"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.P.

Automatic control of intraprovince through calls at the Leningrad Long-Distance Telephone Office. Vest.sviazi 20 no.3:16-18 Mr '60. (MIRA 13:6)

1. Glavnyy inzhener Leningradskoy mezhdugorodnoy telefonnoy stantsii.
(Leningrad--Telephone, Automatic)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

BUYNOV, A.V., kand. tekhn. nauk, MOROZOV, A.P., inzh.

Pay telephone for long-distance communication. Vest. sviazi 24 no.11:14 N '64. (MIRA 18:2)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MILEYKOVSKIY, Solomon Gerasimovich; MOROZOV, Arkadiy Petrovich; POLYAK, M.U., retsenzent; KHERN, K.D., retsenzent; ABOLITS, I.A., otv. red.; LANOVSKAYA, [illegible].M., red.

[Long-distance communication and multiplexing of municipal telephone networks] Dal'niaia sviaz' i uplotnenie gorodskikh telefonnykh tsepei. Moskva, Izd-vo "Sviaz'," 1964. 357 p. (MIRA 17:10)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A. P.

PA 237T67

USSR/Geophysics - Waves Dec 52

"Diversity of Waves," A. P. Morozov, Leningrad Div of State Inst of Oceanography

"Meteorol i Gidrol" No 12, pp 39-42

A variety of waves are always observed on disturbed surface of the sea; and in consequence of their extreme diversity, height, period, length and other elements can be considered as variable quantities.

237T67

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MORCZOV, A.P.

Use of the open-sea wave recorder VOM-42-TM in studying the action of waves. Trudy GOIN no.22:19-35 '52. (MIRA 12:1)
(Oceanographic instruments) (Waves)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.P.

Provisional instruction of work with the open-sea wave recorder VOM-47-TM. Trudy GOIN no.22:36-51 '52. (MIRA 12:1)
(Oceanographic instruments) (Waves)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.P.

Currents at the Liepaja lightship. Trudy GOIN no.41:46-53 '57.
(MIRA 11:9)

(Liepaja region--Ocean currents)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A P

PHASE I BOOK EXPLOITATION SOV/5463

Sovetskaya antarkticheskaya ekspeditsiya

Vtoraya morskaya ekspeditsiya na d/e "Ob'", 1956-1957 gg.; obshcheye opisaniye i nauchnyye rezul'taty (Second Marine Expedition on the Diesel-Electric Ship "Ob'", 1956-57; General Description and Scientific Results) Leningrad, Morskoy transport, 1959. 175 p. (Series: Its: [Materialy] no. 5) Errata slip inserted. 1,200 copies printed.

Sponsoring Agency: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

Ed. (Title page): I. V. Maksimov, Doctor of Geographical Sciences, Professor; Ed.: L. G. Kaplinskaya; Tech. Ed.: O. I. Kotlyakova.

PURPOSE: This book is intended for oceanographers, meteorologists, and hydrochemists.

Card 1/6

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

COVERAGE: The present [illegible], the fifth in a series of seven, is a [illegible] of articles (except for [illegible]) voted specifically to the oceanographic, meteorological, and hydrochemical findings of the Second Soviet Marine Expedition conducted on the diesel ship "Ob'" (I. A. Mar, Captain) during 1956-57. The first two articles outline the Expedition's organization and program, and provide a general account of its activities during the 223-day voyage, which covered more than 40,000 miles of the Atlantic, Antarctic, and Indian Oceans. The expedition was sponsored by the Arctic and Antarctic Scientific Research Institute of the Glavsevmorput' Ministerstva morskogo flota SSSR (Main Administration of the Northern Sea Route of the Ministry of the Merchant Marine of the USSR) as part of the International Geophysical Year program. Its purpose was to investigate 1) atmospheric processes in the Antarctic region and their effect on the earth's general circulation, 2) basic [illegible] in the distribution of waters in the southern oceanic zone, 3) ex[illegible] of the waters of the southern seas with the waters of the world ocean, 4) [illegible] structure of the sea bottom in the Antarctic region, and 5) the plankton, benthos

Card 2/6

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

[illegible], and [illegible] organisms of the Antarctic waters. [illegible] of the magnetic field of the earth were also made. The expedition, headed by Professor Prof. Vladislavovich Maksimov, Doctor of Geographical Sciences and Professor at the Leningradskoye vysshoye inzhenernoye morskoye uchilishche imeni S. O. Makarova (Leningrad Higher Marine Engineering School imeni S. O. Makarov), consisted of the following 8 scientific task forces: aerometeorological (headed by Leonid Gennadiyevich Sokolov), hydrological (Kirill Vladimirovich Moroshkin); geological (Aleksandr Petrovich Lisitsyn), hydrochemical (Aleksey Nikolayevich Bogoyavlenskiy), hydrobiological (Viktor Aleksandrovich Arsen'yev), geophysical (Nikolay Panteleymonovich Grushinskiy), geographic (Gravrila Dmitriyevich Rokhter), and hydrographic (Yuriy Aleksandrovich Gordeyev). A complete list of the names and affiliations of the 65 scientific and administrative members of the Expedition is contained in the first article. The articles were written by members of the Institut okeanologii Akademii nauk SSSR (Institute of Oceanology, Academy of Sciences USSR), Gosudarstvennyy okeanograficheskiy institut Gidrometsluzhby SSSR (State Oceanographic Institute of the Hydro-

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[illegible] of the USSR, [illegible] Vsesoyuznyy [illegible] Issledovatel'skiy institut rybnogo khozyaystva i okeanografii (All-Union Scientific Research Institute of Fisheries and Oceanography), and the Arctic and Antarctic Scientific Research Institute. There are no references.

TABLE OF CONTENTS.

Foreword [illegible]

Maksimov, I. V. Second Antarctic Marine Expedition 7

Man, I. A. Second Voyage of the Diesel Ship "Ob" [illegible]

Khromov, S. P. Atmospheric Circulation and Weather During the Course of the 1956-57 Voyage of the "Ob" 27

Gutnikov, V. P. Synoptic Processes in the Southern Hemisphere 34

Card 4/6

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Second Marine E[illegible] [illegible]

S[illegible], L. G. [illegible] Unit [illegible]

Mor[illegible], K. V. Hydrological Investigations [illegible]

Mor[illegible], K. V., and M. A. Bogdanov. Results Obtained With an Electromagnetic Current Meter in the Indian Ocean and in the Southern Part of the Pacific Ocean [illegible]

Morozov, A. P. Observations on Sea Disturbances [illegible]

Gordeyev, Yu. A. Hydrographical Works [illegible]

Tomashunas, B. Ya. Ice Observations [illegible]

Bogoyavlenskiy, A. N. Hydrochemical Investigations [illegible]

Card 5/6

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Second Marine Expedition (Cont.) SOV 5453

Kutyurin, V.M. Determining the Content of Chlorophyll in Sea Water and the Spectral Analysis of Phytoplankton Pigments 175

AVAILABLE: Library of Congress (G860, S56)

JA/dwm/be

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.P., mladshiy nauchnyy sotrudnik

Nature of sea waves in Antarctic waters. Inform. biul. Sov. antark. ekep. no.9:35-39 '59 (MIRA 13:3)

1. Leningradskoye otdeleniye Gosudarstvennogo okeanograficheskogo instituta.
(Antarctic regions--Waves)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.P.

Wave recording methods used on ships. Trudy Okean kom. 9:181-185 '60. (MIRA 14:1)

(Waves)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MILEYKOVSKIY, Solomon Gerasimovich; MOROZOV, Arkadiy Iet[illegible]; POLYAKOV, M.U., retsenzent; KHERN, K.D., retsenzent; ABOLITS, I.A., otv. red.; ULANOVSKAYA, N.M., red.

[Long-distance communication and multiplexing [illegible] municipal telephone circuits] Dal'niaia sviaz' i uplotnenie gorodskikh telefonnykh tsepei. Moskva, Izd-vo "Sviaz'," [illegible]. 357 p. (MIRA [illegible])

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.P.

Method of determining the curvature of the regulation direction. Trudy NIIVTa no.16:29-33 '64. (MIRA 18:4)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

L 04579-67 EWT(1) SOUB 19

ACC NR: AP6033147 SOURCE CODE: UR/0238/66/012/005/0571/0575

AUTHOR: Yankovs'kyy, V. D.--Yankovskiy, V. D.; Morozov, O. P.--Morozov, A. P.; Adamenko, M. P.--Adamenko, N. P.

ORG: Department of the Physiology of Hypoxic and Hyperoxic States, Institute of Physiology im. O. O. Bohomolets, AN UkrSSR, Kiev (Viddil fiziolohiyi hipoksychnykh i hiperoksychnykh staniv Instytutu fiziolohiyi Akademiyi nauk UkrRSR)

TITLE: Reanimation of dogs following clinical death due to radial acceleration

SOURCE: Fiziolohichnyy zhurnal, v. 12, no. 5, 1966, 571-575

TOPIC TAGS: reanimatology, reanimation, dog, experiment animal, clinical death, radial acceleration

ABSTRACT: Despite many statements in the literature that death resulting from exposure to large accelerations is accompanied by drastic changes in tissues and organs which are easily observed by gross and microscopic examination, N. N. Sirotinin felt that reanimation of animals succumbing to radial accelerations was fully feasible. The authors conducted a series of experiments under his direct supervision and found that dogs can be reanimated following clinical death resulting from radial accelerations of up to 40 G by the method of artificial circulation devised by Bryukhonenko and modified by N. P. Adamenko. The longest periods of clinical death due to radial accelerations following which full restoration of functions could be

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L 04579-67

ACC NR: AP6033147

attained varied from 15 min 45 sec to 19 min 30 sec, which once more explodes the erroneous notion that reanimation cannot succeed following clinical death of more than 5—8 min duration. The reanimated dogs live for years (observations have lasted 3 years), bear normal litters, and differ in no respect fron normal dogs in behavior and work capacity. Sinantrin, a new Soviet heparin analog, was found to be a fully satisfactory anticoagulant during reanimation by the artificial circulation method, even following the acute clinical death produced by the experiment. Orig. art. has: 1 table.

SUB CODE: 06/ SUBM DATE: 15Jun66/ ORIG REF: 005/ ATD PRESS: 5100

Card 2/2 vmb

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ADAMENKO, N.P. [Adamenko. M.P.]; GERYA, Yu.F. [Herla, IU.F.]; MOROZOV, A.P. [Morozov, O.P.]; YANKOVSKIY, V.D. [IAnkovs'kyi, V.D.]

Basic results of S.S.Briukhonenko's artificial blood circulation and its recent variations in experimental reanimation of a dead organism. Fiziol.zhur. [Ukr.] 11 no.4:470-475 Jl-Ag '65. (MIRA 18:10)

1. Laboratoriya gipoksicheskikh i giperoksicheskikh sostoyaniy Instituta fiziologii im. A.A.Bogomol'tsa AN UkrSSR, Kiyev.

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L 64466-65 ENT(d)/ESS-2

ACCESSION NR: AR5006553 S/0274/64/000/012/V026/V026
621.397.7

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Sv. t., Abs. 12V157

AUTHOR: Vershkov, M. V.; Kosarev, I. A.; Morozov, A. P.; Onishchenko, T. A.

TITLE: Prospects for using facsimile transmission in the navy

CITED SOURCE: Informats. ab. Tsentr. n.-i. in-t morsk. flota, vyp. 109, 1964, 56-71

TOPIC TAGS: facsimile transmission, navy facsimile service

TRANSLATION: The principles of facsimile transmission and reception are reported as well as the parameters of Soviet-made facsimile equipment (FTA-K, "Ladoga", FTA-P, FTA-P2, "Rekord", "Prizma", "Arfa", and "Neva"). Steps for increasing noise immunity in the radio transmission are considered. The FTA-K transmitter and "Ladoga" receiver are recommended for transmission of meteo maps and other large-frame graphic material in the navy. A special attachment connected between the transmitter output and the VChD-100 exciter was developed for radio and wire channels. The attachment isolates the picture frequency up to 1400 cps from FM facsimile signals having a central frequency of 1900 cps and a deviation of

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ACCESSION NR: AR5006553

± 400 cps for radio transmission, or having a central frequency of 2300 cps and a deviation of ± 300 cps for wire transmission. A block diagram of the attachment is presented. It is noted that in foreign countries dozens of radio stations are in operation which transmit the facsimile weather maps with the basin specific features intended for ships. It is held expedient to organize such facsimile transmissions in the USSR and to equip all navy ships with facsimile receivers. Some information is supplied on the technical and economic efficiency of using facsimile equipment in the navy. Three illustrations.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

1. MOROZOV, A. R.

2. USSR (600)

4. Stock and Stockbreeding--Study and Teaching

7. Disseminating progressive practice in animal husbandry, Sots. zhiv., 15, No. 2, 1953.

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

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

AFANAS'YEVA, Nina Ivanovna; MOROZOV, Aleksandr Rudol'fovich; LEBEDEV, P.B., redaktor; YUSFINA, N.L., tekhnicheskiy redaktor

[The club and socialist competition among collective farm workers] Klub i sotsialisticheskoe sorevnovanie kolkhoznikov. Moskva, Gos. izd-vo kul'turno-prosvetitel'noi lit-ry, 1956. 58 p. (MLRA 9:12)
(Collective farms) (Socialist competition)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

TRAPEZNIKOV, A.A.; MOROZOV, A.S.; PETRZHIK, G.G.

Normal stresses in structurized colloidal systems, and the effect of the thixotropic recovery of structure on them. Koll. zhur. 22 no. 6:761-762 N-D '60. (MIRA 13:12)

1. Institut fizicheskoy khimii AN SSSR, Moskva Laboratoriya oleokolloidov i monosloyev.
(Colloids)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

S/020/60/133/003/030/031/XX
B004/B064

AUTHORS: Trapeznikov, A A, Morozov, A S, and Petrznik, G G

TITLE: The Dependence of Normal and Shearing Stresses on the Extent of Deformation During the Transition of the Aluminum Naphthenate Gel From the State of Rest Into Steady Flow

PERIODICAL: Doklady Akademii nauk SSSR, 1960 Vol. 133, No. 3, pp. 637 - 640

TEXT: The authors aimed at a quantitative determination of the development in time of normal stress as a function of deformation during a continuous transition from the state of rest into steady flow. The experiments were conducted with a 2% solution of aluminum naphthenate gel in Vaseline oil. To render possible a simultaneous measurement of normal stress P_n and shearing stress P_τ, a rheogeniometric apparatus supplementing the plasto-viscosimeter was designed (Fig. 1). In principle, it consisted of a flat cone combined with a disk. The perpendicular displacement of the disk under the action of the normal force F and its rotation under the action of the

Card 1/3

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

The Dependence of the Normal and Shearing Stresses on the Extent of Deformation During the Transition of the Aluminum Naphthenate Gel From the State of Rest Into Steady Flow

S/020/60/133/003/030/031/XX
B004/B064

torque of the tangential force F_τ were measured with a spring dynamometer and recorded with an electronic potentiometer of the type ЭПП-09 (EPP-09) or an МПО-2 (MPO-2) loop oscilloscope. Fig. 2 shows P_n and P_τ as a function of deformation, ε, at various rates of deformation. The viscosity determined from $\eta = P_{\tau s}\varepsilon$ (the subscript s denotes steady flow), falls, as a rule with rising $\dot{\varepsilon}$ (Fig. 3). Fig. 2 indicates that P_n and P_τ have a maximum. T. G. Shalopalkina and A. A. Trapeznikov obtained the same result in 1955, as may be seen from Fig. 4. The experimental data show that at $\varepsilon > 1700$ the structure of the system undergoes changes exerting a stronger effect on normal stress than on tangential stress. The normal stress depends on the entanglement of the particles. The longer and the more entangled they are, the greater is F_n in the stress. The second maximum P_{n2} and $P_{\tau 2}$ is due to the destruction of structural elements that, after the destruction of the initial network, were formed by orientation in the flow. There are 4 figure

Card 2/3

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

The Dependence of the Normal and Shearing Stresses on the Extent of Deformation During the Transition of the Aluminum Naphthenate Gel From the State of Rest Into Steady Flow

S/020/60/133/003/030/031/XX
B004/B064

and 13 references 7 Soviet, 5 US, 3 British, 1 Dutch and 5 German.

ASSOCIATION Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

PRESENTED March 24, 1960 by S I Vol'fkovich, Academician

SUBMITTED March 18, 1960

Card 3/3

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

S/120/62/000/003/039/048
E039/E135

AUTHORS: Morozov, A.S., Petrzhik, G.G., and Trapeznikov, A.A.

TITLE: Rheogoniometer with freely suspended discs and continuous recording for structured colloidal systems and polymer solutions

PERIODICAL: Pribory i tekhnika eksperimenta, no.3, 1962, 153-157

TEXT: A rheogoniometer for the investigation of normal and tangential forces in colloidal systems and polymer solutions with their deformation is described. The apparatus consists of a normal goniometer arrangement with a space for the investigation of deformations between a rotating cone and disc. Angles between cone and disc for two interchangeable cones are 3° 55' and 1° 52' 30". The cones are truncated by 0.04 mm. Results are given for a 1 solution of aluminium naphthalate in vaseline grease. An oscillograph trace shows the simultaneous growth in time of the normal force acting along the axis of the rotating cone and the value of the torsional moment of the displacement force. Measurement of the dependence of the value of the normal force on radius of the filled part of the cone space showed that

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Rheogoniometer with freely ... S/120/62/000/005/036/048
E039/E135

$$F_0 = 1/2\ P_0\ \pi\ r^2$$

where P_0 is the normal force per unit length at radius r. A capacity pickup is used to obtain signals showing the growth of the deformation process from a condition of rest to uniform flow. The influence of non-parallel axes for the discs and cones is investigated for various values of clearance between them.

There are 7 figures.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry, AS USSR)

SUBMITTED: September 12, 1961

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A. S.

Mbr., All-Union Inst. Fodder Res. im. V. R. Vil'yams, Moscow, -1939-49-.

"Effect of Temperature upon the Reversible Activity of Invertase in Forage Grasses as Dependent on Their Cold and Heat Resistance," Dok. AN. 23, No. 9, 1939;

"Storing of Carbohydrates by Forage Grasses," ibid., 24, No. 4, 1939;

"The Biological Importance of Saccarase in Meadow Grasses," Biokhim.,4, No. 1, 1939;

"Influence of Temperature in Various Phenophases on Reversible Action of Invertase in the Fodder Grasses as Related to Their Resistance to Heat," Dok. AN, 26, No. 3, 1940;

"Synthetic and Hydrolytic Action of Invertase at Various Hours of the Day in BROMUS INERMIS Leyss," ibid.;

"Influence of Gramacidin S and Phytoncides of Onion and Garlic on the Synthesizing and Hydrolytic Activity of Red Clover Invertase," ibid., 70, No. 2, 1950.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Effect of sodium chloride and sodium sulfate on sugar content in melons A. S. Morozov. *Compt. rend. acad. sci. U. R. S. S.* 21, 279-81 (1938). The addn. of [illegible] mol. NaCl or Na_2SO_4 to soil in which watermelons were growing [illegible] and [illegible] The addn. of [illegible] from [illegible] and 3 from [illegible] Muskmelons were more sensitive to the salinity of the soil than the water melons. The sucrose content of the muskmelons, however, was increased by the salts. C. K. Horner

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Biological importance of invertase in meadow grasses

A. S. Motozov, *Biokhimiya* 4, 17-22 (1939). The relation between enzymic properties and the ability of meadow grasses to accumulate carbohydrates was investigated by the method of vacuum infiltration. The ratio of synthesis to hydrolysis was in practically all cases greater than unity, and accounted for the preponderance of sucrose over monosaccharides. H. Cohen

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

OA

11D

Dynamics of reserve carbohydrates in the most perennial grasses. S. P. Smelov and A. S. Morozov. *Sovet. Botan.* 1939, No. 5, 18-30; *Herbage Abstracts* 10, No. 3, 145 (1940). The amts. of reserve substances in aboveground and underground organs varied similarly in all species with phenological phases within the vegetative period and with plant age. The amt. of carbohydrates in over ground parts fell with the beginning of flowering, and increased with the age of the plants. S. Soloveichik

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

CA

Sodium chloride as a fertilizer for sugar beets. M. I. Delemenchuk and A. S. Morozova. *Tekhnika Kul'tury* 1939, No. 10, 20-3. *Khim. Referat. Zhur.* 1940, No. 6, 59. The favorable effect of NaCl on sugar beets is attributed to improvement by Na of the assimilation of N and P and facilitation of the movement of K and carbohydrates. No unfavorable effect on the physical properties of the soil was produced by moderate amts. of NaCl. W. R. Hom.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Effect of temperature on the reversible activity of invertase in forage grasses as dependent on their cold- and heat-resistance. A. S. Monozov (Compt. rend. Acad. Sci., U.R.S.S., 1939, 23, 949—951).—The synthesizing and hydrolysing activity of invertase has been studied at intervals of 10° from −5° to 50° in hibernating leaves of *Bromus inermis* and of *Lolium perenne* taken from under the snow. Depending on the osmotic pressure the cells are infiltrated with 0·1—0·2M-sucrose for determinations of hydrolysis and of invert sugar for determination of synthesis. After infiltration the plants are kept for 3 hr. at the corresponding temp. In *B. inermis* the temp. max. are shifted towards low temp.; this is particularly noticeable in plants which have been temp.-hardened. The hydrolysing action of invertase suggests three max. at −5°, 10°, and 50° respectively and the synthetic action has max. at −5° and 20°. At low temp. synthesis prevails markedly over hydrolysis. At −12° the leaves are iced and there is neither synthesis nor hydrolysis. An entirely analogous situation is observed in hibernating leaves of *L. perenne*. In the leaves of *L. perenne* grown under greenhouse conditions the temp. max. are shifted towards high temp. The hydrolysing action of invertase has two max. at 30° and 50°

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CA

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

12

Storing of carbohydrates by forage grasses. A. S. Mogutzov.—*Compt. rend. acad. sci. U. R. S. S.* 24, 407-9(1939)(in English).—Investigations of *Bromus inermis* Leyss., *Lolium perenne*, *Festuca pratense*, and some other forage grasses, cleaned, killed, dried, and ground, gave the following results (figures given in tables): (1) Carbohydrates accumulate chiefly in roots, stems, shortened internodes and leaves. The carbohydrates stored are chiefly inulin-like substances and hemicellulose. (2) Sucrose always predominates over monosaccharides, its increase being attended by an increase in the total content of carbohydrates. (3) The carbohydrate content increases with the growth of the plant, attaining a max. at flowering. 4 references.

A. H. Krappe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

(A) Synthetic and hydrolytic action of invertase at various hours of the day in *Bromus inermis*, Leyss. (B) Influence of temperature in various phenophases on reversible action of invertase in the fodder grasses as related to their resistance to heat. A. S. Komarov (Compt. rend. Acad. Sci. U.R.S.S., 1946, [illegible], 175—176, 177—179).—(A) The synthetic and hydrolytic activities of invertase are correlated with the sucrose and invert sugar content of the leaves.

(B) The synthetic action of invertase predominates at low temp. (10°) and in the early stages of development, hydrolysis at higher temp. (up to 50°) and in the later stages.

R. L. E.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.S.

25080 MOROZOV, A.S. Dinamika Nakopleniya Zapasnykh Veshchestv V Usloviyakh Ogranicheniya Protsessov Kushcheniya. V Sb: Voprosy Kormodobyvaniya. Vyp. 2.M., 1949, S. 24-25

SO: Letopis', No. 33, 1949

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

11D

Effect of gramicidin S and the phytocides of onion and garlic on the synthetic and hydrolytic activity of red clover invertase A. S. Morozov *Doklady Akad. Nauk S.S.S.R.* 70, 269-70(1950)—Infiltration of gramicidin S, onion, or garlic suspensions into the cells of red clover plant, followed by storage at 30° leads to Gramicidin causes decline of synthetic activity almost to zero, and a decline of the hydrolytic activity by 2 fold. The phytocides on the other hand cause an increase of both synthetic and hydrolytic activity of the invertase, with predominance of the latter. The increases range from 200% to nearly 800%.

G. M. Kosolapoff

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.S.

Effect of methods of cutting and utilization on the carbohydrate metabolism in meadow grasses. Dokl.Akad.sel'khoz. 23 no.11: 17-19 '58. (MIRA 11:12)

1. Vsesoyuznyy sel'skokhozyaystvennyy institut zaochnogo obrazovaniya. Predstavlena akademikom I.V.Larinym.
(Grasses) (Carbohydrate metabolism)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A. S., Doc Biol Sci (diss) -- "The physiological-biochemical principles of using hay harvests and pastures". Leningrad, 1959. 21 pp (Min Agric USSR, Leningrad Agric Inst), 150 copies (KL, No 25, 1959, 130)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.S.; CHEL'TSOVA, L.P.; LEBEDEVA, N.I.

Physiological characteristics of the development of spring, dual-purpose and winter wheat sown in spring and in fall. Trudy Inst. gen. no.30:119-128 '63. (MIRA 17:1)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

L 14108-66 EWT(1)/ECC GW

ACC NR: AR5016460 SOURCE CODE: UR/0169/65/000/006/D026/D026

AUTHOR: Karasik, A.M.; Morozov, A.S.

ORG: none

53
B

TITLE: Data obtained in using a proton-processing magnetometer during an aeromagnetic survey over the Arctic Ocean

12,55 12,44,55

SOURCE: Ref. zh. Geofizika, Abs. 6D185

REF SOURCE: Sb. Geofiz. priborostr., vyp. 19, L., Nedra, 1964, 74-85

TOPIC TAGS: magnetic field, magnetic field intensity, oceanographic instrument, magnetic measurement

TRANSLATION: The results are examined of experiments conducted during an aeromagnetic survey over the Arctic Ocean of a proton-processing magnetometer (PPM) as an absolute attachment to the relative aeromagnetometers AM-13 and AMM-13. The PM was mounted on a standard electronically computing frequency meter, with added current nodes, giving a temperature (T) calculation accuracy of ±2 during a 5 sec. measuring cycle. The intensity of the magnetic field was indicated on the light screen in gammas. The PPM was used at low negative temperatures. With a fixed bracing of the transmitter 230 cm behind the fuselage, the range of the deviation from the course did not exceed 6 , according to data given by air and ground control. Multiple surveys of the control

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L 14108-66

ACC NR: AR5016460

route showed a high degree of agreement in the PPM data, with a maximum deviation from the median of 4.5γ. In comparing the continuous registry of ΔT by AM-13 and AMM-13 with PPM records registered during 30 minutes, a complete agreement between the computations was established. Causes were found for airplane interferences distorting PPM readings. The merits and shortcomings of PPMs were evaluated. Deductions were made and recommendations offered on the methods and areas for PPM use in geomagnetometry. A. Karasik.

SUB CODE: 08

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

KARASIK, [illegible]; MOROZOV, A.S.

Practice in using a proton-precision magnetometer in the aeromagnetic surveying of the Arctic Ocean. Geofiz. prib. no.19:74-85 '64. (MIRA 18:9)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

DECEASED

MOROZOV, A. T.

1964

SOIL

C. '63

UNDERGROUND WATER

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A. V.

7211. Influence of the intensity of thinning on the growth of a population of *Daphnia*. A. V. Morojov *Nauch. Eshegod. Saratov Univ.*, 1955, 286—288; *Referat. Zh. Biol.*, 1956, Abstr. No. 90834.—By observation of the free growth of a population of *Daphnia* the existence of two periods—progressive and regressive—is apparent. A formula characterising the growth of the crustacea in the first period is derived empirically: $\lg. (y + 76) = 0{\cdot}11153x + 1{\cdot}72110$, where x = the age of the population, y = quantity of *Daphnia*. Prognosis of the magnitude of the increase of the population is given by the equation: $\lg (y_2 + 76) = \lg (y_1 + 76) + 0{\cdot}11155$, where y_1 = the quantity of crustacea on any day, y_2 = the quantity on the following day. It is shown that the increase of the population does not cease during daily thinnings of up to 40% of the *Daphnia*, and its rate is in inverse proportion to the size of the thinning. With the withdrawal of half or the larger part of the crustacea their quantity diminishes and later stabilises at a fixed level. Experiments fully confirmed the calculated data. With *Daphnia* culture, where it is necessary to maintain the growth of the population, thinnings must not exceed 50%. Best results are obtained by 10—20% daily thinnings. (Russian) C. PRINGLE

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.V.

Morphological characteristics of the roaches Rutilus rutilus natio bergi and Rutilus frisii Nordmann and their hybrids in the Kumbashinka River. Uch. zap. Sar. un. 64:159-182 '59. (MIRA 13:9)
(Kumbashinka River--Roach (Fish))

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MAKSIMOVSKAYA, I.S., kand.tekhn.nauk; MOROZOV, A.V., inzh.

Operation of oil vacuum pumps with a ballast gas device. Sbor. st.NIIKHIMMASH no.24:71-76 '58. (MIRA 12:1)
(Pumping machinery) (Vacuum apparatus)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AP6004222 (A) SOURCE CODE: UR/0331/65/000/009/0025/0027

AUTHOR: Morozov, A. V.

ORG: MLTI

TITLE: Gas turbines for the lumber industry

SOURCE: Lesnaya promyshlennost', no. 9, 1965, 25-27

TOPIC TAGS: turbine engine, turbine regenerator, gas turbine engine

ABSTRACT: The author reviews the operating principles and design of gas turbine generators and discusses the need for such generators, which use wood waste as fuel, especially in the lumber producing areas. 6B type gas turbines with high compression gas generator units can convert wood wastes into gas to be used as a fuel. The study provides modification specifications for this combined unit, its fuel requirements, operational data, and power output, proving the feasibility of building a high compression gas generator unit combined with gas turbines for the production of electric power. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 13/ SUBM DATE: none

UDC: 621.311.23

Card 1/1

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

BARDIN, V.V., inzh.; MOROZOV, A.V.

Young inventors and efficiency promoters at the Orekhovo Cotton Combine. Izobr.v SSSR 3 no.1:30-32 Ja '58. (MIRA 11:1)
(Orekhovo-Zuevo--Textile workers)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A. V.; TUGEYEV, K. S.; BORODOVSKIY, N. A.

Development of an electric charge in mouline yarns during rewinding on automatic reels. Tekst. prom. 23 no.3:42-45 Mr '63. (MIRA 16:4)

1. Sotrudniki kafedry fiziki Leningradskogo tekstil'nogo instituta (LTI) imeni S. M. Kirova.

(Winding machines) (Electrostatics)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A. V.

Morozov, A. V.

"The use of legumes in 'semechkovyye' fruit orchards." Min Higher Education USSR. Fruit and Vegetable Institute I. V. Michurin. Michurinsk, 1956. (Dissertation for the degree of Candidate in Agricultural Sciences)

Knizhnaya letopis
No. 15, 1956. Moscow

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.V.

Curves of growth, weight gain, and the rate of increase. Vop. ikht. 3 no.2:408-411 '63. (MIRA 16:7)

1. Saratovskiy gosudarstvennyy universitet imeni N.G. Chernyshevskogo.

(Ichthyological research)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

KUVSHINOV, G.Ye.; MOROZOV, A.V., BORISOV, V.I., otv. red.

[Calculation of direct amplitude and phase compounding systems of marine synchronous generators. Raschet sistem priamogo amplitudno-fazovogo kompaundirovaniia sudovykh sinkhronnykh generatorov. Vladivostok, Primorskoe kn. izd-vo, 1963. 35 p. (MIRA 18:3)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A. V.

Tungstate cathodes. A. I. Mel'nikov, A. V. Morozov and N. Tyurmina. U.S.S.R. 107,412, Oct. 25, 1957. Film-pressed cathodes are made with a base of Ba_2CaWO_6.
M. Hosch

Distr: 4E4j

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.V.

109-3-3/23

AUTHORS: Mel'nikov, A.I., Morozov, A.V., Popov, B.N. and Maklakov, A.A.

TITLE: Pressed Cathode Based on Barium-calcium Tungstate (Pressovannyy katod na osnove bariy-kal'tsiyevogo vol'framata)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol.III, No.3, pp. 322 - 328 (USSR)

ABSTRACT: The active material which is employed in the preparation of pressed film-type cathode should have the following characteristics: capacity to produce the necessary quantity of the activator during its interaction with the reducing agent; good stability under normal atmospheric conditions; a low gas-absorption capacity and a low evaporation rate. The above requirements are, to a large extent, fulfilled by barium tungstate, Ba_3WO_6. This substance can be prepared from pure barium carbonate and tungsten oxide, the chemical reaction being in the form:

$$3BaCO_3 + WO_3 = Ba_3WO_6 + 3CO_2 \qquad (1).$$

Properties of the cathode can be further improved by using

Card1/3

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barium-calcium tungstate instead of Ba_3WO_6. This can be obtained by adding into the mixture of barium carbonate and tungsten oxide an appropriate quantity of calcium carbonate. The reactions are then in the form represented by Eqs. (2), (3) and (4). The resulting material was used in two types of pressed, experimental cathodes (see Figs 2a and 6). The cathodes were in the form of molybdenum cylinders; the active mixture consisted of 90% tungsten, 9.5% tungstate and 0.5% aluminium (by weight). The cathodes were mounted in special diodes (see Fig.3) which were fitted with special cooling copper anodes. The distance between the cathodes and the anodes was 0.4 to 0.6 mm. The experimental results are shown in Figs. 4, 5, 6 and 7. Fig. 4 shows voltage current characteristics of the diodes taken at various cathode temperatures; the two curves of Fig. 4a were taken under pulse conditions, while the curves of Fig. 4б were measured under static conditions. Fig. 5 shows the static emission current of a tube as a function of time; Curve 1 refers to the cathode made of barium tungstate, while Curve 2 illustrates the emission of a barium-calcium tungstate cathode. Fig. 6 illustrates the influence of hydrogen-poisoning on barium-calcium tungstate cathodes (full

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Pressed Cathode Based on Barium-calcium Tungstate

curves illustrate the poisoning effect, while 'dotted' curves illustrate the process of the reactivation of the cathode). Secondary electron emission of the cathodes was also investigated at temperatures of 800, 900, 1 000, 1 100 and 1 200 °C and the resulting curves are shown in Fig.7. From the data obtained, it is concluded that the barium-calcium tungstate cathodes can produce stable emission densities of 6 to 7 A/cm^2 at operating temperatures of 1 130 to 1 150 °C; the cathodes have a life of about 1 000 hours, provided the anodes of the tubes are properly cooled.
There are 7 figures, and 7 references, 5 of which are English, 1 French and 1 Russian.

SUBMITTED: April 10, 1957

AVAILABLE: Library of Congress

Card 3/3

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

SOV/109-3-8-[illegible]/18

AUTHORS: K[illegible], M.L., Mel'nikov, A.I., Morozov, A.V., [illegible], [illegible], Sobolevskaya, R.B., Tsarev, B.M. and Shul'man, A.R.

TITLE: Thermionic Properties of Barium Tungstate (Termo-elektronnyye svoystva vol'framata bariya)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, [illegible], pp. 1010 - 101[illegible] (USSR)

ABSTRACT: The work described was concerned with the investigation of the thermionic emission of barium tungstate and Ba_2CaWO_6. The investigation was undertaken since it was thought that the resulting data might be useful in explaining the operation of the pressed cathodes and other cathodes which contain barium tungstate. The investigations were carried out on directly [illegible] cathodes which were based on tungsten and molybdenum cores. The measurements were made on special experimental [illegible], fitted with protective anodes. The cathode temperature was determined by measuring the change in the [illegible] of the core. All the measurements were [illegible] static conditions. The coating of Ba_3WO_6 and Ba_2CaWO_6 were effected by two methods: a) a filament of the

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core metal was passed through a drop of the coating substance mixed with a binder; b) cataphoretic coating was used. In the first case, coarse-grain coatings were obtained, while the second method permitted obtaining the particles having a diameter of about 1 - 5 μ. The cathodes were de-gassed by heating up to 1 250 °K for the duration of 1 - 2 hours without taking any current.

This processing resulted also in a partial activation of the cathodes. Further activation of the cathodes (by heating and taking the current) was then carried out. During the preliminary activation, it was found that the work function (as measured from the Richardson curves) was of the order of 2.2 eV, while after the final activation, the work function dropped to 1.2 - 0.5 eV. The characteristics of a barium-tungstate cathode after final activation are shown in Figure 2. The emission current and the work function of the same cathode for various activation temperatures are given in Table 1. On the other hand, it was found that the cathodes of La_2CaWO_6 had very low emission densities. These were of the order

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$\mu A/cm^2$, as can be seen from Table 2. By comparing the results of Table 2 with those for Ba_3WO_6 (given in Table 3), it is seen that the emission of the latter is about 100 times higher than that of the former. It was found that the curve:

$$\lg \frac{1}{T^2} = f\left(\frac{1}{T}\right)$$

[illegible] of barium tungstate consists of three regions (Figure 4). At low temperatures (below 300 °K), the curve has the highest slope; the work function [illegible] is [illegible] 1.3 eV. In the regions of temperatures from 900 - 1 250 °K, the work function has a value of about 0.[illegible] - 0.7 eV. Finally, at temperatures above 1 250 °K, the current decreases as a function of temperature and the slope of the curve cannot be regarded as representing the work function.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Thermionic Properties of Barium Tungstate SOV/109-3-8-5/18

There are 5 figures, 5 tables and 4 references, 3 of which are Soviet and 1 English.

SUBMITTED: January 29, 1958

Card 4/4 1. Barium tungstates--Properties 2. Thermionic emission--Analysis
3. Cathodes--Performance

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

AUTHORS: Mel'nikov, A. I., Morozov, A. V., Popov, B. N., Maklakov, A. A. 48-22-5-18/22

TITLE: Pressed Cathodes of Aluminates and Tungstates of Barium and Calcium (Pressovannyye katody na osnove alyuminatov i vol'framatov bariya-kal'tsiya) (Data From VIII. All Union Conference on Cathode Electronics, Leningrad, October 17-24, 1957) (Materialy VIII Vsesoyuznogo soveshchaniya po katodnoy elektronike, Leningrad, 17-24 oktyabrya 1957 g.)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1958 Vol. 22, Nr 5, pp. 613-621 (USSR)

ABSTRACT: Recently a demand for new types of cathodes has risen, as the oxide cathodes fail in the acception of emission currents of high density (mostly in high-frequency apparatuses). Therefore the idea of uniting the cathode space, where the active substance is formed, with the sponge by means of a direct introduction of barium combinations into the pores of the latter, has been put forward. There are a) impregnated (Ref 1) and b) pressed cathodes (Ref 2). Figure 1 demonstrates the construction of a pressed cathode. It is a molybdenum cylinder, into which a mixture of the active substance, tungsten powder and the reducing substances has been pressed. At the working

Card 1/3

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Pressed Cathodes of Aluminates and Tungstates of Barium and Calcium 48-20-5-18/22

temperature of the cathode, the interaction of the components of this mixture leads to the formation of free barium and to the activation of the cathode. As the barium compounds tested so far had proved unsatisfactory (reference 3,4), the authors set themselves the task of testing the compounds resulting from the interaction of alkaline earth metal oxides of barium and calcium with acidity- -and amphoteric oxides. The investigations yielded the following conclusions: 1. The pressed cathodes mentioned in the title permit an uninterrupted emission up to a current density of 8 A cm^{-2} if the time of operation exceeds 1000 hours. 2. The mechanical and electrical stability of the cathodes is satisfactory, they are easily enough reactivated after the poisoning. 3. Their production is simpler than that of the L-cathodes. 4. The emission properties and the life of the cathodes depends on the properties of the active substance. Here Barium-calcium tungstate is superior to aluminates because

Card 2/3

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

Pressed Cathode: of Aluminates and Tungstates of Barium and Calcium 48-22-5-18/22

of its stability in air. 5. The tungstate mentioned last makes possible a longer time of operation than the barium tungstate. 6. Preliminary tests have shown that the influence of considerable changes in the concentration of tungstate in the emitter on the emission currents of the cathodes is insignificant. A final interpretation of this phenomenon has not been given yet. S. D. Uman, Z. V. Kukushkina, L. G. Sherstnev, Ye. P. Ostapchenko, A. A. Gugnin, A. I. Figner and the first two authors joined in the discussion. There are 9 figures and 9 references: 2 of which are Soviet.

1. Cathodes (Electron tube)--Design 2. Cathodes (Electron tube) --Materials 3. Cathodes (Electron tube)--Effectiveness 4. Barium aluminates--Applications 5. Calcium aluminates--Applications 6. Barium tungstates--Applications 7. Calcium tungstates--Applications

Card 3/3

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

SOV/137-59-4-7945

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 4, p 84 (USSR)

AUTHORS: Maklakov, A.A., Mel'nikov, A.I., Morozov, A.V., Ostapchenko, Ye.P.

TITLE: A Method of Obtaining Tri-Barium Tungstate

PERIODICAL: Avt. sv. USSR 113045, 15.08.58

ABSTRACT: The described method of obtaining Ba_2WO_6 yields products of greater homogeneity and higher purity than previously known methods. In consists in the joint precipitation of Ba tungstenate and Ba carbonate from an aqueous solution of $(NH_4)_2WO_4$, $(NH_4)_2CO_3$ and $Ba(NO_3)_2$. Three weight portions of $(NH_4)_2WO_4$ and $(NH_4)_2CO_3$ are dissolved in 10 weight portions of water, the solutions are mixed, heated up to 60°C and a solution of 1 weight portion $Ba(NO_3)_2$ and 7 weight portions of water, heated up to 60°C, is added. The precipitate is filtrated, dried for 1 hour at ~100°C and roasted at ~1,400°C. Hereby a $BaWO_4 + 2BaCO_3 = Ba_3.WO_6 + 2CO_2$ reaction takes place. The yield of the finished product is 96 - 98% of the theoretical amount.

Ye.Z.

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MEL'NIKOV, A. I.; MOROZOV, A. V.; SOBOLEVSKAYA, R. B.; SHUL'MAN, A. R.

Thermionic emission from barium tungstate. Fiz. tver. tela 2 no.4: 704-708 Ap '60. (MIRA 13:10)
(Barium tungstate) (Thermionic emission)

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9,3120
S 2200

25975
S/539/60/000/031/008/014
E021/E406

AUTHORS: Kovtunenko, P.V., Kondakov, B.V., Morozov, A.V. and Mel'nikov, A.I.

TITLE: Evaporation of alkaline earth metals from cathodes prepared on a barium-calcium tungstate base

PERIODICAL: Moscow. Khimiko-tekhnologicheskiy institut. Trudy, No.31, 1960. Issledovaniye v oblasti khimii i tekhnologii elektrovakuumnykh materialov, pp.55-59

TEXT: The rate of evaporation of alkaline earth metal from pressed cathodes prepared from refractory salts of these metals is important. The cathodes used in the present investigation were prepared by pressing a mixture of tungsten, aluminium and barium-calcium tungstate into a molybdenum cylinder at a pressure of 20 tons/cm^2 and sintering at 1950°C. As the cathode is used at 1100 to 1200°C free alkaline earth metal is formed as follows:

$$2Ba_3WO_6 + 6Al = 3Ba + 2W + 3BaAl_2O_4$$

Some of the free barium formed immediately evaporates and the rest migrates along the emitter and evaporates gradually. The

Card 1/3

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apparatus used to determine the rate of evaporation was a high-vacuum system and the minimum quantity of barium which could be detected was 5×10^{-9} g. After evacuating the apparatus, the cathode was activated for 30 minutes at 1150 to 1200°C and then the rate of evaporation of barium was determined. Fig.4 shows typical curves of the rate of evaporation of Ba (in g/hr) against time of working of the cathode (hours). The rate of evaporation is highest in the first few hours. With increased time, the rate decreases and tends to a constant value. There are 4 figures, 2 tables and 4 references: 3 Soviet and 1 non-Soviet. The reference to an English language publication reads as follows: E.S.Rittner, W.C.Rutledge, R.H.Ahlert, J.Appl.Phys., 28, No.12, 1468 (1957).

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9.3120
26.2531

S/109/62/007/009/012/018
D409/D301

AUTHORS: Kovtunenko, P.V., Morozov, A.V., Mel'nikov, A.I., and Gusakov, V.V.

TITLE: Evaporation of alkaline-earth metals from rhenium-barium cathodes

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 9, 1962, 1593 - 1597

TEXT: The authors studied the rate of evaporation of barium and of barium oxide from rhenium-barium cathodes, as a function of the period of operation of the cathode; the change in the emission properties of the cathode was also studied. The present investigation was prompted by the satisfactory results, obtained in replacing tungsten by rhenium as a cathode material. It was found that the new (rhenium-barium) cathode gives the same emission-current density (5-6 A/cm^2) as the tungsten-barium cathode, while operating at lower temperatures; the total rate of evaporation of barium (or of calcium from its base) and of its compounds, is of the same order of magnitude as that from tungsten-barium cathodes. The rate of

Card 1/2

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evaporation of the free barium (calcium), was determined by a chemical method, described by the authors in an earlier work. The total amount of free barium and of its oxides was determined by a spectral method, developed by S.A. Savostin. The experiments were conducted by means of an experimental diode with a watercooled copper-anode. It was found that the rate of evaporation of alkaline-earth metals from cathodes which belong to different lots, may differ greatly from lot to lot; this is apparently due to the previous history of the specimens. The dependence of the rate of evaporation on the period of operation, is the same for rhenium-barium cathodes as for tungsten-barium cathodes. It was found that in many cases, but not always, a drop in the rate of evaporation is accompanied by a drop in emission; this indicates the need for further experimental evidence. The fraction of free barium, evaporated from the cathode, did not exceed 10 % of the total amount of evaporated barium; but the amount of barium which is oxidized during the process, was not determined in the experiments. There are 4 figures and 1 table.

SUBMITTED: March 19, 1962

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

TUGEYEV, K.S., starshiy prepodavatel'; MOROZOV, A.V., dotsent

Unit for determining the electric conductivity of textile fabrics. Tekst. prom. 23 no.9:80-82 S '63. (MIRA 16:10)

1. Kafedra fiziki Leningradskogo tekstil'nogo instituta imeni Kirova.
(Textile fibers—Electric properties)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

[illegible], K.S., [illegible]; MO[illegible], A.V., [illegible]

[illegible]

[illegible]

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ROMANENKO, Pavel Nikanorovich, professor; MOROZOV, Aleksandr Viktorovich, dotsent; ZAYCHIK, G.I., professor, retsenzent; MATVEYEV, G.A., redaktor; PITERMAN, Ye.L., redaktor izdatel'stva, KARASIK, [illegible], tekhnicheskiy redaktor; SHITS, V.P., tekhnicheskiy redaktor

Heatpower equipment in the lumbering and woodworking industry. Teplosilovye ustanovki lesozagotovitel'noi i derevoobrabatyvaiushchai promyshlennosti. Moskva, Goslesbumizdat, 1956. 471 p. (MLRA 10:10)
(Electric power plants)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.V., kand.tekhn.nauk

Calculating the radiating heating surface of small boiler units. Nauch.trudy MLTI no.9:[illegible] 1958. (MIRA 11:12)
(Boilers)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

PATSIORA, P.P., prof.; SHESTAKOVSKIY, G.F., inzh.; ROMANENKO, P.N., prof.; MOROZOV, A.V., kand. tekhn. nauk; dots.; ZARETSKIY, M.S., red.; MIROPOL'SKIY, Z.L., red.; POPOVA, A.G., red. ~~izd-va~~; SHIBKOVA, R.Ye., tekhn. ~~red.~~

[Power engineering in the lumber industry]Energetika lesnoi promyshlennosti; spravochnik. Moskva, Goslesbumizdat, 1962. 545 p. (MIRA 16:3)
(Electricity in lumbering--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ROMANENKO, P.N.; MOROZOV, A.V., dots., otv. red.

[Thermal electric power plants of forest industry enterprises] Teplovye elektricheskie stantsii lesopromyshlennykh predpriiatii. Moskva, Mosk. lesotekhn. in-t 1962. 84 p. (MIRA 18:3)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ROMANENKO, Pavel Nikanorovich, prof.; MOROZOV, Aleksandr Viktorovich, dots. Prinimal uchastiye RODIONOV, Ye.L., inzh.; PITERMAN, Ye.L., red.izd-va; KARLOVA, G.L., tekhn. red.

[Arrangement and design of boiler units for industrial boiler rooms] Komponovka i raschet kotloagregatov promyshlennykh kotel'nykh. Moskva, Gosstroyizdat, 1963. 307 p. (MIRA 17:2)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AM6029193 Monograph UR/

Kudintseva, Galina Alekseyevna; Mel'nikov, Aleksandr Ivanovich; Morozov, Aleksandr Vasil'yevich; Nikonov, Boris Pavlovich

Thermionic cathodes (Termoelektronnyye katody) Moscow, Izd-vo "Energiya," 1966. 367 p. illus., biblio. 7500 copies printed.

TOPIC TAGS: electron tube cathode, thermionic emission, electron emission, emissivity

PURPOSE AND COVERAGE: This book may be used by students studying electronics and also by engineers and technicians concerning with the design of electrovacuum devices and cathode production technology. The book describes the technology of production and basic physical, technological and operational characteristics of various types of thermo-ionic cathodes for vacuum devices such as oxide cathodes, high-temperature cathodes based on the rare earth oxides and thorium oxide, various forms of pressed, impregnated and cell metalloporous cathodes, metalloceramic and boron-coated cathodes and their heaters. Major attention is given to the rational selection of cathodes, their structures, materials and processing methods. Chapters I—IV were written by B. P. Nikonov; V and VII by A. V. Morozov; VI and IX A. I. Mel'nikov; and VIII by G. A. Kudintseva. A I. Belousov, P. M. Bernshteyn, L. A. Vikman, A. A. Gugnin, L. A. Yermolayev, A. B. Kiselev, M. V. Kaganovich, G. M. Kuznetsova, E. V. Lobova, R. A. Makarova, L. N. Nevskaya, V. I. Nekrasov, T. M. Novikova, I. A. Noskova, N. M. Ogaleva, S. Ye. Rozhkov, V. Smirnov,

Card 1/6 UDC: 621.385.7

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AM6029193

L. Ya. Smoktiy, and A. Ye. Filippova participated in the experiments described in the book. References follow each chapter.

TABLE OF CONTENTS:

Foreword -- 3
Basic symbols -- 5

Ch. I. Basic Physical and Operation Characteristics of Thermionic Cathodes and Methods of Their Measurements -- 7
1. Thermionic emission and electron emissivity -- 7
2. Evaporation rate of active material. Durability of thermionic cathodes -- 14
3. Cathode temperature and methods of its measurement -- 17
4. Other characteristics of thermionic cathodes -- 22
Bibliography -- 23

Ch. II. Oxide Cathodes -- 24
1. Classification of oxide cathodes -- 24
2. Cathode core -- 26
3. Preparation of alcalite earth-metal carbonates -- 31
4. Deposition of carbonate coating on the cathode core -- 37
5. Degassing and activating of oxide cathodes -- 58

Card 2/6

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AM6029193

6. Emission and other characteristics of oxide cathodes -- 79
7. Operating conditions and durability of an oxide cathode -- 90
Bibliography -- 99

Ch. III. Spongy Nickel-Oxide Cathodes -- 103
1. Cathodes impregnated by active material after sintering the sponge -- 103
2. Sponge oxide cathode using rhenium core -- 117
3. Thyratron and gas-filled rectifier tube oxide cathodes -- 123
4. Pressed spongy nickelous-oxide cathodes -- 127
Billiography -- 131

Ch. IV. High Temperature Oxide Cathodes -- 133
1. Introduction
2. Production technology of the cathodes -- 135
3. Activation of thorium-oxide cathodes -- 140
4. Basic characteristics of thorium-oxide cathodes -- 143
5. Electron bombardment effect on emission properties of thorium-oxide -- 147
6. Poisoning thorium-oxide cathodes -- 151
7. Operating conditions of thorium-oxide cathodes -- 153
8. Investigation of rare earth's oxide elements as the active materials of high temperature cathodes -- 155
Bibliography -- 158

Card 3/6

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AM6029193

Ch. V. Metalloporous Cell Cathodes (L-Cathodes) -- 160
1. Cathode structure and the materials used in their production -- 160
2. Production of cathodes -- 169
3. Processing of the cathodes in vacuum -- 176
4. Cathode properties -- 189
5. Applications of cathodes -- 200
Bibliography -- 201

Ch. VI. Metalloporous Pressed and Impregnated Tungsten-Barium Cathodes -- 203
1. General information on metalloporous pressed and impregnated tungsten-barium cathodes -- 203
2. Material used for manufacturing the cathodes -- 206
3. Fabrication of cathodes -- 214
4. Degassing and activating of cathodes in a diode -- 217
5. Properties of cathodes -- 218
6. Physical and chemical processes taking place during fabrication and operation of cathodes -- 243
7. Peculiarities of application of the cathodes in devices -- 259
8. Hollow cathodes -- 265
Bibliography -- 273

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AM6029193

Ch. VII. Cermet cathode -- 277
1. Production technology of cermet cathodes -- 277
2. Impregnated tungsten-thorium cathodes -- 282
3. Activation of cermet cathodes -- 283
4. Characteristics of cermet cathodes -- 285
Bibliography -- 289

Ch. VIII. Boride Cathodes -- 290
1. Properties of borides -- 290
2. Preparation of emitting materials -- 296
3. Deposition of hexaborite coatings on the metallic base (support) -- 300
4. Pressed cathodes -- 304
5. Basic structures and properties of cathode made from hexaborite lanthanum -- 309
6. Durability of lanthanum hexaboride cathodes and the field of their application -- 322
Bibliography -- 326

Ch. IX. Thermionic Cathode Heaters -- 327
1. Selection of a heater and its design -- 327
2. Materials and production technology of oxide cathode heaters -- 334

Card 5/6

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AM6029193

3. Heaters for cathodes with stepped-up operating temperature -- 343
Bibliography -- 351

Appendices -- 352

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Card 6/6

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L 34714-65 EWG(j)/EWT(m)/FCC/T/EWA(m)-2 IJP(c)

ACCESSION NR: AP4049587 S/0048/64/028/011/1761/1763 23 18 6

AUTHOR: Guseva, V.V.; Dubrovina, S.A.; Lebedev, A.M.; Morozov, A.Ya.; San'ko, L.A.; Sokolovskiy, V.V.; Slavatinskiy, S.A.; Tolkachev, B.V. 14

TITLE: Nucleon-nucleus collisions at high energies /Report, All-Union Conference on the Physics of Cosmic Rays held in Moscow 4 to 10 Oct 1963/

SOURCE: AN SSSR. Izv. Seriya fizicheskaya, v.28, no.11, 1964, 1761-1763

TOPIC TAGS: cosmic ray, high energy interaction, nucleon nucleus interaction, hydrodynamic theory

ABSTRACT: The work presents an attempt to describe the interaction of high-energy (10^{11} to 10^{12}) nucleons with complex nuclei from the standpoint of a succession of statistically independent encounters of the incident particle with the nucleons of the target nucleus. The nucleon interaction cross sections were calculated by the classical method of impact parameters. The Hofstadter data on electron scattering were used to evaluate the proton densities. Numerical calculations were carried out for the cross sections for nuclei with A = 6, 9, 12, 14, 16, 56, 122 and 207. The

1/4

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ACCESSION NR: AP4049587

calculated values of σ are in good agreement with the power function $\sigma = \sigma_0 A^{3/4}$. Further, there were calculated the values of the mean fraction $\bar{\Delta}$ of the energy retained by the nucleon after interaction with a complex nucleus. The results of these calculations are compared with some experimental data in Fig.1 of the Enclosure. The agreement is best (but far from perfect) on the assumption of an inelasticity coefficient 0.35 ($\bar{\Delta}_0 = 0.65$). The values of the anisotropy parameter (proportional to $\sigma/\sigma_{isotropic}$) as a function of the jet multiplicity n_s (which may be taken as a measure of the length of the reaction tube or the number of nucleons with which the incident particle interacts) obtained by interpolation of the experimental data are compared in Fig.2 of the Enclosure with the functional dependence calculated on the basis of hydrodynamic theory; here the disagreement is substantial. This is interpreted as an argument in favor of the assumption of successive interaction of the incident nucleon with the nuclear nucleons. "The authors are grateful to N.A.Dobrotin, Ye.L.Feynberg, G.B.Zhdanov and D.S.Chernavskiy for discussions and valuable suggestions." Orig.art.has: 4 formulas and 2 tables.

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ACCESSION NR: AP4049687

ASSOCIATION: Fizicheskiy institut im.P.N.Lebedeva Akademii nauk SSSR (Physics Institute, Academy of Sciences, SSSR)

SUBMITTED: 00 ENCL: 01

SUB CODE: AA, NP NR REF SOV: 007 OTHER: 002

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

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ACCESSION NR: AP4049587

ENCLOSURE: 01

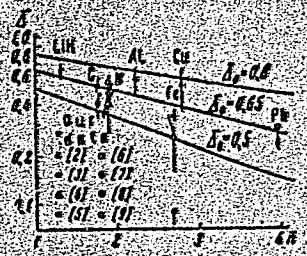

Fig.1. Mean fraction of the energy retained by the nucleon after interaction with different nuclei. Points - experimental (the numbers in brackets are the references from which the data were taken); lines - results of calculations for $\Delta_0 = 0.8$, 0.65 and 0.5.

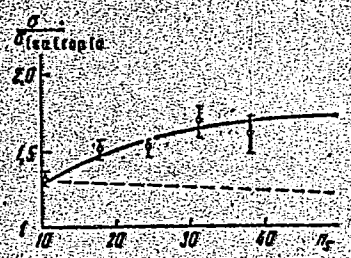

Fig.2. Variation of $\sigma/\sigma_{isotropic}$ with n_s. Solid line - interpolation of experimental data; dashed line - calculations based on the hydrodynamic theory.

Card 4/4

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AP7007076 SOURCE CODE: UR/0048/66/030/010/1577/1580

AUTHOR: Denisov, Ye. V.; Dedenko, L. G.; Dubrovina, S. A.; Kotel'nikov, K. A.; Morozov, A. Ye.; Ogurtsov, O. F.; Sokolovskiy, V. V; Slavatinskiy, S. A.; Fetisov, I. N.

ORG: Physics Institute im. P. P. Lebedev, AN SSSR (Fizicheskiy institut AN SSSR)

TITLE: Nuclear cascade process in an ionization calorimeter /Paper presented at the All-Union Conference on Cosmic radiation physics, Moscow, 15-20 Nov 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 10, 1966, 1577-1580

TOPIC TAGS: pi meson, calorimeter, proton

SUB CODE: 20

ABSTRACT: Results of the calculation of the nuclear cascade process in an iron absorber were correlated with experimental data obtained on the ionization calorimeter of the Tyan'-Shan' Cosmic Ray Station. It was established that at E_0 = 300 Bev approximately 30% of the energy spent being carried away by strongly ionizing particles ("black tracks"), and the rest by protons with an energy of ~ 150 Mev ("grey tracks"). Errors in the measurement of E_0 = 200 Bev associated with fluctuations in the recording of strongly ionizing particles amounted to ~ 12% (~ 11% for "black tracks" and ~ 4% for "grey tracks"). In measurements by means of an ionization calorimeter of the energy transmitted to π^0 mesons, ionization produced by particles originating from nuclear splitting must be considered. The authors thank N. A. Dobrotin and V. S. Murzin for valuable critical observations, V. G. Ignat'yevaya, Z. G. Yereminaya,

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

ACC NR: AP7007076

L. V. Shibayevaya and N. S. Kochurkinaya for processing the experimental data. Orig. art. has: 2 figures, 2 formulas and 1 table. [JPRS: 39,658]

Card 2/2

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, A.Z.

Resources of th growth of labor [illegible]tivity. Kozh. obuv'prom. 6 no.10:4-6 O '64. (MIRA 18:1)

1. Glavnyy ekonomist moskovskogo ob"yedineniya predpriyatiy mone[illegible]noy obuvi "Vostok".

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

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[illegible], L.A., MOR[illegible]

[illegible] combine "V[illegible]" [illegible] good name of the firm's trademark, [illegible] 9-14 My '65. [illegible]

1. [illegible] inzhener M[illegible] [illegible] model'noy obuv. "Vostok" [illegible] general'nogo direktor [illegible].

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MOROZOV, B.A.

Met od of setting-up the indirect hemagglutination reaction in listeriosis. Zh. mikrobiol. 40 no.7:90-92 Jl'63 (MIRA 17:1)

1. Iz Tomskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

MORCZOV, B.; NAPOL'SKIY, G.

Elastic rubber elements [illegible] coupling device.
Avt. transp. 43 no. [illegible]:41 [illegible]. (MIRA [illegible])

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

The effect of sulfur gases upon scale formation during heat-treatment. B. A. Morozov and A. V. Tursunov (*Metallurg* **13**, 22-7 (July-Aug., 1938); *Met. Abstracts* (in *Metals & Alloys*) **10**, No. 4, 200 (1939)).—The presence of about 0.025% S gases in the combustion products (oxidizing atm.) at 800-900° resulted in a sharp increase of scaling in steel of 1.0% Cr and 4.0% Ni. When the S gases reached 0.05-0.1%, the metal surface became strongly satd. with S. The scaling proceeded in the form of a strongly corroded, uneven layer. This was considerably reduced in a neutral atm. and was totally absent in a reducing atm. High-S fuel may be used in an oxidizing atm. provided the combustion products are dild. with air to contain less than 0.025% S gases. C. L. B.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135210020-6

PROCESSES AND PROPERTIES INDEX

18

On the Measurement of Turning Moment in Rotating Shafts with the Aid of Wire Strain Gauges. M. A. Morozov (Zavodskaya Laboratoriya, 1949, vol. 15, Nov., pp. 1387-1390). [In Russian]. Three ways of arranging wire strain gauges on a shaft for the measurement of the turning moment during rotation are described together with the corresponding electrical circuits. In two of these methods there is automatic compensation for any deformation of the shaft not due to the turning moment. Several types of brushes for use with the gauges when dealing with shafts of different size and accessibility are illustrated, and examples are given of oscillographic records of test results which show the importance of brush design and cleanliness for accurate recording.

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MOROZOV, B. A.

O nekotorykh vozmozhnostiakh umen'sheniia veliciny koefitsiinta zapasa prochnosti. (Vestn. Mash., 19[illegible], no. [illegible], p. [illegible])

Some possibilities of reducing the safety factor.

[illegible]: TN4.V4

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MOROZOV, B.A., kandidat tekhnicheskikh nauk.

Investigation of the sturdiness of the bed plate of rolling mill stands. Vest.mash. 33 no.11:23-26 N '53. (MIRA 6:12)
(Rolling-mill machinery)

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