

ACC NR: AT6012346 SOURCE CODE: UR/0000/66/000/000/0086/0097

AUTHOR: Kashirin, V. A.; Novikov, A. I.

ORG: none

TITLE: Possibilities for drastic narrowing of frequency band used in tele-systems

SOURCE: Nauchno-tekhnicheskaya konferentsiya po sredstvam promyshlennoy telemekhaniki. Moscow, 1963. Promyshlennaya telemekhanika (Industrial telemechanics); materialy konferentsii. Moscow, Izd-vo Energiya, 1966, 86-97

TOPIC TAGS: remote control system, telemetry system, supervisory control system

ABSTRACT: The possibilities are theoretically explored of designing a narrow-band pulse-duration telemetry system that would contain an exponential threshold device; the latter is capable of accurately detecting variable-height easy-front pulses. The instrument accuracy of such a receiver is evaluated, as is the feasibility of operation in a very narrow band. The accuracy and efficiency of this new receiver are compared to those of a fixed-threshold receiver. It is claimed that at $\gamma = 4-10$, the accuracy of the new receiver can be "14—23 times higher"(?) than, and the required passband as narrow as 1/10 to 1/25 that of a fixed-threshold receiver. Here, γ is a "band factor" equal to $\gamma = \Delta f T$, where Δf is the effective passband of the input filter and T is the measurement period. Orig. art. has: 6 figures and 27 formulas.

SUB CODE: 09 / SUBM DATE: 08Jan66 / ORIG REF: 004

Card 1/1

ACC NR: AP7011360

SOURCE CODE: UR/0425/66/009/009/0022/0025

AUTHOR: Novikov, A. I.; Pirogova, T. A.

ORG: Tadzhik State University im. V. I. Lenin (Tadzhikskiy gosudarstvennyy universitet)

TITLE: Separation of tellurium and iodine by coprecipitation with iron hydroxide

SOURCE: AN TadzhSSR. Doklady, v. 9, no. 9, 1966, 22-25

TOPIC TAGS: iodine, tellurium compound, chemical separation, hydroxide, iron compound, chemical precipitation

SUB CODE: 07

ABSTRACT: The following procedure was used to separate iodine from irradiated TeO_2. The sample of TeO_2 is dissolved in alkali, acidified with 2 M sulfuric acid, and oxidized with ammonium persulfate to convert Te^{IV} to Te^{VI} and I^- to IO_3^-. Potassium hydroxide is then added to give a concentration of 2M with respect to KOH and the K_2SO_4 crystals are separated by centrifuging. The solution is then raised to 5M KOH. Coprecipitation with iron hydroxide is carried out at pH 11-14. This precipitates the carrier with sorbed Te^{VI} while the IO_3^- remains in solution.

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ACC NR: AP7011360

This paper was presented by Academician AN TadzhSSR K. T. Poroshin on 25 January 1965. Orig. art. has: 3 figures. [JPRS: 40,361]

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ACC NR: AP6037027 (N) SOURCE CODE: UR/0374/66/000/005/0693/0699

AUTHOR: Zolenov, Yu. V.; Novikov, A. G.

ORG: Laboratory of Polymer Physics Problems, Moscow State Pedagogical Institute im. V. I. Lenin (Problemnaya laboratoriya fiziki polimerov, Moskovskiy gosudarstvennyy pedagogicheskiy institut)

TITLE: Effect of temperature on the change of the stressed state of teflon seals

SOURCE: Mekhanika polimerov, no. 5, 1966, 693-699

TOPIC TAGS: vacuum seal, teflon, stress relaxation

ABSTRACT: In connection with the lack of methods for estimating the performance of teflon parts of sealing systems as a function of changes in the temperature of the ambient medium, the article analyzes problems involved in time-limited shifts from one temperature to another. It is assumed that the process of fast relaxation has already occurred and that the shift in temperature does not cause the stress relaxation processes to accelerate. Cases of both uniaxial and volume loading of teflon specimens are considered. Formulas are derived for (1) the decrease in stress during the temperature change in a uniaxially compressed teflon specimen, (2) lateral pressure on the teflon specimen during its compression in a closed volume, and (3) decrease in compressive stress of the teflon specimen in a closed volume during its cooling. It is shown that in order to reduce the decrease in stress with temperature,

 UDC: 678:01.53

ACC NR: AP6037027

it is necessary to try to obtain smaller geometrical dimensions of the polymer seal and to decrease the rigidity of the structure holding the seal. Orig. art. has: 6 figures and 7 formulas.

SUB CODE: 11/ SUBM DATE: 15Jan66/ ORIG REF: 005/ OTH REF: 001

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NOVIKOV, A. I.

5(2); 21(5) PHASE I BOOK EXPLOITATION SOV/1900

Akademiya nauk SSSR. Komissiya po analiticheskoy khimii

Primeneniye radioaktivnykh izotopov v analiticheskoy khimii (Use of Radioactive Isotopes in Analytical Chemistry) Moscow Izd-vo AN SSSR, 1958. 366 p. [Series: Its: Trudy, t. 9 (12)] Errata slip inserted. 3,000 copies printed.

Resp. Ed.: I.P. Alimarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.N. Yermakov; Tech. Ed.: T.V. Polyakova.

PURPOSE: The book is intended for chemists and chemical engineers concerned with work in analytical chemistry.

COVERAGE: The book is a collection of the principal papers presented in Moscow at the Second Conference on the Use of Radioactive Isotopes. The problems discussed at the Conference included coprecipitation, aging, and solubility of precipitates, determination of the instability constants

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of complex compounds, separation of rare earth metals, and ion-exchange chromatography. No personalities are mentioned. There are 351 references, 175 of which are Soviet, 33 German, 19 French, 8 Swedish, 2 Hungarian, and 2 Czech.

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Use of Radioactive Isotopes (Cont.) SOV/1900

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NOVIKOV A. I.

AUTHOR: Zolotov, Yu. A. 39-4-5-23/26

TITLE: Conference on the Use of Radioactive Isotopes in Analytic Chemistry (Soveshchaniye po primeneniyu radioaktivnykh izotopov v analiticheskoy khimii)

PERIODICAL: Atomnaya Energiya, 1958, Vol 4, Nr 5, pp 49-495 (USSR)

ABSTRACT: In Moscow on December 2-4, 1957, a meeting on the use of radioactive isotopes in analytic chemistry was called by the Department of Chemistry of the Academy of Sciences (USSR) and the Committee on Analytic Chemistry of the Institute of Geochemistry and Analytic Chemistry imeni V. I. Vernadskiy. The meeting was attended by 450 members of various scientific research institutes, institutions of higher learning, and industrial enterprises, including 30 scientists from England, Bulgaria, the Chinese People's Republic, Poland, Rumania, Czechoslovakia, and the United States. The purpose of the meeting was to consider the work of the Soviet Union in 1) the use of radioactive isotopes for the development of new methods of analysis based on radioactivity, 2) developing the theoretical bases of analytic chemistry, 3) improving and testing the methods of separating and differentiating chemical elements, and 4) determining those physico-chemical values which have analytical

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Conference on the Use (Cont.)

significance. The 50 reports presented at this meeting will be published in a collection under the title "The Application of Radioactive Isotopes in Analytic Chemistry" (Primeneniye radioaktivnykh izotopov v analiticheskoy khimii). Following are the general areas of consideration and summaries of the reports given at the meeting:

I. Methods of analysis based on radioactivity:

I. Ye. Zimakov and G. S. Rozhavskiy (Gintsvetmet [State Institute of Nonferrous Metals]) - a new variant of the method for determining minute quantities in mixtures, called the method of "multi-radioactive dilution", which eliminates measurement of the specific activity of preparations - thereby simplifying analysis. I. P. Alimarin and G. M. Milimovich (GEOKhI [Geochemical Institute of the Academy of Sciences (USSR)] - a method for separating tantalum from titanium, zirconium, and niobium; and identifying tantalum by isotopic dilution. The precipation of tantalum was induced by a new organic reagent, [ammonium benzeneselenate] (benzolseleninovokisliy ammoniy). Radiometric titration (two reports; author not given) - a new method of volumetric analysis in which the point of equivalence is determined by measuring the activity of the solution. K. B. Yatsimirskiy and Ye. N. Roslyakova

(Ivanovo Institute of Chemical Technology) - the use of solutions of complex compounds (luteo salts) of Co^{60} for identifying large anions (phosphates, molybdites, and sulfates) by the radiometric titration method. I. M. Koreman and F. R. Sheyanova (Gor'kiy State University) - the possibility of using non-isotopic indicators in radiometric titration and other areas of analytic chemistry. A. I. Kulak (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev) - the determination of micro-admixtures (10^{-5} to 10^{-6} %) of cobalt, copper, tellurium, arsenic, and antimony in ferrous oxides. A. A. Zhukhovitskiy and others (USSR) - development of a new rapid method of analysis based on the reflection (backward scattering) of beta-rays (β-rays). V. B. Gaydadymov (GEOKhI) and L. I. Il'ina (Moscow Electric Light Factory) - determination of the properties of binary tantalum-niobium alloys by the β-ray-reflection method.

II. Methods of identifying and separating elements: M. M. Senyavin (GEOKhI) - chromatographic analysis using radioactive isotopes; for example, research on separating infinitely small quantities of substances, quantitative analysis by isotopic dilution, etc. E. I. Il'yenko, B. P. Nikol'skiy and A. M. Trofimov (RIAN [Radium Institute of the Academy of Sciences (USSR)]) - the results of research on the adsorption of mercury in ion exchange resins.

Conference on the Use (Cont.)

L. V. Borisova (GEOKhI) - data on the distribution of rhenium and molybdenum between [anionite] EDE-10 and solutions of hydrochloric acid. A. K. Lavrukhina, K. Yun-Pin and V. Knoblokh (GEOKhI) - a new complexly-forming substance [trioxyglutaric acid] (trioksiglutarovaya kislota), which is no less effective for identifying purposes than lactic acid used at present. V. I. Kuznetsov and T. G. Akimova (GEOKhI) - separating of uranium from sea-water by the co-precipitation of [thiocyanate] (rodanidnyy) complexes of uranyl with the sedimentation of a large organic cation of hodanide - methyl violet. Some reports were related to the question of co-precipitation in inorganic collectors: [Yu. V. Morachevskiy and A. I. Novikov (Leningrad State University) - "Coprecipitation of several elements of low concentration with metal hydroxides". I. Ye. Starik, F.Ye.Starik, and A. N. Apollon' . (RIAN) - "Carbonate method of separating micro-quantities of ur anium from weighable amounts of iron". A. K. Lavrukhina (GEOKhI) - examination of peculiarities in the behaviour of insignificant concentrations of radioactive isotopes in solutions, and experimental difficulties caused by the loss of elements adsorbed in filters and glass; the formation of radio-colloids, etc. V. P. Shvedov and L. M. Ivanova (RIAN) - methods of separating the isotopes Mo^{99}, Ag^{111}, Cd^{115} and Ba^{140} from complex mixtures.

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89-4-5-23/26

III. Some general problems of analytical chemistry: N. I. Izmaylov and V. S. Chernyy (Khar'kov State University) - research on the influence of the nature of solvents on the solubility of silver chlorides and cesium. The authors related the degree of solubility to the dielectric constant of the solvent. D. M. Ziv and I. A. Efros (RIAN) - a method for determining solubility by the "ultra-micro" method. N. P. Komar (Khar'kov State University) - (in connection with the above method), reported on the use of radiochemical measurements in combination with a determination of the molar coefficient of absorption for the study of complex ions in two-phase systems. I. M. Kol'tgof (Minnesota State University, USA) - new data characterizing the aging and development of crystalline sediments with the aid of radioactive isotopes. A. K. Lavrukhina and S. S. Rodin (GEOKhI) - the results of several experiments with the behaviour of element 87 (France) by co-precipitation with various carriers, extraction by solvents, etc. I. M. Irving (Oxford University, England) - study of the analytical properties of indium with the aid of radioactive isotopes. A. A. Grizik and N. I. Marunina (Giredmet [State Rare Metals Scientific Research Institute]) - the use of radioactive isotopes for control of production, for example, production of rare-earth metals.

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1. Conferences--Radioactive Isotopes--Moscow 2. Isotopes (Radioactive) --Applications

KORACHEVSKIY, Yu.V.; NOVIKOV, A.I.

Coprecipitation of various elements in small concentrations with metal hydroxides. Trudy kom.anal.khim. 9:121-134 '58. (MIRA 11:11)

(Metals) (Precipitation) (Hydroxides)

Novikov, A.I.

PHASE I BOOK EXPLOITATION SOV/2946

5(2)

Leningrad. Universitet

Voprosy khimii (Problems in Chemistry) [Leningrad] Izd-vo Leningradskogo univ., 1959. 160 p. (Series: Its: Uchenyye zapiski, no. 272) (Series: Leningrad. Universitet. Uchenyye zapiski. Seriya khimicheskikh nauk, vyp. 18) 1,600 copies printed.

Resp. Ed.: A. G. Morachevskiy; Ed.: Ye. V. Shchemeleva; Tech. Ed.: S. D. Vodolagina.

PURPOSE: This book is intended for chemists in research and industry as well as for teachers and students in chemical fields.

COVERAGE: This collection of eighteen articles on various branches of chemistry, mainly physical and analytical, was compiled on the basis of experimental research by the Chemistry Department of Leningrad University. The articles deal chiefly with methods of isolating rare earths in pure form and identifying them. No personalities are mentioned. References accompany individual articles.

TABLE OF CONTENTS:

NOVIKOV, A.I.

Coprecipitation of small quantities of iodine and metal hydroxides. Dokl. Akad. Tadzh. SSR 2 no. 5:9-13 '59. (MIRA 13:12)

1. Tadzhikskiy gosudarstvennyy universitet imeni V.I. Lenina. Predstavleno chlenom-korrespondentom AN Tadzhikskoy SSR Adkhamovym.
(Iodine) (Hydroxides)

5(4) SOV/78-4-9-37/44

AUTHOR: Novikov, A. I.

TITLE: The Simultaneous Precipitation of Small Amounts of Chromate Ions With Aluminum Hydroxide

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 9, pp 2161-2167 (USSR)

ABSTRACT: The reaction referred to in the title has not yet been completely clarified, in particular not for small amounts of chromate ions. Therefore the reaction was in the present case investigated while the pH of the medium and the concentrations were being changed. The indicator used was the radioactive isotope Cr^{51}. It was found 1) the simultaneous precipitation of chromate ions takes place by means of an adsorption on the aluminum hydroxide precipitate; 2) the amount of adsorbed chromate ions after the completion of the coagulation of aluminum hydroxide depends on the pH of the solution, the ammonium nitrate concentration, the hydroxide amount, and the chromate ion concentration; 3) the simultaneous precipitation of chromate ions is further influenced by the way in which the reagents mix and the duration of contact of solution and precipitate. Under experimental conditions the amount of simultaneously precipitated chromate ions with concentrations

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below 10^{-3} gram ion/l ranged from 0 to 100% ; 4) with chromate ion concentrations exceeding 10^{-5} g ion/l their simultaneous precipitation may be avoided by a pH of 10.1 - 9.4 and ammonium nitrate concentrations between 0.03 and 2 mol/l. The higher the pH of the solution and the concentration of ammonium nitrate, the more thorough is the separation of the chromate ions from aluminum hydroxide; 5) it is assumed that under certain conditions it would be possible to determine a change in the charges or compositions of adsorbed ions by means of curves for "carried-down ion portions - pH of the solution". There are 5 figures, 1 table, and 18 references, 12 of which are Soviet.

MORACHEVSKIY, Yu.V.; NOVIKOV, A.I.

Coprecipitation of small amounts of certain elements with metal hydroxides. Report No.1: Coprecipitation of strontium with hydroxides of iron, titanium, aluminum and beryllium. Uch.zap.LGU no.272:112-122 '59. (MIRA 13:1)
(Strontium) (Hydroxides)

MORACHEVSKIY, Yu.V.; NOVIKOV, A.I.

Coprecipitation of small amounts of certain elements with metal hydroxides. Report No.2: Coprecipitation of small amounts of rare earth elements with hydroxides of iron, titanium, aluminum and beryllium. Uch.zap.LGU no.272:123-128 '59. (MIRA 13:1)

(Rare earths) (Hydroxides)

MORACHEVSKIY, Yu.V.; NOVIKOV, A.I.

Coprecipitation of small amounts of certain elements with metal hydroxides. Report No.3: Coprecipitation of cesium, rhenium, gallium, ruthenium and zirconium with iron hydroxide. Uch.zap.LGU no.272:129-133 '59. (MIRA 13:1)
(Iron hydroxide) (Metals)

NOVIKOV, A. I.

PHASE I BOOK EXPLOITATION SOV/5410

T... ...skaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii. Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful ... of Atomic Energy) v. 2. ... 1960. 449 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk Uzbekskoy SSR.

Responsible Ed.: S. V. Starodubtsev, Academician, Academy of Sciences Uzbek SSR. Editorial Board: A. A. Abdullayev, Candidate of Physics and Mathematics; D. M. Abdurasulov, Doctor of Medical Sciences; U. A. Arifov, Academician, Academy of Sciences Uzbek SSR; A. A. Borodulina, Candidate of Biological Sciences; V. N. Ivanchev; G. S. Ikramova; A. Ye. Kiv; Ye. M. Lobanov, Candidate of Physics and Mathematics; A. I. Nikolayev, Candidate of Medical Sciences; D. Nishanov, Candidate of Chemical Sciences; A. S. Sadykov, Corresponding Member, Academy of Sciences USSR, Academician, Academy of Sciences Uzbek SSR; Yu. N. Talanin,

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Transactions of the Tashkent (Cont.) SOV/5410

...Institute of Physics and Mathematics; Ya. Kh. Turdyshev, Doctor ...Biological Sciences. Ed.: R. I. Khanidov; Tech. Ed.: A. G. Rastvorova.

PURPOSE: The publication is intended for scientific workers and ...specialists employed in enterprises where radioactive isotopes ...nuclear radiation are used for research in chemical, geo...logical, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Trudy sessions of the Tashkent Conference on the ...ceful Uses of Atomic Energy. The individual articles deal ...th a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes, application of spectral analysis for the manufacturing of radioactive preparations, ... radiometric methods for determining the content of elements in the earth, and an analysis of methods for obtaining pure substances. Certain

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Instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

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