ACC NR: AR7008645 SOURCE CODE: UR/0372/66/000/012/V072/V072

AUTHOR: Myasnikova, Ye. N.; Gromov, N. P.; Ogurtsov, Yu. P.

TITLE: Programming a device for objective speech recognition

SOURCE: Ref. zh. Kibernetika, Abs. 12V476

REF SOURCE: Sb. tr. Leningr. mekhan. in-ta, no. 51, 1965, 145-151

TOPIC TAGS: speech recognition, intelligent programming system, binary code

ABSTRACT: The authors consider two methods of speech recognition. In the first method, the characteristic features used for distinguishing sounds are combinations of bits for energy differences in five pairs of frequency bands. The speech signal is divided into ten bands by semioctave filters with average frequencies from 400 to 5000 cps. Each sound is expressed in 12-digit binary code. The average reliability for recognition of isolated Russian vowels pronounced a total of 181 times by 12 speakers of both sexes was 46%. Recognition reliability for speakers of one sex was 57% and for a single person--80%. The decision was made on the basis of the probability that a given code belonged to one of the sounds. In the second method, the speech signal is passed through a clipper and the intervals between zeros are divided into six gradations according to length. The sound is expressed in 6-digit binary code. The reliability of vowel recognition for a group of speakers of both sexes was 51%. When both analyzers are used simultaneously, reliability should increase to 75%. G. Tsemel'. [Translation of abstract]

SUB CODE: 09 /

Card 1/1 UDC: 51:681.14:155

GROMOV, N.S.; DIKERMAN, N.I.

Manufacture of tiles and decorative ceramics for interior wall coverings. Gor.khoz.Mosk. 28 no.10:36-37 O '54. (MLRA 7:11)
(Tiles) (Walls) (Decoration and ornament, Architectural)

Int

USSR

1759. The production of faïence.—N. S. GROMOV and N. I. DIKERMAN (*Glass & Ceramics*, Moscow, 2, No. 1, 11, 1955) Faïence for artistic architectural work in Moscow (high buildings, underground railways, etc.) is produced by a new method - slip-casting with a water content of 32-33%. The slip for small products contains 32% water, "thickens" 1·5-2·5%, has a flow after 30 sec. of 18-40, and a residue +100-mesh of 8-12%. Many coloured glazes of the lead borosilicate types are available; their use ensures resistance to frost. The frit for the lead glazes contains (%): felspar, 12·5; quartz sand, 27·1; raw kaolin, 2·1; PbO, 58·3. The frit for the borosilicate glaze consists of (%): colemanite, 29·39; felspar, 24·37; kaolin, 0·73; quartz sand, 22·28; whiting, 4·41; soda, 8·8. To produce the glaze, the lead frit is ball-milled with an addition of 4% kaolin; the borosilicate frit is milled with 7·5% kaolin. The most popular glazes are: (1) blue, with CoO and ZnO as pigments; (2) light green, with CuO and ZnO, and (3) gold, with Fe_2O_3. (8 figs., 1 table.)

GROMOV, N.S.; DIKERMAN , N.I.

Effective method of assembling shaped products in saggers. Stek. i ker. 12 no.3:31-32 M '55. (MLRA 8:5)

1. Keramiko-plitochnyy zavod imeni Bulganina.
(Ceramic industries)

SHULESHKIN, A.V., inzh.; GROMOV, N.V., inzh.

Increasing the precision of selecting technological bases for machining body parts. Vest.mash. 40 no.6:60-67 Je '60.
(MIRA 13:8)

(Metal cutting)

GROMOV, O.V.
p 2

SOV/77-4-2-15/18

23(4) 23 (5)

AUTHOR: Lyalikov, K.S.

TITLE: Successes of Soviet Electrophotography (Uspekhi sovetskoy elektrofotografii) A Scientific and Technical Conference on Questions of Electrography (Nauchno-tekhnicheskaya konferentsiya po voprosam elektrografii)

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1959, Vol 4, Nr 2, pp 143-152 (USSR)

ABSTRACT: This is an account of a scientific and technical con-
ference on electrography, the first to be held in the
Soviet Union and evidently in the world. It was organ-
ized in Vil'nyus on December 16-19, 1958 by the Soviet
narodnogo khozyaystva Litovskoy SSR (Council for
National Economy of the Lithuanian SSR), the Gosudarst-
vennyy nauchno-tekhnicheskiy komitet Soveta ministrov
Litovskoy SSR (State Scientific and Technical Committee
of the Council of Ministers of the Lithuanian SSR) and
the Nauchno-issledovatel'skiy institut elektrografii
(Scientific Research Institute of Electrography).
The conference, attended by over 300 scientific wor-
kers, was opened by the Deputy Chairman of the Council
for National Economy of the Lithuanian SSR P.A.
Kul'vets, after which the director of the Institute
for Electrography, I.I.Zhilevich, reviewed the state
and prospects for development of electrography in the
USSR. He stated that research in this field should be
carried out along the following lines: a) a search
for new photo-active materials with high dark resistance;
b) physical research into the internal photoeffect;
c) development of photosemiconductor layers; d) de-
velopment of the theory of the electrophotographic
process. K.S. Lyalikov (speaking also for G.G. Popova)
gave a report in which he suggested determining the
light sensitivity of electrophotographic layers in GOST
units. N.I. Plavins (speaking also for I.I.Zhilevich,
L.I.Hyun'ko, N.N.Markevich, P.I. Kalinauskens and O.K.
Suveyzdis) reported on some research on the sensitization
of a semiconductor in electrophotographic layers. Y.A.
Fridkin gave a report on highly sensitive electrophoto-
graphic layers and an electrophotocopying device, and
reviewed the formation process of the latent electro-
photographic image on the basis of the zonal theory.
He also described the design of an electrosensitometer
for determining sensitivity by the relaxation period of
a charge on the surface of the layer, and the circuit
of an electrophotographic copying device. Anfilov
finished describing the latter and then spoke on the
mechanics and kinetics of the development of the latent
electrophotographic image in liquid developers.

Card 3/10

SOV/77-4-2-15/18

Successes of Soviet Electrophotography: A Scientific and Technical Conference on Questions of Electrography

K.M. Vinogradov described some of the features of the cascade and liquid methods of electrophotographic development. Yu.Ye. Karpeshko devoted his report to the criterion of light sensitivity of the electrophotographic process. After the reports, a discussion took place on methods of determining the light sensitivity of electrophotographic layers. A.N. Chernyshev spoke on the prospects of developing polygraphic processes using electric and magnetic forces. O.V. Gromov (speaking also for I.I. Zhilevich, A.A. Sukhiy, V.A. Gordeyeva, A.S. Pausha and Yu. I. Kevalaytis) reported on the development of elctrophotographic reproducing equipment. A.S. Pausha (speaking also for I.I. Zhilevich, A.S. Borisovich, E.M. Gal'vidiks and Z.I. Rautkauskas) reported on the use of electrographic methods in recording oscillographs and other recording instruments.

V.I. Yurchenko (speaking also for L.N. Balin) spoke on the possibility of electrophotographically recording images from electron-beam tubes. L.S. Korol' (speaking also for N.N. Markevich, T.I. Kozlovskaya, D.I. Kalinauskene, M.K. Naynens, I.I. Zhilevich and E.A. Kontrimas) gave a detailed description of laboratory and machine methods of producing photosemiconductor papers (zinc oxide was used). A.A. Sukhiy (speaking also for I.I. Zhilevich, O.V. Gromov, V.A. Gordeyev, N.V. Peintov and T.N. Ger) described a laboratory and industrial machine for producing photosemiconductor papers. T.A. Chishkina (speaking also for Ya.A. [illegible]) reported on a method of examining electrophotographic materials using an a/c bridge. S.I. Khotyanovich (speaking also for A.I. Sikens and I.S. [illegible]evkena) spoke on developing materials for electrophotography and ferromagnitography, including developers giving a "reverse" image. B.I. Tikhonov reviewed methods of measuring the electrostatic potentials of electrophotographic layers, stressing that the oscillating electrode should not be placed above a layer with varying potential as this causes self-discharge. A.V. Kr[illegible]vskis (speaking also for R.S. Jorevty, A.A. Celjcv and Ye. S. Kheyfets) spoke on the practice of producing velveteen papers in an electrostatic field, and showed samples produced by the Grigishskaya paper factory. Ye.L. Semirovskiy then gave a historical review of the development of electrographic methods in which he paid tribute to the work of the Scientific Research Institute of Electrography in Vil'nyus and the Institut poligraficheskogo mashinostroyeniya (Moskva)-(Polygraphic Machine-Building Institute (Moscow)). Debates were then held

Card 6/10

on methods of measuring the potential of charged electrophotographic layers, the vibration pick-up most-used was shown in B.I. Tikhonov's report to be not always accurate. S.G.Grenishin stated that the bad influence of the oscillating electrode can be eliminated if the electrode probe above its surface is fixed and the pick-up is connected to it by a shielded cable. In the debate on Ye.L. Nemirovskiy's report it was stated that the research of Academicians A.N. Terenin and Ye.K. Putseyko should be considered as the basis of all work on electrophotographic papers with ZnO, as they were the first to show the possibility of optical sensitisation of the internal photoeffect in ZnO. N.M.Gol'vidis then gave a report on the depositing of charges by a corona discharge. A.I. Kaziaskas and A.P. Yapulis reviewed some of the results of the use of electrographic methods in radiography. L.I. Nyun'ko (speaking also for I.I. Zhilevich, I.S. Flavin, Yu.K. Vishchakas and Yu.A.Zibuts) reported on relaxation processes in semiconductor layers, using a vibration electrometer. Yu.K.Vishakas gave a report on research on some physical properties of the polycrystalline layers of selenious cadmium. K.P. Mikalkyavichyus spoke on some of the photoelectric properties of Sb_2S_3 and Sb_2Se_3: the absorption maximum of the latter is about 900 mμ. S.M. Karpan reported on methods of obtaining selenium light-sensitive layers, including sublimation and thermal treatment; it was also found that the sensitivity of the layers increased after storage for 1.5 to 2 months at room temperature. P.M. Podvigalkin (speaking also for S.G.Grenishin) spoke on research into the electrical properties of electrophotographic layers of amorphous selenium and powdered zinc oxide. N.K. Shiktorov (speaking also for A.S. Tauraytis) discussed the production of selenium layers and some of their properties. Finally the following reports on ferromagnetography were delivered; 1) B.Ya. Kaznacheyev, V.M.Zhogina, "Electrodeposition of Magneto-Hard Alloys with Given Magnetic Characteristics" 2) M.T.Arutyunov, "Visualization of Magnetic Oscillograms by the Ferrographic Method" 3) V.F.Patrunov, "Ferrographic Recording of Facsimile Images" 4) I.I.Zhilevich, I.I. Gikis, B. Ye. Buchek, I.I. Kaynise, A.K.Kizhis, "Mock Experiments in Non-Pressure Ferromagnetic Printing". There was also an exhibition showing the work of the Electrographic Institute. The most important conclusion of the conference was that a solid approach had been made to the possibility of wide technical use of the methods of electrography. It was considered that although work in this field actually started only in 1955-56 it has covered as much ground as the USA in 10 years. While admitting that it was easier to reproduce results already achieved than to be the first to arrive at them, the conference observed that the Americans took good care that no important information appeared in the literature available.

Card 10/10

NOVIKOV, Marian Vasil'yevich; SGIBNEV, Aleksandr Andreyevich;
GROMOV, O.V., podpolkovnik, red.

[Exploit in the land of Algeria] Podvig na zemle Alzhira.
Moskva, Voenizdat, 1965. 117 p. (MIRA 18:12)

KOTIK, I.; ROGOV, V.; GROMOV, P.; FEYGIN, L.; SHCHERBAKOV, V.; ROGOVER, M.; BUTKEVICH, P.

Innovators of the Leningrad Metalworks to the 22d Congress of the CPSU. Mashinostroitel' no.9:30-32 S '61. (MIRA 14:10)
(Leningrad--Machinery industry--Technological innovations)

GROMOV, P.A.

Drqwings and map diagrams in the teaching of geography. Geog. v shkole 20 no.6:54-55 N-D '57. (MIRA 10:12)

1. Karinskaya shkola, Moskovskoy oblasti.
(Geography--Study and teaching)

[redacted]

[redacted], Yu.S.; SHCHERBAKOV, I.N.; [redacted], F.A.

Bucket for scraper equipment. Gor.zhur. no.10:26 O '62.
(MIRA 18:1)

GROMOV, P.N.; GERSHANOVICH, N.L.; SMIRNOVA, A.M.; SHCHEGLOVA, R.G.

Vasilii Ipat'evich Onokhrienko. Vest.otorinolar. 12 no.2:81 Mr-Ap '50. (CLML 19:2)

1. Obituary.

GERSHANOVICH, N.L.; GROMOV, P.N.

Effect of prolonged use of hearing aids on hearing. Vest. otorinolar., Moskva 14 no. 3:93 May-June 1952. (CLML 22:4)

1. Of the Polyclinic for Hearing and Speech of the Administration of Cost Accounting Therapeutic Institutions of Moscow Municipal Public Health Department.

BYCHIKHIN, V.T.; PANFILOV, Ye.G.; GROMOV, R.A.

Industrial training of ninth graders. Politekh.obuch. no.11: 17-22 N '58. (MIRA 11:12)
(Moscow--Field work (Educational method))

MOLOD, A. (Alma-Ata); ZHANTUAN, A. (Kishinev); GROMOV, S.; SELIFANOV, P., inzh.-tekhnolog; LYAPINA, A., inzh.-tekhnolog; ZAKOVRYASHIN, G.; ARKAD'YEV, D.

From the editor's mail. Obshchestv. pit. no.8:42 Ag '63. (MIRA 16:12)

1. Direktor Belgorodskogo zheleznodorozhnogo restorana (for Gromov). 2. Otdel rabochego snabzheniya kombinata "Sverdles" Sverdlovsk (for Selifanov). 3. Direktor Minskoy kulinarnoy shkoly (for Zakovryashin).

GROMOV, S.A.; LISOVSKAYA, K.I.

Effect of subarachnoidal introduction of oxygen on the content of ascorbic acid in the liquor. Trudy Gos. nauch.-issl. psikhonevr. Inst. 31:267-270 '63. (MIRA 17:6)

GROMOV, S.A.

Effect of pneumo[illegible]graphy on the content of ascorbic acid in the cerebrospinal fluid. Trudy Gos. nauch.-issl. psikhonevr. inst. 37:[illegible]275 '60. (MIRA 17:6)

[redacted]

GROMOV S.

RUDAYA,K., kandidat tekhnicheskikh nauk; GROMOV,S., aspirant

Locomotives. Tekh.mol.23 no.11:24-28 N'55. (MLRA 8:12)
(Locomotives)

SHANGIN, Yuriy Aleksandrovich, inzhener; GROMOV, S.A., redaktor; KHITROV, P.A., tekhnicheskiy redaktor.

[Diesel locomotive with a rotary amplifier] Teplovoz s elektromashinnym usilitelem. Moskva, Gos.transp.zhel-dor. izd-vo, 1956. 25 p. (MLRA 9:6)
(Diesel locomotives) (Rotating amplifiers)

LUGININ, Nikolay Grigor'yevich, kandidat tekhnicheskikh nauk; SHCHERBACHE-VICH, G.S., inzhener, redaktor; GROMOV, S.A., kandidat tekhnicheskikh nauk, redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Repair of diesel-electric locomotives] Remont teplovozov. Moskva, Gos.transp.zhel-dor.izd-vo, 1956. 344 p. (MLRA 10:7)
(Locomotives--maintenance and repair)

NASYROV, Rifkat Akhmetovich; GROMOV, Sergey Aleksandrovich; VOLODIN, A.I., kand.tekhn.nauk, red.; BOBROVA, Ye.N., tekhn.red.

[Operation of the TE3 diesel locomotive; maintenance and repair] Ekspluatatsiia teplovozov TE3; obsluzhivanie i remont. Moskva, Gos. transp.zhel-dor.izd-vo, 1957. 120 p. (MIRA 11:1)
(Diesel locomotives--Maintenance and repair)

ASTAKHOV, P.N., kandidat tekhnicheskikh nauk; GROMOV, S.A., kandidat tekhnicheskikh nauk; LAPUSHKIN, S.A., inzhener.

Some conclusions from tests of the TE7 diesel locomotive. (MLRA 10:7)
Elek.i tepl.tiaga no.5:6-10 My '57.
(Diesel locomotives--Testing)

GROMOV, S.A., kand.tekhn.nauk

Determining the temperature of armature windings of electric machinery on diesel locomotives by the temperature of auxiliary pole windings. Trudy TSNII MPS no.149:199-230 '58. (MIRA 11:6)
(Diesel locomotives--Electric equipment)

GROMOV, S.A., kand.tekhn.nauk

Answers to readers' questions. Elek. i tepl.tiaga 3 no.2:43 F '59. (MIRA 12:4)
(Diesel locomotives--Electric equipment)

GROMOV, S.A., kand.tekhn.nauk

Ways for improving the TE-3 diesel locomotive automatic power regulation. Elek.i tepl.tiaga 3 no.8:28-30 Ag '59. (MIRA 12:12)

(Diesel locomotives)

GROMOV, Sergey Alekseyevich; SAZONOV, A.G., inzh., red.; MEDVEDEVA, M.A., tekhn.red.

[Main diesel locomotive electric generators] Glavnye generatory teplovozov. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 81 p. (MIRA 14:1)
(Diesel locomotives) (Electric generators)

GROMOV, S.A., kand.tekhn.nauk

What takes place when the 6th pair of wheels of a diesel locomotive skid? Elek.i tepl.tiaga 4 no.4:42-43 '60. (MIRA 13:6)
(Diesel locomotives)

GROMOV, S.A., kand.tekhn.nauk

Automatic control of the power of the TE3 diesel locomotive.
Elek.i tepl.tiaga 5 no.9:43-44 S '61. (MIRA 14:10)
(Diesel locomotives) (Automatic control)

RADCHENKO, V.D., kand.tekhn.nauk; PERTSOVSKIY, L.M., inzh.; KHATSKELEVICH, M.N., inzh.; KLIMOV, N.N., inzh.; GROMOV, S.A., kand.tekhn.nauk

Answering readers' queries. Elek.i tepl.tiaga 5 no.11:43-44 N '61. (MIRA 14:11)

(Electric locomotives)
(Diesel locomotives)

GROMOV, S.A., kand.tekhn.nauk; FILIPPOV, L.K., inzh.

Ways of improving the series circuit for slippage prevention in TEZ diesel locomotives. Vest.TSNII MPS 20 no.5:26-29 '61. (MIRA 14:8)

(Diesel locomotives)

SHABANOV, Vadim Aleksandrovich, inzh.; GROMOV, S.A., kand. tekhn. nauk, red.; VOROTNIKOVA, L.F., tekhn. red.

[Repairing the main generators of TE3 diesel locomotives in the shed] Remont glavnykh generatorov teplovozov TE3 v depo. Moskva, Transzheldorizdat, 1962. 42 p. (MIRA 15:6)
(Diesel locomotives—Maintenance and repairs)

GROMOV, S.A., kand.tekhn.nauk

Answering readers queries. Elekt.i topl. tiaga 5 no.10:37 O '61. (MIRA 14:10)
(Diesel locomotives)

GROMOV, S.A., kand.tekhn.nauk; SHEVCHENKO, L.A., kand.tekhn.nauk

Gas-turbine locomotive with a.c. electric driving. Vest. TSNII MPS 20 no.5:17-22 '62. (MIRA 15:8)
(Gas-turbine locomotives--Electric driving)

GROMOV, S.A., kand.tekhn.nauk

Conditions causing the origination of a circular flame at the collector of a machine with a compound winding. Vest. elektroprom. 33 no.5:19-23 My '62. (MIRA 15:5)
(Electric generators)

DROBINSKIY, V.A., inzh.; YEGUNOV, P.M., kand. tekhn.nauk; VOLODIN, A.I., kand.tekhn.nauk, retsenzent; GROMOV, S.A., kand. tekhn.nauk, retsenzent; POPOV, G.V., kand. tekhn. nauk, retsenzent; BOL'SHAKOV, A.S., inzh., retsenzent; KATANOV, M.I., inzh., retsenzent; SIROTENKO, V.D., kand. tekhn. nauk, red.; USENKO, L.A., tekhn.red.

[How a diesel locomotive is built and operates] Kak ustroen i rabotaet teplovoz. Izd.2., perer. i dop. Moskov, Transzheldorizdat, 1963. 380 p. (MIRA 17:1)

GRONOV, S.A., kand. tekn. nauk; SNEGILOV, B.V., inzh.

Some characteristics of the armature windings of diesel locomotive electric traction machines. Trudy TSNII MPS no.272:90-100 '64.
(MIRA 17:9)

GROMOV, S.A., kand. tekhn. nauk

Temperature conditions of asynchronous electric traction motors in the starting and speeding-up of trains. Trudy TSNII MPS no. 272:175-189 '64. (MIRA 17:9)

GROMOV, S. A.

Surgical section of diaphragmatic nerve in pulmonary tuberculosis. Sovet med. No. 6, June 50. p. 31-2

1. Of the Tuberculosis Division of a hospital (Head of hospital—Serdyuk, Lt. Col. Medical Corps).

CLML 19, 5, Nov., 1950

GROMOV, S.A. (Leningrad)

Remote results of ligation of the carotid arteries in combined therapy of neoplastic tumors of the brain. Vop.neirokhir. 24 no.5:47-48 S-O '60. (MIRA 13:11)

1. Neyrokhirurgicheskoye otdeleniye Leningradskoy oblastnoy klinicheskoy bol'nitsy.
(BRAIN--TUMORS) (CAROTID ARTERIES--SURGERY)

GROMOV, S.A.; CHALISOVA, K.N.

Clinical aspects and the histopathology of tick-borne encephalitis. Vop.psikh.i nevr. no.7:78-85 '61. (MIRA 15:8)

1. Iz nevrologicheskogo otdeleniya (nauchnyy rukovoditel' - prof. N.A.Popov) Leningradskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - A.P.Yegorova).
(ENCEPHALITIS) (TICKS AS CARRIERS OF DISEASES)

BOL'SHAKOV, Anatoliy Stepanovich; SARIN, Valeriy Ivanovich; SHVAYNSHTEYN, Boris Simonovich; PONOMAREV, V.S., inzh., retsenzent; ZAZOVSKIY, D.G., inzh., retsenzent; MAKAROV, M.S., inzh., retsenzent; POPOV, G.V., inzh., retsenzent; KURBATOV, A.I., retsenzent; KITAYEVA, Z.A., inzh., retsenzent; SDOBNIKOV, Ye.F., retsenzent; KOVALEV, A.K., inzh., retsenzent; KESAREV, A.P., inzh., retsenzent; KISELEVA, N.P., inzh., red.; GROMOV, S.A., kand. tekhn. nauk, red.; SHCHERBACHEVICH, G.S., inzh., red.; USENKO, L.A., tekhn. red.

[Shunting diesel locomotives]Manevrovye teplovozy. Moskva, 1962. 383 p. (MIRA 15:6)
(Diesel locomotives)

GROMOV, S.A.; SMIRNOVA, Z.A.

Clinical aspects and histopathology of aneurysms in the vessels of the brain. Vop. psikh. i nevr. no.9:118-123 '62. (MIRA 17:1)

1. Leningradskaya oblastnaya klinicheskaya bol'nitsa (glavnyy vrach - A.P. Yegorova).

GROMOV, B.A.; GURCHIN, F.A.

Clinical aspects of chronic cystic subdural hematomas.
Vop. psikh. i nevr. no.9:132-135 '62. (MIRA 17:1)

1. Leningradskaya bol'nitsa (glavnyy vrach A.I. Yegorova).

VOROB'YEV, Serafim Pavlovich; PETROV, A.N., red.; GROMOV, S.A., red.

[Treatment of epilepsy] Lechenie epilepsii. Leningrad, Leningr.otd-nie, Meditsina, 1965. 108 p. (MIRA 18:12)

GROMOV, S.A.; RODIONOV, K.K.

Clinical aspects and treatment of glomus tumors of arteriovenous anastomoses. Vop. psikh. nevr. no.10:90-97 '64.
(MIRA 18:12)

1. Neyrokhirurgicheskoye i nervnoye otdeleniye Leningradskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - A.P.Yegorova).

L 45873-66
ACC NR: AP6013105 (A) SOURCE CODE: UR/0231/65/000/007/0006/0011

AUTHOR: Shevchenko, L. A. (Candidate of technical sciences); Gromov, S. A. (Candidate of technical sciences); Gukovskiy, G. Ye. (Engineer)

ORG: None

61
B

TITLE: Experimental gas-turbine train of TsNII MPS

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta. Vestnik, no. 7, 1965, 6-11

TOPIC TAGS: railway transportation, railway vehicle data, railway equipment, gas turbine engine, electric generator, electric motor, locomotive

ABSTRACT: A general description of an experimental railway gas-turbine motor car with an a-c propulsion system is presented. The motor-car propulsion system consists of a gas-turbine engine, one 3-phase synchronous generator and two traction induction motors with rotors of squirrel cage type. The generator excitation system is fed from an exciter mounted on the turbocompressor shaft. The auxiliary generator used for feeding lighting and control circuits and for charging storage batteries is also mounted on the same shaft. The experimental research is conducted in two stages of which the first one covers the preliminary investigations with one motor car while the second stage deals with a two-car train. The data on the 350-hp gas-turbine engine, the 400-v, 450-amp, 50-cps generator

Card 1/2 UDC: 625.282-843.8

L 45873-66
ACC NR: AP6013105

and 40/55-kw, 380-v induction motor are presented in tables. A general view of the motor car is shown in a photo. Electric circuit diagrams are presented for one-car and two-car versions. The arrangement of the equipment inside the motor car is also illustrated. The installation and operation of the equipment is discussed including the control of speed, reversal of rotation and brake actions. Speed-traction curves (experimental and theoretical) are established and plotted for a two-car train. It is concluded, that the investigated and tested propulsion system can successfully be used for electric railway traction. A further research and development of large gas-turbine motor cars and trains with an a-c propulsion system is strongly recommended. Orig. art. has: 5 figures.

SUB CODE: 13, 21,09/SUBM DATE: None/ ORIG REF: 003

Card 2/2 UCR

GROMOV, S. I.; Inzh.

Sand; Furnaces

Shaft furnace for preheating sand.
Biul. stroi. tekh. 9 No. 8, 1952.

SO: Monthly List of Russian Accessions, Library of Congress, August 1952 ~~1953~~, Uncl.

GROMOV, S.I., inzhener.

Building high concrete columns in nailless formwork without scaffolding. Biul.stroi.tekh. 10 no.17:14 D '53. (MLRA 7:1)
(Reinforced concrete construction)

GROMOV, S.I.; MOGIL'NAYA, E.Ya.; CHYLIT, T.P.

Feeding grease into fat-liquoring drums and pulverizing it by compressed air. Obm.tekh.opyt. [MLP] no.26:31-32 '58. (MIRA 11:11)

(Tanning)

GROMOV, S.I., inzhener.

Cable elevator. Biul.stroi.tekh. 10 no.13:20 Ag '53. (MLRA 6:10)

(Elevators)

1. Glavaviastroy.

GROMOV, S.I., inzh.

Scaffolds with tipping stub poles. Biul. stroi. tekh. 12 no.1:20-21 Ja '55. (MIRA 11:12)

1.Glavaviastroy Ministerstva aviatsionnoy promyshlennosti SSSR.
(Scaffolding)

(Hromov, S. P.)

S/169/62/000/001/051/083
D228/D302

AUTHOR: Hromov, Sz. P.

TITLE: Synoptic processes in Antarctica

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 44-45, abstract 1B288 (Időjárás, 65, no. 1, 1961, 1-16)

TEXT: The author reviews the most important results of research by Soviet scientists on problems of the southern hemisphere's general circulation and synoptic processes, especially in high latitudes. It is noted that in their basic features the circulation processes in Antarctica are analogous to those in the Arctic. The essential differences of the physical and geographic conditions leave a specific imprint on certain details of the phenomena, but they do not influence the main features. The following fundamental questions are considered: Stability and also the synoptic and aerologic structure of Antarctic anticyclones; the cyclonic activity on the coasts of Antarctica and its relation to the higher and lower latitudes; the position of polar fronts and their role in cyclo-

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S/169/62/000/001/051/083
D228/D302

Synoptic processes in ...

genesis; the regeneration of cyclones on Antarctic fronts and the formation of central cyclones near the coasts; the topography's role in the formation of cyclones; fronts between marine and continental Antarctic air; meridional and zonal circulations in the southern hemisphere, their alternation, and their peculiarities; effluent winds and their role in the transfer of snow and also in the exchange of air between the continent and ocean. 26 references.
/Abstractor's note: Complete translation./

Card 2/2

SMILGEVICH, B.L.; FRENKEL', M.D.; GROMOV, S.S.

New apparatus for determining the heat resistance of plastics. Plast. massy no.12:53-54 '63. (MIRA 17:2)

GROMOV, S. V.

Astronomy, Spherical and Practical

Reduction of astronomical coordinates to a geoidal surface. Vest. Len. un 7, No. 12, 1952.

Section 1, "Setting Up the Problem," states in part: "In problems of the figure of the earth and cartography of remote regions it is sometimes necessary to know astron lat and long of certain points on surface of geoid. Problem would be easy if there were no topographical masses outside geoid surface; in fact, astronomers are often above the geoid. Astronomical coordinates are determined by direction of plumb line at a point." Other sections are: 2, "Possibility of Using Variometric Date for Determining Curvature of a Line of Force"; 3, "Calculation of Corrections to Observed Values of Derivatives W_{xz}, W_{yz} of Gravitational Potential W"; 4, "Calculation of Corrections W_{xz} Due to Inversion of Topographical Masses Lying Close to the Station"; 5, "Necessary Accuracy in Determining Heights h_{nv} of Locality Near a Station"; 6, "Taking Into Account the Topographical Influence on W_{xz},W_{yz}"; 7, "Conclusion"; 8, "Literature" (S.V.Gromov, "Inversion and Inclination of Plumb Lines," Uch. Zap. Lenin Gos. U., No.153, 25, 1952; A.A.Mikhaylov, "Course of Gravimetry and Theory of the Figure of the Earth," 1930; P. Rudzki, "The Gravity of Krakow, San Francisco, and Dhra-Dun by a New Method," (in French), Byuell. Astron., 1907.

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

GROMOV, S. V.

Reduction of Astronomical coordinates to the surface of a Geoid. Vestnik Leningradskogo Universiteta, No 12, pp 53-66, 1952.

Translation-M-244, 7 Mar 1955.

GRO:OV, S. V.

"Inversion and the deflaction of vertical," Uch. zap. LGU//Academic Notes, Leningrad State University/, No 155, Issur 25, 1952.

GROMOV, S.V.

A method for determining the form of the geoid. Uch.zap.Len. un. no.153:194-276 '52. (MLRA 8:6)
(Earth--Figure) (Gravity)

GROMOV, S.V.

Inversion and deflection of plumb lines. Uch.zap.Len.un. no.153: 277-322 '52. (MLRA 8:6)

(Gravity)

GRUSHOV, S.V.

Determination of the fundamental point of gravity net by the Department of Mathematics and Mechanics of Leningrad State University. Vest. LGU 8 no.2:69-79 F '53. (MIRA 12:7)

(Gravity--Measurement)

GROMOV, S.V.

Sludskii's method in application to the problem of the deformation of the quasigeoid. Vest.Len.un. 11 no. 19:174-185 '56. (MLRA 10:1)
(Earth--Figure)

GROMOV, S.V.

Investigating the figure of the earth without using the concept of a normal comparison planet [with summary in English] Vest. LGU no.19: 145-152 '57. (MIRA 11:1)

(Earth--Figure)

GROMOV, S.V.

Problems in the theory of earth's figure based on F.A. Sludskii's ideas. Uch.zap.LGU no.273:208-249 '58. (MIRA 12:1)
(Earth--Figure)

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3(1)

AUTHOR: Gromov, S.V. SOV/43-59-1-11/17

TITLE: On the Question of Simultaneous Determination of Mass and Form of the Earth With the Aid of Astronomical-Geodesic and Gravimetric Data (K voprosu o sovmestnom opredelenii massy i figury zemli po astronomo-geodezicheskim i gravimetricheskim dannym)

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1959, Nr 1(1), pp 111-118 (USSR)

ABSTRACT: Starting from the papers of M.S. Molodenskiy, the author investigates the influence of an inadequate knowledge of the mass of the earth on the determination of the form of the earth, as well as the possibility of a simultaneous determination of mass and form. According to the author the proposed method cannot be applied in the present time, since the density of the existing gravimetric data is too small. The author thanks Professor P.M. Gorshkov for the revisal of the manuscript.
There are 7 references, 6 of which are Soviet, and 1 Italian.

SUBMITTED: October 10,1956

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Chronicle

Card 4/6

Card 5/6

Card 6/6

25499
S/043/61/000/002/009/009
D207/D306

3.2200

AUTHOR: Gromov, S.V.

TITLE: On determining the general spheroid of the earth

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, vol. 16 no. 2, 1961, 136 - 141

TEXT: The world's spheriod E_0 is defined as the ellipsoid, for which the integral

$$\frac{1}{\sigma}\int_{\sigma} N^2 \, d\sigma \qquad (1.1)$$

is a minimum, where N is at the given point of the surface of E_0, σ - its surface which can be replaced by the surface of a sphere of unit radius. For the spheroid E_0, $a_0 = a + \Delta a$. $\alpha_0 = \alpha + \Delta\alpha$, satisfying

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On determining the general ...

$$\Delta a + \frac{aa^2}{3}\Delta\left(\frac{1}{a}\right) = \frac{1}{4\pi}\int N d\sigma,$$
$$\Delta a + \frac{2aa^2}{5}\Delta\left(\frac{1}{a}\right) = \frac{3}{4\pi}\int N \sin^2\varphi\, d\sigma, \qquad (1.6)$$

Solving Eq. (1.6) gives the following expressions

$$\Delta\left(\frac{1}{a}\right) = \frac{15}{8\pi a a^2}\int N P_2(\sin\varphi)\, d\sigma, \qquad (1.7)$$

and

$$\Delta a = -\frac{1}{8\pi}\left[-2\int N P_0 d\sigma + 5\int N P_2 d\sigma\right]. \qquad (1.8)$$

where P_0 and P_2 are Legendre's polynomials in Sin φ, where φ - astronomical latitude. The earth level ellipsoid Eg is now defined as such for which

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On determining the general ...

$$\int_{\sigma} (\Delta g)^2 \, d\sigma \tag{2.1}$$

is a minimum and where $\Delta g = g - \gamma_e (1 + \beta \sin^2\varphi - \beta_1 \sin^2 2\varphi)$. Expressions for "a" and $e^2\alpha$ are then found for which Eq. (2.1) has a minimum and are given by

$$\delta\left(\frac{1}{a}\right) = \frac{15}{8\pi\gamma_e} \int_{\sigma} \Delta g \, P_2 \, d\sigma, \tag{2.6}$$

$$\delta a = -\frac{a}{8\pi\gamma_e}\left[\int_{\sigma} \Delta g \, P_0 \, d\sigma + 5\int_{\sigma} \Delta g \, P_2 \, d\sigma\right].$$

Then, using the expressions

$$\Delta g = g_0 + \sum_{2}^{\infty} g_n \tag{3.1}$$

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On determining the general ...

and

$$N = \frac{a}{\gamma_e}\left[-\frac{K_0}{2} + \sum_2^{\infty}\frac{K_n}{n-1}\right]. \qquad (3.2)$$

the author obtains

$$\Delta\left(\frac{1}{\alpha}\right) = \delta\left(\frac{1}{\alpha}\right) \text{ and } \Delta a = \delta a \qquad (3.3)$$

and concludes that the earth's level ellipsoid determined by the condition that Eq. (2.1) is a minimum, practically coincides in figure and size with the world's spheroid. There are 4 Soviet-bloc references.

Card 4/4

GROMOV, S.V.

Determining the earth's figure using the anomaly of the vertical gradient of gravity acceleration. Uch.zap.LO[redacted] no.307:234-242 '62. (MIRA 15:9)
(Earth--Figure)

GROMOV, S.V.

A solution of Photenot's problems. Uch. Zap. LGU no.323: 214-218 '64. (MIRA 17:12)

GROMOV, V.

Use of mineral sorbents for the decontamination of liquid radioactive solutions. Atom. energ. 17 no.1:73-75 Jl '64. (MIR 17:9)

GROMOV, V.

Low-frequency amplifier. Radio no.6:25-27 Je '56. (MLRA 9:8)
(Amplifiers, Electron-tube)

GROMOV, V.

Reacting favorably to constructive criticism. Sov. profsoiuzy 4 no.7:44-45 Jl '56. (MLRA 9:10)

(Boots and shoes, Rubber)

GROMOV, V. (Leningrad)

Specialization and cooperation of production in machinery manufacturing. Vop.ekon. no.9:29-39 S '59.
(MIRA 12:12)

(Machinery industry)

GROMOV, V.

AID P - 1073

Subject : USSR/Aeronautics

Card 1/1 Pub. 58 - 3/19

Author : Gromov, V.

Title : Distance flight

Periodical : Kryl. rod., 12, 4, D 1954

Abstract : The author describes his flight for an All-Union distance record for aircraft of a non-specified weight category. Some names are mentioned. Photo.

Institution : None

Submitted : No date

VAYSFEL'D, V.; GROMOV, V.

Dispatcher control in centralized freight haulage. Avt. transp. 34 no.10:7-8 O '56. (MLRA 9:12)

1. Nachal'nik slushby dvizheniya Glavmosavtotransa (for Vaysfel'd) 2. Starshiy lineynyy dispetcher Glavmosavtotransa (for Gromov).

(Transportation, Automotive)

YERMOLENKO, V., inzh.; GROMOV, V., kand.tekhn.nauk

More about double-sash windows. Zhil.stroi. no.7:15-16 Jl '60. (MIRA 13:7)

(Windows)

GROMOV, V., kand.tekhn.nauk

Using double-pane casement. Zhil.-kom. khoz. 11 no.2:29-31 F '61. (MIRA 14:5)

(Windows)

GROMOV, V., kand.tekhn.nauk

Modern parquet floors. Zhil. stroi. no.2:31 F '61. (MIRA 14:1)
(Parquet floors)

GROMOV, V.; PORMALE, M.

Hydrotropic and alkaline boiling of hardwood for obtaining cellulose with simultaneous hydrogenation of lignin. Report No. 2: Fractionation of hydrogenated lignin products and separation of phenols. Izv.AN Latv. SSR no.4:85-92 '61. (MIRA 16:1)

1. Institut lesokhozyaystvennykh problem i khimii drevesiny AN Latviyskoy SSR.

(Lignin) (Phenols)

GROMOV, V.

In the research institutes of Finland. Vestis Latv ak no.7:133-137 '62.

B-12

USSR/Electrochemistry

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26340

Author : V.A. Gromov
Title : To The Question of Discharge Mechanism in Hollow Cathode.

Orig Pub : Optika i spektroskopiya, 1956, 1, No 3, 334-337

Abstract : The influence of little additions (up to 10%) of polyatomic gases on the alteration of the discharge current I in a tube with a hollow cathode was investigated at the pressure of about 1 mm of Hg column. Benzene (I), exylene, carbon tetrachloride, methyl, ethyl, normal buthyl and isobuthyl alcohols were used as additions to Ar, I and alcohols were used as additions to He, and I, methane and alcohols were used as addition to Kr. An intensive molecular spectrum appears at the moment of the introduction of a polyatomic admixture and quickly disappears. A sharp drop of I is observed simultaneously with it, but the initial value of I is soon restored. The drop of I may be explained by photon adsorption, as well as by neutralization of ions of the main gas by the transition of electrons from the admixture molecules to these ions.

Card : 1/1

GROMOV, V.A.

USSR/Electronics - Gas Discharge and Gas-Discharge Apparatus H-7

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 7137

Author : Gromov, V.A.
Title : Concerning the Mechanism of Discharge in a Hollow Cathode

Orig Pub : Optika i spektroskopiya, 1956, 1, No 3, 334-337

Abstract : Report on the results of investigations of the discharge in a hollow cathode, carried out to clarify the role of photoemission electrons from the cathode, occurring under the influence of the intrinsic short-wave ultraviolet radiation of the discharge. A study was made of the change in the discharge current upon addition of various impurities to the inert gases in the form of multi-atomic gases, which absorb the short wave-ultraviolet radiation. The partial pressure of the impurities did not exceed 10% of the pressure of the fundamental inert gas. Oscillograms of the discharge current are given, and these characterize the sharp drop in current upon addition of the quenching gas and the subsequent burning out of the impurity. The shape of the burning out curve depends on the type of quenching gas.

Card : 1/1

AUTHOR: Gromov, V.A.

51-5-20/26

TITLE: A New Method of the Spectrum Excitation in an Atomic Beam. (Novyy metod vozbuzhdeniya spektra v atomnom puchke)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.2, No.5, pp. 669 - 671 (USSR).

ABSTRACT: At present, three methods of excitation of the emission spectrum of an atomic beam are known: 1) by an electron beam; 2) by a high-frequency electro-magnetic field in an inert gas, and 3) by resonance excitation using light. All these methods possess certain disadvantages. The author reports a new method of excitation in an atomic beam, using simultaneously the action of an electron beam and a high-frequency electric field. The apparatus used is shown in the figure on p. 670. In a central conductor of a co-axial solid resonator, tuned to 1 100 Mc/s, an electron gun 7 is placed which produces an electron beam of 150 mA with electron energies of 200 eV. On leaving the gun, the electrons travel into the region between the end of the central conductor and the bottom of the co-axial resonator where an antinode of the electric field and a node of the magnetic, high-frequency field are superimposed. The electric-gun grid is insulated from the resonator, which makes it possible to apply a constant electric field between the grid and the

Card 1/3

A New Method of the Spectrum Excitation in an Atomic Beam.

resonator bottom. By variation of this constant field, one can alter the trajectories of the electrons moving from the gun to the bottom of the resonator. Since the time of transit of the electrons with 200 eV energy through this gap is larger than the period of the high-frequency field, the electron beam motion can be made oscillatory. The efficiency of excitation in an atomic beam which crosses the electron beam described above should be higher than the efficiency of excitation using electrons without the high-frequency field. The reasons for that are as follows: a) increase of the time spent by an electron in the atomic beam; b) traversing the atomic beam, an electron is accelerated and de-celerated many times, which should increase the probability of excitation; c) further electrons are produced in ionisation of the atomic beam. If the high-frequency field is sufficiently powerful and the atomic beam sufficiently dense, a spontaneous, electrode-less, high-frequency discharge will be produced. An atomic beam of magnesium was excited using electrons with and without a high-frequency-field. It was found that the intensity of the wavelengths 4481, 5173, 5184, 5528 Å excited in the magnesium beam was 2 - 4 times higher, using the high-frequency field than without it. The work reported in this paper is of a preliminary nature, but it may lead to wider application of the

A New Method of the Spectrum Excitation in an Atomic Beam. 51-5-20/26

atomic beam production of light for the study of hyperfine structure and isotopic shift.

There are 1 figure, 1 table and 2 references, 1 of which is Slavic and the other a translation of an English book into Russian.

ASSOCIATION: Moscow State University (Moskovskiy Gosudarstvennyy Universitet)

SUBMITTED: November 19, 1956.

AVAILABLE: Library of Congress

Card 3/3

GROMOV, V.A.; YELISHOV, A.G.

Current density distribution in a hollow cathode. Fiz.sbor. no.4:80-83 '58. (MIRA 12:5)

1. Fizicheskiy fakul'tet Moskovskogo ordena Lenina gosudarstvennogo universiteta imeni M.V.Lomonosova.
(Cathodes) (Electric currents)

GRUMOV, V. N.

[illegible] G. I.)

PHASE I BOOK EXPLOITATION SOV/5410

Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii. Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 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. Ivashev; G. S. Ikramova; A. Ye. Kiv; Ye. M. Lobanov, Candidate of Physics and Mathematics; A. I. Nikolayev, Candidate of Medical Sciences; D. Mishanov, 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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Candidate of Physics and Mathematics; Ya. Kh. Turdaliov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhanova.

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

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with 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; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

Transactions of the Tashkent (Cont.) SOV/5410

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

TABLE OF CONTENTS:

RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION IN ENGINEERING AND GEOLOGY

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S/081/61/000/024/006/086
B138/B102

AUTHORS: Grinev, V. S., Gromov, V. A., Korovina, I. A.

TITLE: Spectral analysis in the manufacture of radioactive preparations

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 61, abstract 24B414 (Tr. Tashkentsk. konferentsii po mirn. ispol'zovaniyu atomn. energii. Tashkent, AN UzSSR, v. 2, 1960, 377 - 382)

TEXT: The application of semi-quantitative emission analysis to impurities is described, together with absorption spectral analysis in the visual and ultraviolet ranges, for the identification and evaluation of labeled compounds in the production of radioactive preparations. In the first case an alternating current arc is used (generator ДГ-1 (DG-1)) and a quartz spectrograph with single-lens illumination ИСП-22 (ISP-22). The impurities in the preparation I^{131} (without carrier) were determined from the emission spectra, with a sensitivity of 0.0007%, and also rare-earth impurities in the oxides Ho_2O_3, Dy_2O_3 and La_2O_3. Using a type ВС-1 (VS-1)

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S/081/61/000/024/006/086
B138/B102

Spectral analysis in the ...

steeloscope and the results of the marking analysis of metals, the metallic impurities were determined, which were contained in the blocks used for irradiating the preparations. The following labeled compounds were identified by absorption spectral analysis in the visual and UV ranges: paraformaldehyde, Bengal rose, diiodotyrosine and diiodofluorescin. Control checks were also made in the production of labeled vitamin B_{12} and a number of compounds with S^{35}. [Abstracter's note: Complete translation.]

Card 2/2

GROMOV, V.A.; ZHULANOVA, Z.I.; ROMANTSEV, Ye.F.; [illegible], [illegible]; SOKOLOVA, G.N.

Changes in the composition of liver lipid fractions in animals exposed to radiation. Radiobiologiia 4 no.3:378-380 '64. (MIRA 17:11)