

Z 64788-65 EWA(c)/EWT(1)/EWT(m)/EWP(i)/EWP(b)/T/EWP(t) IJP(c) GG/JD

ACCESSION NR: AP5018734

UR/0070/65/010/004/0585/0586
548.522:539.23

40
34
B

AUTHORS: Postnikov, V.V.; Loginova, R.G.; Ovsyannikov, M.I.
44,55 44,55 44,55

TITLE: Application of the magnetic moment in ferromagnetic films to continuously rotating elements of computers

SOURCE: Kristallografiya, v. 10, no. 4, 1965, 585-586

TOPIC TAGS: germanium, ^{44,55}etched crystal, crystal lattice dislocation ↙

ABSTRACT: An estimate is made of the pressure and growth rate which should yield single-crystal silicon films. Using these estimates, layers of silicon on silicon were obtained at a pressure of less than 2×10^{-7} mm Hg and at growth rates of 3--20 μ /hr. The layers were obtained by evaporation of silicon from the solid state. The silicon samples were chemically polished. During growth the temperature of the substrate (1000--1250C) was kept constant. In the entire range of temperatures and growth rates single-crystal layers were obtained.

Card 1/2

L 64788-65

ACCESSION NR: AP5018734

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Epitaxial layers of silicon were obtained at 1000C and a growth rate of 20 μ /hr. The maximum thickness of the films which we obtained was 50 μ . "V. M. Obolikshto took part in the work." Orig. art. has: 2 formulas and 1 figure. 44,55

ASSOCIATION: Gor'kovskiy issledovatel'skiy fiziko-tehnicheskii institut (Gor'kiy Physicotechnical Research Institute) 44,55

SUBMITTED: 08Aug64

ENCL: 00

SUB CODE: 88

NR REF SOV: 002

OTHER: 004

Cord

44
5/2

L 36397-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6018783

SOURCE CODE: UR/0070/66/011/003/0479/0480

AUTHOR: Loginova, R. G.; Kuznetsov, V. P.; Ovsyannikov, M. I.; Postnikov, V. V.

ORG: Gor'kiy Physicotechnical Institute (Gor'kovskiy fiziko-tekhnicheskiy institut)

TITLE: Properties of epitaxial layers of silicon grown by vacuum sublimation

SOURCE: Kristallografiya, v. 11, no. 3, 1966, 479-480

TOPIC TAGS: single crystal, epitaxial growing, vacuum sublimation, temperature dependence, Hall constant, specific resistance, current carrier

ABSTRACT: Hall coefficients and specific resistivity measurements as functions of the concentration and mobility of current carriers were studied in single crystal Si films at temperatures ranging from 77° to 450°K. The thin films (50 to 200 μ) were produced by vacuum sublimation ($2 \cdot 10^{-7}$ mm Hg) on heated substrates (900° to 1200°C). Using the above data, the transport coefficients for B and P impurities were calculated. The films were n- and p-type, depending upon the source of the conductivity (B yielded p-type; P yielded n-type). The given temperature dependence for the concentration of current carriers in Si films was compared to the n- and p-type conductivity for published data on Si single crystals. At equal impurity concentrations, the given Hall mobility of the current carriers in epitaxial films was close to the mobility measured in Si single crystals for all temperatures (77°-450°K). Films of p-type conductivity had

UDC: 548.52 : 539.23

Card 1/2

PETROVSKIY, Nikolay Viktorovich. Prinjmalj uchastiye: **KAMKIN, S.V.**, kand. tekhn.nauk; **NESTARENKO, N.V.**, aspirant; **OVSIANNIKOV, M.K.**, kand. tekhn.nauk. **KPEL'MAN, T.Ye.**, dotsent, kand.tekhn.nauk, retsenzent; **ROLINSKIY, V.Yu.**, dotsent, kand.tekhn.nauk, retsenzent; **TABACHNIKOV, L.Ya.**, dotsent, kand.tekhn.nauk, retsenzent; **BRINCHIK, A.M.**, dotsent, kand.tekhn.nauk, retsenzent; **GRIBANOV, V.I.**, kand.tekhn.nauk, nauchnyy red.; **APTEKMAN, M.A.**, red.; **FRUMKIN, P.S.**, tekhn.red.

[Special problems in the theory of marine diesel engines] Spetsial'nye voprosy teorii sudovykh diselei. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1960. 311 p. (MIRA 13:10)
(Marine diesel engines)

OVSYANIKOV, M. K.

1746. EFFECT OF CONDITIONS OF GAS TRANSFER ON THE OPERATION OF THE
CYLINDERS OF A LOW SPEED TWO-STROKE DIESEL ENGINE. OVSYANIKOV, M. K. ---
(Energo Mashinostroyeniye (Eng. Mech., Leningrad), Sept. 1957, 21-25). Results
are given of oscillograph and other measurements on all the cylinders of
six engines of 100 to 700 h.p. per cylinder running at 100 to 300 rev/min.
(L).

NOVIKOV, Mikhail Petrovich,; SHPAKOVA, A.P., otv. za vypusk,; OVSYANNIKOV,
M.F., dots., kand. filosofskikh nauk, red.; PURMAN, G.V., tekhn. red.

[Inconsistencies in the socialist system of production and
how to overcome them] Protivorechiia v sotsialisticheskom sponobe
proizvodstva i ikh preodolenie. Moskva, Ob-vo po rasprostraneni
oolit. i nauchn. znaniy RSFSR, 1958. 31 o. (MIRA 11:12)

1. Zav. otdelom filosofii, pedagogiki, literatury i iskusstva
Pravleniya Obshchestva po rasprostraneniya politicheskikh i
nauchnykh znaniy RSFSR (for Shpakova).
(Industry)

SOV: 124-58 5-5274 D

Translation from Referativnyi zhurnal. Mekhanika, 1958, No. 5, p. 45. 155#

AUTHOR Ovsyannikov, M.K.

TITLE Investigation of Gas-scavenging Conditions in Two-stroke Marine Diesels (Issledovaniye usloviy gazoobmena v sudovykh dvukhtaknykh dizelyakh)

ABSTRACT Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Leningr. vyssh. inzh. morsk. uch-shche (Leningrad Higher School of Naval Engineering), Leningrad, 1956.

ASSOCIATION Leningr. vyssh. inzh. morsk. uch-shche (Leningrad Higher School of Naval Engineering), Leningrad

... diesel engine --performance

Card 1/1

OVSYANNIKOV, M. K., Cand Tech Sci -- (diss) "Study of the Con-
ditions of Gas Exchange in Two-Cycle Ship Diesels." Len, 1957.
18 pp with graphs (Min of ~~Navy~~ ¹⁻¹⁻⁵⁷ USSR, Len Higher Engineering
Naval School in Admiral S. O. Makarov), 100 copies (KL, 10-57,
1'3)

- 37 -

OVSYANNIKOV M.K.

Approximate evaluation of disk strength of radial turbomachines
Sud. sil. ust. no. 103544 (61) (MIRA 1961)

1. Leningradskoye vyssheye inzhenernoye morskoye uchilishche
im. admirala Makarova.
(Gas turbine disks)

OVSYANNIKOV, M. K., kand.tekhn.nauk

Selection of main diesel engine fuel pumps for icebreakers with electric transmission to the propellers. Sudostroenie 28 no.11:33-35 N '62.

(MIRA 15:12)

(Marine diesel engines—Fuel systems)

OVSYANNIKOV, M.K., kand.tekhn.nauk

Results of testing the main engines of the icebreaker "Moskva."
Sudostroenie 28 no.6:45-46 Je '62. (MIRA 15:01
(Marine diesel engines--Testing)
(Ice-breaking vessels)

Ovsyannikov, M. K.

10000

ENERGETICHESKII BYULLETEN

(Power Bulletin)

No. 4, April, 1956

Handwritten initials
ZINCHENKO, V. I.

OVSYANNIKOV, M. A.

The Conditions of Gas Exchange in the Cylinders of Engine Type MDR-30/50.

Study of a two stroke engine to establish the reasons for uneven power output of different cylinders.

~~was~~
was

ZINCHENKO, V.I.; OVSYANNIKOV, M.K.

Conditions of gas exchange in the cylinder of the 4DR-30/50 engine.
Energ. biul. no. 4: 7-10 Ap '56. (MIRA 9:7)
(Diesel engines)

I 17832-63

EPR/EPA(b)/EWT(1)/BDS/ES(v)

AEBC/AFTTC/ASD/AFMDC

Pa-1/Pd-1/Pe-1 WW

71

ACCESSION NR: AP3004746

S/0170/63/006/008/0092/0096 70

AUTHOR: Ovsyannikov, M. P.TITLE: External drag at supersonic inlet velocities of ducted bodies with an elliptical cone at the inlet

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 6, no. 8, 1953, 92-96

TOPIC TAGS: air-intake duct, air-breathing aircraft, air intake, supersonic air intake, elliptical nose, drag, external drag

ABSTRACT: The external drag of a body with a throughflow duct with an elliptical cone at the inlet is analyzed for Mach numbers at which the flow into the duct does not interfere with the external flow (e.g., the case of a pure conical flow between the apex of the elliptical cone and the rim of the intake air collector). When the cross-section surface of the intake rim is larger than that of the undisturbed fluid jet entering the duct, the external drag of the ducted nose cone is equal to the drag of the collector rim in the fluid contour generated by the stream passing over the front part of the body. To determine the local pressure coefficient in the fluid contour, the flow over an elliptical cone is

Card 1/2

L 21125-65 EWT(d)/EWT(1)/EWP(m)/EWT(m)/EWP(w)/EWO(v)/ENA(d)/EWP(v)/EWP(k)/PCS(k)/
ENA(h) Pd-1/Pe-5/Pf-4/Peb AFWL/SSD(b)/AEDG(a)/BSD/SSD/ASD(f)-3/ASD(p)-3/AFETR/
ACCESSION NR: AP5002032 AFTC(a)/AFOC(a) S/0170/64/000/012/D.95/0105
EM/WW

AUTHOR: Mkhitarian, A. M.; Ovsyannikov, M. P.

TITLE: Determining the linearized perturbation fluxes in hypersonic air flow over conical bodies without axial symmetry

SOURCE: Inzhanerno-fizicheskii zhurnal, no. 11, 1964, 95-103

TOPIC TAGS: hypersonic flow, supersonic flow, shock waves, shock coefficient, inviscid flow, dissociated air, perturbation flux, conical flow, linearized characteristics method

ABSTRACT: The inviscid hypersonic flow of an ideal gas over thick and thin conical bodies without axial symmetry is considered. This study is a further development of similar studies by Ferri (JAS, no. 8, 1953) and Chapkis (JAS, no. 11, 1961), using the superposition of linear solutions on a nonlinear solution for flow around circular cone. However, the results obtained for flows over thin conical bodies differ from that of Chapkis. Equations that define the velocity components of the linearized perturbation fluxes are derived for thick and thin conical bodies, respectively. A generalized solu-

Card 1/2

L 26117-65 EMT(1)/EWP(B)/EWA(d)/EWG(v)/FCS(k)/EWA(1) Pd-1/Pe-5 WW

31
17
B

ACCESSION NR: AP5005529

8/0147/65/000/001/0007/0014

AUTHOR: Mkhitaryan, A.M.; Ovsyannikov, M.P.

TITLE: On the determination of linearized perturbation flows in hypersonic flow over conical bodies without axial symmetry

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 1, 1965, 7-14

TOPIC TAGS: hypersonic flow, linearized flow, linearized flow solution, elliptical cone, conical flow, linearized characteristic method

ABSTRACT: This paper presents a study of hypersonic flow over thick conical bodies without axial symmetry and constitutes a development of similar studies by Ferri, Ness, Kaplita, and Chapkis, using a linearized procedure. The equations that define the velocity components of the linearized flow fields are written and boundary conditions on the body surface and at shock wave which must be satisfied are established. Certain simplifying assumptions are introduced in the analysis. Two linearized solutions are obtained corresponding to values of $n(n=1$ and $n > 2)$. It is shown that at free-stream Mach numbers, the velocity components u_n and v_n just behind the shock wave are of the same order for thick conical bodies and that u_n is one order less than v_n for slender conical bodies. The calculated values of the pressure coefficients c_p for thick elliptical cones, obtained by approximate form-
Card 1/2

L-26117-65

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ACCESSION NR: AP5005529

ulas of the asymptotic solution and by a step-by-step numerical procedure, are given in graphical form for the purpose of comparison. Orig. nrt. has: 2 figures and 42 formulas. [AB]

ASSOCIATION: none

SUBMITTED: 09Mar64

ENCL: 00

SUB CODE: ME

NO REF SOV: 001

OTHER: 000

ATD PRESS: 3186

Card 2/2

MKHITARYAN, A.M.; 1977 . . .

Determining linearized perturbation flows about
about nonaxisymmetric bodies. Izv. vyssh. shkoly
av. tekhn. 8 no.17-14 1977.

OVSYANNIKOV, N.A.; SOYENKO, V.A.; RAGULINA, I.V.

Improve the economic indices of the work of canning plants.
Kons. i ov. prom. 18 no.12:26-28 D '63. (MIRA 17:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy
promyshlennosti.

DOLGIY, I.P.; OVSYANNIKOV, N.A.; MILOKOSTOVA, L.I.

Eliminate working time losses in the canning plants. Koms. i sv. proz.
17 no. 7:32 JI '62. (MIRA 15:6)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy
promyshlennosti.

(Canning industry—Management)

OVSIANNIKOV, N.

~~XXXXXXXXXXXXXXXXXXXX~~

Reconstruction of the Volga-Kama Basin waterways. Blok.agit.vod.
transp. no.22:1-8 N'55. (MLRA 9:1)

1.Pervyy samestitel' Ministra rechege flota SSSR.
(Volga Valley--Inland navigation)

OVSYANNIKOV, N.

Problems facing water management construction workers in 1963.
Sel'. stroi. 17 no.2:1-3 P '63. (MIRA 16:3)

1. Pervyy zamestitel' predsedatelya Gosudarstvennogo komiteta Soveta
Ministrov RSFSR po vodnomu khozyaystvu.
(Irrigation) (Drainage)

OVSYANNIKOV, N.

Protection of natural resources is a task of nation-wide importance.
Rech. transp. 19 no.12:1-4 D '60. (MIRA 13:12)

1. Predsedatel' Gosudarstvennogo komiteta Soveta ministrov RSFSR po
ispol'zovaniyu i okhrane poverkhnostnykh i podzemnykh vodnykh
resursov.

(Water resources)

OVSYANNIKOV, N.G.

General long-range plan for comprehensive utilization of water resources and hydraulic engineering construction. Izv. AN SSSR. Ser. geog. no.5:28-35 S-0 '71. (MIRA 14:9)

1. Gosudarstvennyy komitet Soveta Ministrov RSFSR po vodnomu khozyaystvu.

(Water resources development)

OVSYANNIKOV, M.

Raise water management construction to the level of the new objectives.
Sel'. stroi. no.6:1-2 Je '62. (MIRA 15:7)

1. Pervyy zamestitel' predsedatelya Gosudarstvennogo komiteta
Soveta Ministrov RSFSR po vodnomu khozyaystvu.
(Water-supply engineering)

OVSYANNIKOV, N.; ZORIN, N.; MATLIN, G.; KUZKOV, L.; VEDROV, S.

Improve the full use and preservation of U.S.S.R. water resources.
Rech. transp. 19 no.11:32-35 N '60. (MIRA 13:11)
(Water supply engineering)

OVSIANNIKOV, N.

Complete river navigation successfully. Blok. agit. vod. transp.
no.19:9-16 0 '56. (MIRA 9:11)

1. Zamestitel' ministra rechnogo flota RSFSR.
(Inland water transportation)

OVSYANNIKOV, N.A.; MILOKOSTOVA, L.I.; DOLGIY, N.P.

Pay attention to the movement of efficiency promoters. *Конт. и*
ov.prom. 18 no.9:31-32 S '63. *(MIRA 10:9)*

1. Odesskiy tekhnologicheskii institut pishchevoy i kholodil'noy
promyshlennosti.

(Efficiency, Industrial)

OVSYANNIKOV, N.G.

Great gift of nature. Priroda 53 no.3:9-18 '64.

(MIRA 17:8)

1. Gosudarstvennyy proizvodstvennyy komitet po oroshayemomu zemle-
deliyu i vodnomu khozyaystvu RSFSR, Moskva.

OVSYANNIKOV, N.G.

Workers of the State Planning Institute on River Transportation
are fighting for technical progress. Rech.transp. 18 no.11:
23-26 N '59. (MIRA 13:4)

1. Direktor Gosudarstvennogo instituta proyektirovaniya i
isyskanly na rechnom transporte (Giprorrechtrans); chlen Kollegii
Ministerstva rechnogo flota (MRP).
(Inland water transportation)

OVSYANNIKOV, H.G.; ORLOV, D.A.

On the eve of the 21st Congress of the CPSU. Rech.transp. 17 no.10:
1-4 0 '58. (MIRA 11:12)

1. Zamostitel' Ministra rechnogo flota (for Ovsyannikov). 2. Nachal'-
nik Planovo-ekonomicheskogo upravleniya Ministerstva rechnogo flota
(for Orlov).

(Inland water transportation)

OVSYANNIKOV, N.G.

Tasks in 1968 for Russian Federation river transportation workers.
Rech. transp. 17 no.1:1-5 Ja '68. (MIRA 1183)

1. Pervyi zamestitel' Ministra rechnogo flota RSFSR.
(Inland water transportation)

QVSYANNIKOV, N.G.

Supervision and control of accomplished tasks is an important principle in communist leadership. Rech.transp. 16 no.12:4-7

D '57.

(MIRA 11:1)

(Inland water transportation--Accounting)

OVSTANNIKOV, N.G.

New Volga-Baltic waterway. Sov.mor.16 no.21:8-9 N '56.

(MIRA 10:1)

(Mariinsk Canal System)

OVSYANNIKOV, N.G., inzh.

Systematically lower the cost of river boat construction. Rech.
trans. 18 no.8:26-28 Ag '59. (MIRA 12:12)
(Shipbuilding--Costs)

OVSYANNIKOV, N.I. (g. Novozybkov Braynskoj oblasti)

Studying the inclined plane in the seventh grade. Fiz.v shkole
22 no.6:78 N-D '62. (MIRA 16:2)
(Dynamics--Study and teaching)

OVSYANNIKOV, Nikolay Nikolayevich, inzh.; FILIPPOV, S.M., red.)
SEVRYUKOV, P.A., tekhn. red.

[Green light to advanced welding methods] Progressivnoi
svarke - shirokuiu dorogu. Kursk, Kurskoe knizhnoe izd-
vo, 1963. 78 p. (MIRA 17:4)

OVSYANNIKOV, Nikolay Nikolayevich; CHIZHEVSKAYA, K.M., red.

[Methodology for the presentation of a course on keyboard computers; manual for instructors of the school system of the Administration of the Training of Accountants of the Central Statistical Administration of the U.S.S.R.] Metodika prepodavaniia kursa ekspluatatsii schetno-klavishnykh mashin; posobie dlia prepodavatelei uchebnoi seti UPK TsSU SSSR. Moskva, Statistika, 1964. 181 p. (MIRA 17:4)

MIN'ROVSKIY, Yefim Markovich; OVSYANNIKOV, N.N., red.; USTIYANTS, V.A.,
red.; IL'YUSHENKOVA, T.P., tekh. red.

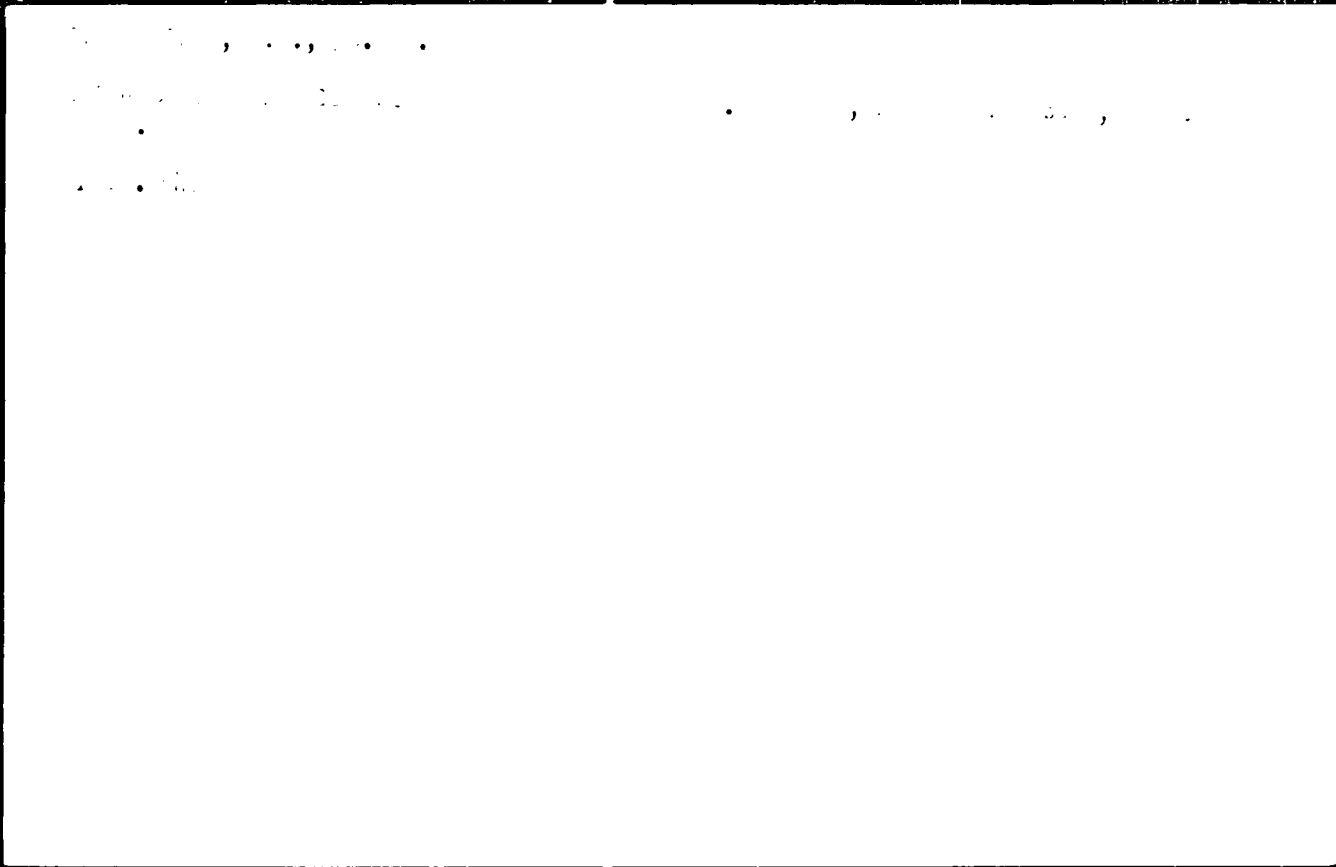
[Calculating machines and their use in accounting] Schetnye
mashiny i ikh ispol'zovanie v bukhgalterskom uchete. Moskva,
Gosstatizdat TsSU SSSR, 1961. 247 p. (MIRA 15:2)
(Calculating machines)

MIK'KOVSKIY, Yefim Markovich; OVSIANNIKOV, Nikolay Nikolayevich;
MAYSKAYA, N.I., red.; MAROV, M.A., red.; IL'YUSHENKOVA,
T.P., tekhn. red.

[The KELRS and SARS computer models; a manual for training
operators] Vychislitel'nye mashiny modeli KELRS i SARS; po-
sobie dlia obucheniia tekhnike raboty na mashinakh. Moskva,
Gosstatizdat, 1962. 98 p. (MIRA 1:10)
(Calculating machines) (Accounting machines)

BORISOV, Pavel Gavrilovich, prof.; VETVANKOV, Nikolai Sergeevich, dots.; LINDENKOF, G.V., prof., reisenzent; KOSIS VA, red.

[A manual for commercial fishes of the U.S.S.R.] "Sposobitel' proryskovykh ryb SSSR. Izd. 4., perer. i dop. izdskva, Izd-vo "Nishehev ia proryshlelnost'," 1962. 214 p. (MIRA 17:4)



ОУСЯНІКІВ, Н. С., jt. au.

Guide to commercial fish of the USSR

2. teor. i dop. izd. Moskva, Rishchenizdat, 1954. 250 p. (56-10459)

QL677.R8B6 1954

FIN'KO, V.I., kand. geologe-mineral. nauk; OVSYANNIKOV, N.V., kand. tekhn.nauk

New deposit of decorative marble. Priroda 48 no.6:88-90 Ja '59.
(MIRA 12:5)

1.Institut geologii rudnykh mestorozhdeniy, petrografii,
mineralogii i geokhimi AN SSSR, Moskva (for Fin'ko). 2.Dal'nevostochnyy
politeknicheskyy institut, Vladivostok (for Ovsyannikov).
(Maritime Territory--Marble)

CVSYHNN I KLL, N. V.

3(5)

PHASE I BOOK EXPLOITATION

SOV/1910

Akademiya nauk SSSR. Dal'nevostochnyy filial, Vladivostok. Institut geografii.

Materialy po fizicheskoy geografii yuga Dal'nego Vostoka; Prikhankayskaya ravnina i privileyushchiye k ney rayony Primorskogo kraya (Physical Geography of the Southern [Soviet] Far East; Khanka Plain and Adjacent Areas of the Primorskiy Kray) Moscow, Izd-vo AN SSSR, 1958, 299 p. 1,300 copies printed.

Resp. Eds.: B.P. Kolesnikov, Doctor of Biological Sciences, G.D. Rikhter. Doctor of Geographical Sciences, Professor, and V.V. Nikol'skaya, Candidate of Geographical Sciences; Ed. of Publishing House: P.K. Kavun; Tech. Ed.: Ye. V. Makuni.

PURPOSE: This book is intended for geographers interested in the physical geography of the Primorskiy Kray (Maritime Province).

COVERAGE: These articles deal with various aspects of the physical geography of the Primorskiy Kray, particularly the Suyfuno-Khankayskaya plain. A paleogeographic study of the Ussuri valley

Card 1/3

Physical Geography of the Southern (Cont.)	SOV/1910
Nikol'skaya, V.V., and D.A. Timofeyev. Geomorphological Characteristics of Small Sections in the Suputink and Kedrovaya River Basins.	107
Stotsenko, A.V. A Climatic Outline of the Prikhankayskaya Plain and Adjacent Territories	131
Sokolov, I.P. Dry Winds Susoveys as a Climatic Feature of the Forest-steppe Landscape of the Prikhankayskaya Plain	162
Stotsenko, A.V., V.G. Chernenko. A Hydrogeographic Description of the Rivers of the Prikhankayskaya Plain and Those of Contiguous Regions	179
Stotsenko, A.V. Floods in the Primorskiy Kray	254
Kurentsov, A.I. Animal Life in the Prikhankayskaya Plains	273

AVAILABLE: Library of Congress (GB325.A45)

MM/lrb
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Card 3/3

1. OVSYANNIKOV, N. V.

2. USSR 600

4. Rocks

7. Alveolate erosion of rocks, Priroda, 42, No. 1, 1953.

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

OVSYANNIKOV, N. V.

OVSYANNIKOV, N. V.--"Andesite Basalts and Their Physicomechanical Properties."
Acad, Sci. USSR, Far Eastern Affiliate under V. L. Komarov, Vladivostok, 1955.
(Dissertation for the Degree of Candidate in Technical Sciences)

SC: Knizhaya Letopis', No. 35, 1955

ТАБДІКОВ, К.З.; О'СЯНДИКОВ, П.І.

Studying the roof stability of Pechekszgan mine chambers.
Trudy Inst. gor. Dela AN Kazakh. SSR 19:106-111 '65.
(MIRA 18:12)

PETRENKO, P.V.; EL'KIN, I.L.; KAZAKOV, S.S.; VOZHIK, D.L.; DENISOV, V.V.; PUCHKOV, V.I.; BOGUTSKIY, N.V.; SAVEL'YEV, I.P.; KOLENTSEV, M.T.; MERKULOV, N.Ya.; VERKLOV, V.A.; OVSYANNIKOV, P.A.; SOSNOV, V.D., otv. red.; CHIZHOVA, V.V., otv.red.; ZHUKOVA, A.P., red.; LEVINA, T.I., red.; PRONINA, N.D., tekhn. red.; OVSEYENKO, V.G., tekhn. red.

[Practice of using cutterloaders] Opyt ispol'zovaniia ochistnykh kombainov; sbornik statei. Moskva, 1962. 102 p.
(MIRA 16:2)

1. Tsentral'nyy institut tekhnicheskoy informatsii ugol'noy promyshlennosti.

(Coal mining machinery)

OVSYANNIKOV, P.M., starshiy prepodavatel:

Design of chain pushers. Izv. vys. ucheb. zav.; gor. zhur.
no.8:158-162 '61. (MIRA 15:5)

1. Kemerovskiy gornyy institut. Rekomendovana kafedroy
gornyykh mashin i rudnichnogo transporta Kemerovskogo gornogo
instituta.

(Mine railroads--Cars)

OVSYANNIKOV, I.M., *Stavki i usloviya*

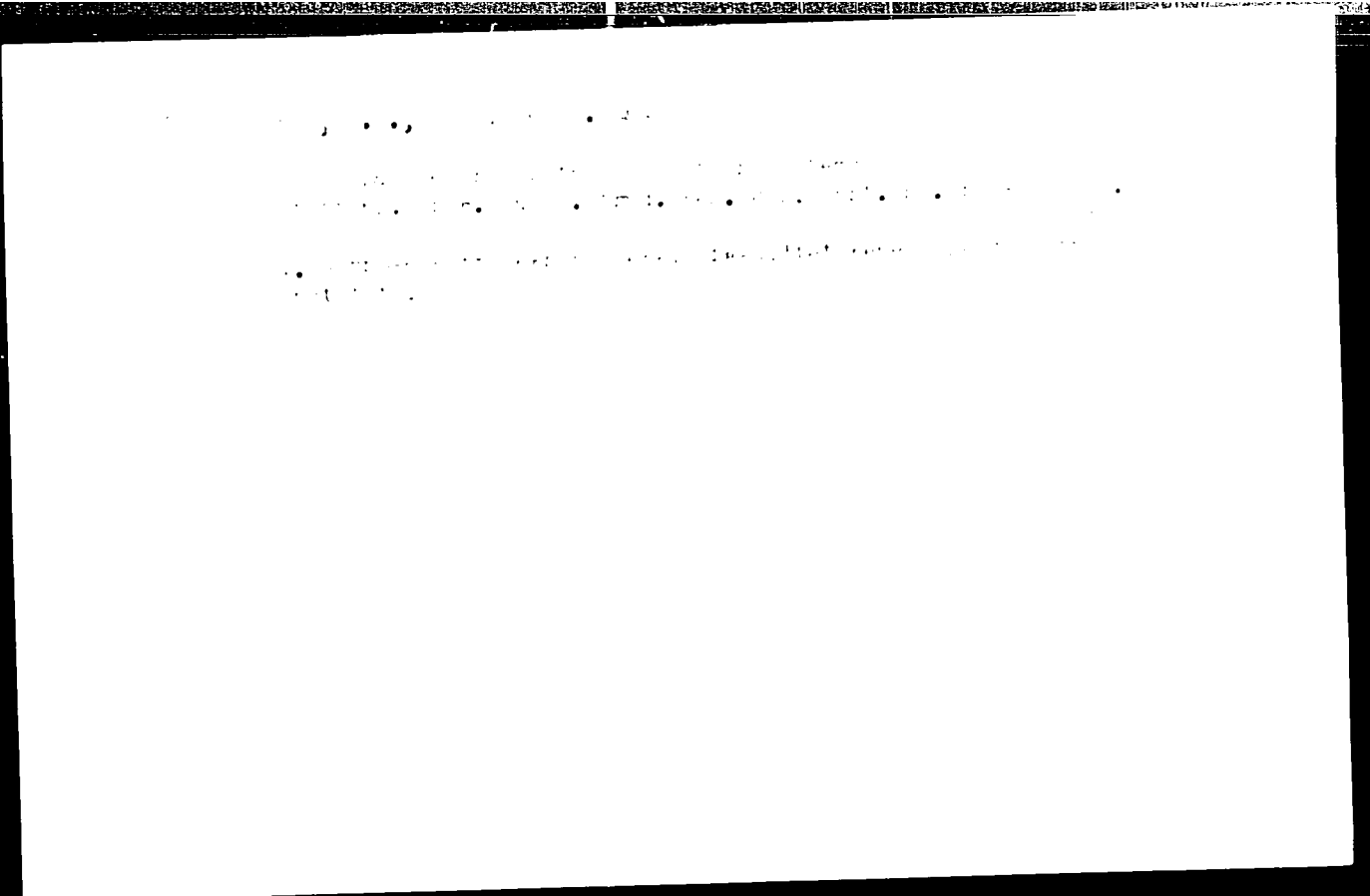
Study of the effect of the operating conditions of the drive of a chain pusher on the load of the traction chain and on the power consumption. *Izv. vyssh. shkol. zav. por. zhur.* no. 11:11-14, 1963. (MIRA 17:4)

1. Kemerovskiy Gornyy Institut. Rekomendovana kafedroy pomykh mashin i kurnochnoy transporta.

OVSYANNIKOV, P.M., starshiy prepodvatel'

Longitudinal and transversal car loading. Izv. vys. ucheb. zav.;
gor. zhur. no.12:101-108 '60. (MIRA 14:1)

1. Kemerovskiy gornyy institut. Rekomendovana kafedroy rudnichnogo
transporta i gornykh mashin Kemerovskogo gornogo instituta.
(Mine railroads--Cars)
(Coal handling machinery)



L 10529-66 EPA/EWT(m)/EWP(f)/EPF(n)-2/T/ETC(m) WW/WE
ACC NR. AP6003468 SOURCE CODE: UR/0318/64/000/012/0024/0026

AUTHOR: Marlin, A. G.; Nikolayeva, V. G.; Bayburskiy, L. A.; Krechetova, P. I.; Rudayev, V. Ye.; Bolotov, L. T.; Ovsyannikov, P. V.; Vlasov, F. F.
ORG: GrozNII

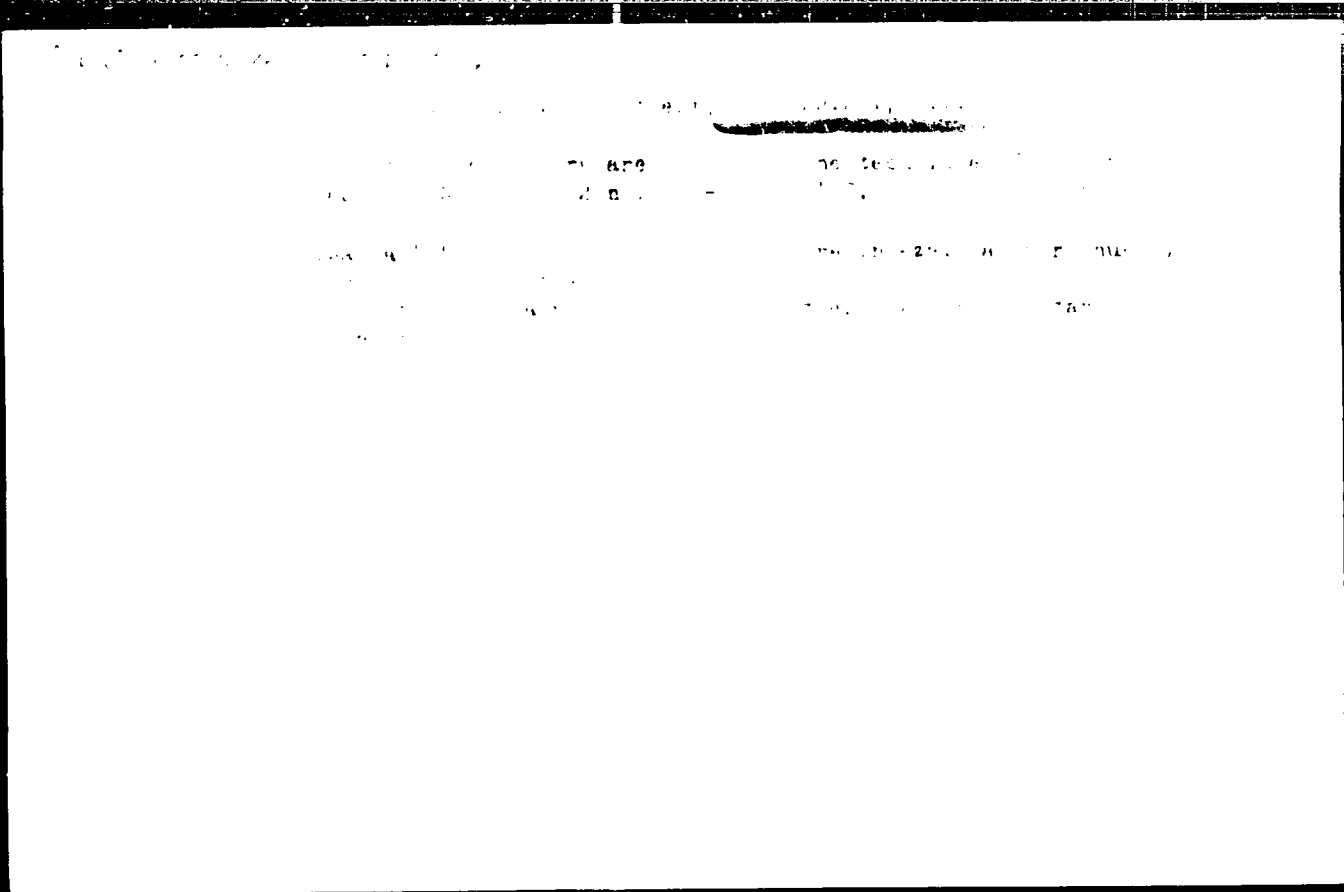
TITLE: Production of gas turbine fuel on the basis of products of thermal cracking

SOURCE: Neftepererabotka i neftekhimiya, no. 12, 1964, 24-26

TOPIC TAGS: gas turbine fuel, petroleum refining

ABSTRACT: A fraction with a boiling range of 200-350° obtained by thermal cracking of a mixture of mazut with a low sulfur content (0.31% S) and solar oil (with 0.15% S) was found to be a satisfactory fuel for gas turbine locomotives. The fuel had a low ash content (0.0007%), a sulfur content of 0.2%, a low vanadium content (traces), and a pour point of minus 17° against minus 12° required by standard specifications. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 21 / SUBM DATE: none / ORIG REF: 002



СКОЛЯНИКОВ, Т. В., МУХОМАНДИ, А. А., ШИШОВ, В. П., ШИШОВ, В. П.,
СКОЛЯНИКОВ, Т. В., МУХОМАНДИ, А. А., ШИШОВ, В. П., ШИШОВ, В. П.,
СКОЛЯНИКОВ, Т. В., МУХОМАНДИ, А. А., ШИШОВ, В. П., ШИШОВ, В. П.,

"The process of"

... ..

ZHUKOV, I.S.; MINASYAN, T.S.; OVSYANIKOV, P.V.

Improving the operation of double-furnace thermocracking installations. Neftianik 2 no.8:14-16 Ag '57. (MIRA 10:10)

1. Nachal'nik ustanovki Groznenskogo kreking-zavoda (for Zhukov)
2. Dotsent Groznenskogo neftyanogo instituta (for Minasyan).
3. Zamestitel' glavnogo inzhenera Groznenskogo kreking-zavoda (for Ovsyannikov).

(Cracking process)

OUSYANNIKOV, V.

Utilization of cracking residues as stocks for repeated cracking. T. S. Minasyan, V. V. Serov, P. V. Orayannikov, I. S. Zhukov, and T. O. Karpenko. *Asrbalidzhan. Neft. Khim.* 1956, No. 4, 19-22 (in Russian).—Cracking residues were deasphaltized with propane and reused as stocks for cracking. The complete exptl. data were given in detail.

T. Durbak

6

gmb

ОУСЯННИКОВ
MINASYAN, T.S.; SEROV, V.V.; OUSYANNIKOV, P.V.; ZHUKOV, I.S.;
KARPENKO, T.G.

Using cracking residues as material for secondary cracking.
Azerb.neft.khoz. 35 no.4:19-22 p '56. (MLRA 9:10)

(Cracking process)

NAZARETOVA, N.B.; BASHILOV, A.A.; AMERIK, B.K.; KRECHETOVA, P.I.;
OVSYANNIKOV, P.V.; SUKHOZEBRIKOV, A.P.

Industrial experiments on the destructive distillation of fuel
oils. Trudy GrozNII no.4:4R-59 '59. (MIRA 12:9)
(Petroleum products) (Distillation, Destructive)

DROZDOVA, Yo.I.; OREINA, Z.G.; SVETOZAROVA, O.I.; ZHDANOVA, V.V.; MEL'NIKOVA,
N.P.; OVSYANNIKOV, P.V.

Refining of the intermediate distillate fractions of thermal
cracking. Trudy GrozNII no.4:142-156 '59. (MIRA 12:9)
(Petroleum--Refining)

SOV/65-59-4-8/14

AUTHORS: Minasyan, T.S., Pal'chikov, G.F., Bolotov, L.T.,
Ovsyannikov, P.V., Shumovskiy, V.G., Afanasenko, M.M.,
Rusakov, A.P. and Karpenko, T.G.

TITLE: Investigations in the Grozny Plants on the Catalytic
Purification of Middle Distillates Obtained During
Thermo-Cracking Processes (Iz opyta raboty groznenskikh
zavodov po kataliticheskoy oshistke srednikh distillyatov
termicheskogo krekinga)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4,
pp 44-48 (USSR)

ABSTRACT: The octane numbers of gasolines can be improved by
catalytic cracking of the kerosine-gas-oil fractions,
obtained during fractional distillation. This,
however, seems unsatisfactory because these fractions are
high quality starting materials for jet and diesel fuels
etc. The middle fractions, obtained during thermal
cracking, used as diesel fuels, contain a high quantity
of unsaturated hydrocarbons and have a low cetane number.
The quality of diesel fuels can be improved by using
aluminium silicate catalysts and enriched secondary
distillates. In this way, the consumption of unsaturated

Card 1/3

SOV/65-59-4-8/14

Investigations in the Grozny Plants on the Catalytic Purification of Middle Distillates Obtained During Thermo-Cracking Processes

compounds is decreased and the cetane number of the diesel fuels increased, whilst maintaining the standards required by GOST for diesel fuels. Tests were carried out on substances obtained after second distillation of the broad fraction and also by using mixtures of these substances and the kerosine fraction obtained during thermal cracking. The properties of the tested materials are given in table 1 and the process conditions in table 2. Some high octane gasoline was obtained during this process. This was purified, washed and reacted with an 18 to 20% NaOH solution. After stabilisation it was purified again, treated with a 15 to 18% NaOH solution and washed. The stabilised pure gasoline had an octane number of 76. A catalyst of decreased activity (29 to 30) was used during the enriching process. The properties of the aluminium silicate catalysts are given (table 3). Table 4 gives the hydrocarbon composition of the gas. The catalytic cracking of middle fractions can

Card 2/3

S/081/61/000/021/070/094
B138/B101

AUTHORS: Bolotov, L. T., Shumovskiy, V. G., Ovsyannikov, P. V.,
Pal'chikov, G. F., Minasyan, T. S., Afanasenko, M. M., Rusakov,
A. P., Burlakov, A. G., Karpenko, T. G.

TITLE: Pilot run for the commercial processing of a secondary raw
material on a catalytic cracking unit

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 401 - 402,
abstract 21M82 ([Tr.] Groznensk. neft. in-t. sb. 23, 1960,
97 - 105)

TEXT: With the aim of increasing supplies of quality high-speed diesel
fuels, experiments have been conducted, in commercial conditions, for the
refining of the medium fractions of the thermal cracking process by re-
distribution of the hydrogen on the aluminosilicate catalyst. The
characteristics of the starting material and of the end product are
enumerated. It is said that it would be possible to use this method for
the production of the components of high-octane automobile gasolines and
low pour-point high-speed diesel fuels. Data are given for the production

(Card 1/2

OVSYANNIKOV, P.V.

304/7213

PHASE I BOOK EXPLOITATION

11 (2, 6)
Greenny. Neftynoy mauchno-issledovatel'skiy institut
Dizain i tekhnologiya pererabotki nefti i gaza (Industry and Techno-
logy of Petroleum and Gas Processing) Moscow, Gosst-
ekizdat, 1959. 278 p. (Series: Naftnyy, vyp. 4) 2,500
copies printed.
Executive Ed.: P.D. Yefremov; Tech. Ed.: A.S. Polozina; Editorial Board: A.Z. Derzhavitskiy (Chairman), B.K. Amurik, G.I. Kas'yan, B.M. Kamukin, V.I. Lavrent'yev, Ye.S. Lavchenko, and M.O. Mitrofanov (Deputy Chairman).

Summary: This book is intended for petroleum engineers and technicians in scientific research institutes, planning organizations, and refineries.
CONTENTS: This collection of technical papers on oil and gas refining were originally discussed at the petroleum refining section of the Third Soviet Scientific-Technical Congress in 1958. The articles have been published to help further the development of the petroleum refining industry and petrochemical industry in the Czechoslovakian area. The history and significance of the petroleum refining industry in the Greenny region is outlined by A.Z. Derzhavitskiy with emphasis on the interdependence of the refineries and the aircraft, automobile and road manufacturing industries. Oil is modern engine demands change in fuel and lubricating properties. The increased use of jet aircraft means that the field of high octane aviation gasoline is important. Since the production of the same type of fuel, aviation kerosene, the yield of which requires quite different refinery treatment is valuable recovered at the same manufacturing lubricating oil and paraffin wax. New materials for manufacturing lubricating oil and paraffin wax and their properties have been thoroughly investigated and results of the study reviewed. The re-equipment of the fuel producing line of refineries at Greenny has been carried out on the basis of findings obtained from tests and pilot plant operations, and a number of reforming and platforming units have been built to upgrade the low octane gasoline produced at Greenny. Water-gas also conducted to ascertain the advisability of applying fractions destructive distillation of residues, which yields catalytic cracking units of the 13-102 type were first put on stream in the Greenny refineries in 1952, and since that time continuous efforts have been made to best their processing capacity. War of stages regeneration of catalysts. The authors make it clear that it is necessary to have the throughput of the above units slight be increased. The production of different types of pellets and their activation catalysts. The contamination of catalyst coking reactor. Its use is discussed. The operation of a contact coking reactor. Its use and products yielded by contact coking units are described. The authors also deal with the manufacture of lubricating oils, paraffin and ceresine wax and indicate way of improving their properties. Electrical denaturation and desalting of crude oil. Recent of light products are described. The authors state that the denaturation extensive studies particularly of gases, benzene, and petroleum products. Monomers and compressors were built and tested. A number of gasoline and acetone from propylene hydrocarbons. A thesis on alcohol and oxidize paraffin various processes and the book is devoted to problems of automatic instruments. The book develops the related control and measuring instruments. Each article contains numerous tables with the characteristics of different petroleum products obtained from refinery processing units. The plants and petrochemical refinery sections. Each article is accompanied by references.

TABLE OF CONTENTS

ZHUKOV, I.S.; MINASYAN, T.S.; OVSYANNIKOV, P.V.

Ways for improving the operation of thermal cracking assemblies.

Azerb.neft.khoz. 75 no.6:46-48 Je '56.

(MLRA 9:10)

(Cracking process)

KISLOV, V.V.; ZAITOV, I.K.; LOBANOV, A.N., doktor tekhn. nauk,
retsensent; LEVCHUK, G.F., kand. tekhn. nauk, dots.,
retsensent; BORDYUKOV, F.P., kand. tekhn. nauk, dots.
retsensent; OVSYANNIKOV, R.I., kand. tekhn. nauk, dots.,
retsensent; KOVLOV, V.N., kand. tekhn. nauk, dots.,
retsensent; BIR, N.Ya., doktor tekhn. nauk, prof.,
red.

[Practical work in photogrammetry] Praktikum po foto-
grammetrii. Moskva, Nedra, 1965. 187 p.

(MIRA 18:6)

VALUYEV, Afanasiy Sergeevich; GERTSENOVA, K.N., kand. tekhn. nauk, retsenzent; LOBANOV, A.N., retsenzent; BORDYUKOV, M.P., retsenzent; BUDYLOV, P.V., retsenzent; OVSYANNIKOV, B.P., retsenzent; POGORELOV, V.M., retsenzent; ROGOZIN, S.M., retsenzent; VASIL'YEVA, V.I., red. izd-va; SUNGUROV, V.S., tekhn. red.

[Practical work in stereophotogrammetry] Praktikum po stereo-fotogrammetrii. Moskva, Izd-vo geodez.lit-ry, 1961. 319 p. (MIRA 15:1)

1. Kafedra fotogrammetrii Voenno-inzhenernoy akademii im. V.V.Kuybysheva (for Lovanov, Boryukov, Budylov, Ovsyannikov, Pogorelov, Rogozin).

(Photogrammetry)

OVSYANNIKOV, R.P., kand.tekhn.nauk

Random errors in spatial phototriangulation. Izv. vys. shk.
zav.; geod. i aerof. no.5:55-72 '61. (MIRA 1961)
(Aerial photogrammetry)

OVSYANNIKOV, R.P.: - kand. tekhn. nauk

Deformation of the model of a spatial aerotriangulation strip.
Izv. vys. ucheb. zav.; geod. i aerof. no. 5:99-118 '60.

(MIRA 13:12)

(Aerial photogrammetry)

OVSYANNIKOV, R.P., kand.tekhn.nauk

Distortion of the relative positions of photographic stations and
triangulation stations. Izv.vys.ucheb.zav.; geod.i aerof. no.1:87-
104 '61. (MIRA 14:6)

(Aerial photogrammetry)

OVSYANN KOV, F.I., kand. tekhn. nauk, dokent

Relative orientation of photographs on universe. Appendix 3.
Izv. vys. ucheb. zav.; geod. i aerof. no. 2 (1954) 1-12.

OVSYANNIKOV, S.

~~Physical training for amateur parachutists. Kryn. red. 8 no.4:14-15~~
Ap '57. (MIRA 10:6)
(Physical education and training) (Parachutists)

OVSYANNIKOV, Stepan Grigor'yevich; KOSTYUKOVETS, F.T., red.

[Problems and instructions on methods for the analysis
of managerial operations of agricultural enterprises]
Sbornik zadach i metodicheskikh razrabotok po analizu
khoziaistvennoi deiatel'nosti sel'skokhoziaistvennykh
predpriatii. Minsk, Vysshaya shkola, 1966. 147 p.
(MIRA 17:12)

OVSYANNIKOV, Stepan Grigor'yevich; KOSTYUK, P.A.

[Inspection of economic and financial activities of agricultural enterprises] Reviziia khoziazistvennoi i finansovoi deiatel'nosti sel'skokhoziaistvennykh predpriatii. Minsk, Gos. izd-vo BSSR, 1960. 90 p. (MIRA 14:11)
(Agriculture--Economic aspects)

OVSYANNIKOV, S.G., kand. ekon. nauk; GRINMAN, G.I.; SHIFUNOV, I.F.;
DRAKICHNIKOV, I.F.; TYABUT, M.A.; KOLEVICH, A.G., red.;
TORKAYLO, I., red.; DIK, V., tekhn. red.

[Accounting and auditing on collective farms; practical aid]
bukhgalterskii uchet i revizionnaia rabota v kolkhozakh;
prakticheskoe posobie. Minsk, Sel'khozgiz BSSR, 1961. 246 p.
(MIRA 15:7)

(Collective farms—Accounting)

~~QVSYANNIKOV, S.O.~~; CHASHINSKIY, I.D.; SAFROMENKO, A.P., redaktor;
~~IZARCHIK, K.~~, redaktor; STEPANOVA, N., tekhnicheskiy redaktor

[Manual for the collective farm stock breeder] Spravochnik kolkhoznogo
zhivotnovoda. Minsk, Gos. izd-vo BSSR, 1956. 317 p. (MIRA 10:2)

1. Glavnyy zootekhnik Ministerstva sel'skogo khozyaystva BSSR (for
Safronenko)
(Stock and stockbreeding)

OVSYANNIKOV, S. G.

Production accounting in kolkhozes Minsk, Gos. izd-vo BSSR, 1954. 60 p.

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N 5
700.112
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Ircizvodstvennyy uchet v kollektivnom proizvodstve. Accounting on
Collective Farms. Moscow, Gos. izd-vo, 1954.

100. titles.

MIL'VIDSKIY, M.G.; LAYNER, L.V.; OVSYANNIKOV, S.P.

Dendrite structure in silicon single crystals grown in a melt
by Chokhral'skii's method. Kristallografiia 5 no.5:817-818
S-0 '60. (MIRA 13:10)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut redkometallicheskoj promyshlennosti.
(Silicon crystals)

OVSYANNIKOV, Stepan Grigor'yevich; VEREVKINA, N.M., red.; BELEN'KAYA,
I.Ye., tekhn. red.

[Ways for improving original accounting on collective farms]
Puti usovershenstvovaniia pervichnogo ucheta v kolkhozakh.
Minsk, Izd-vo Belgosuniversiteta im. V.I.Lenina, 1960. 101 p.
(MIRA 14:8)

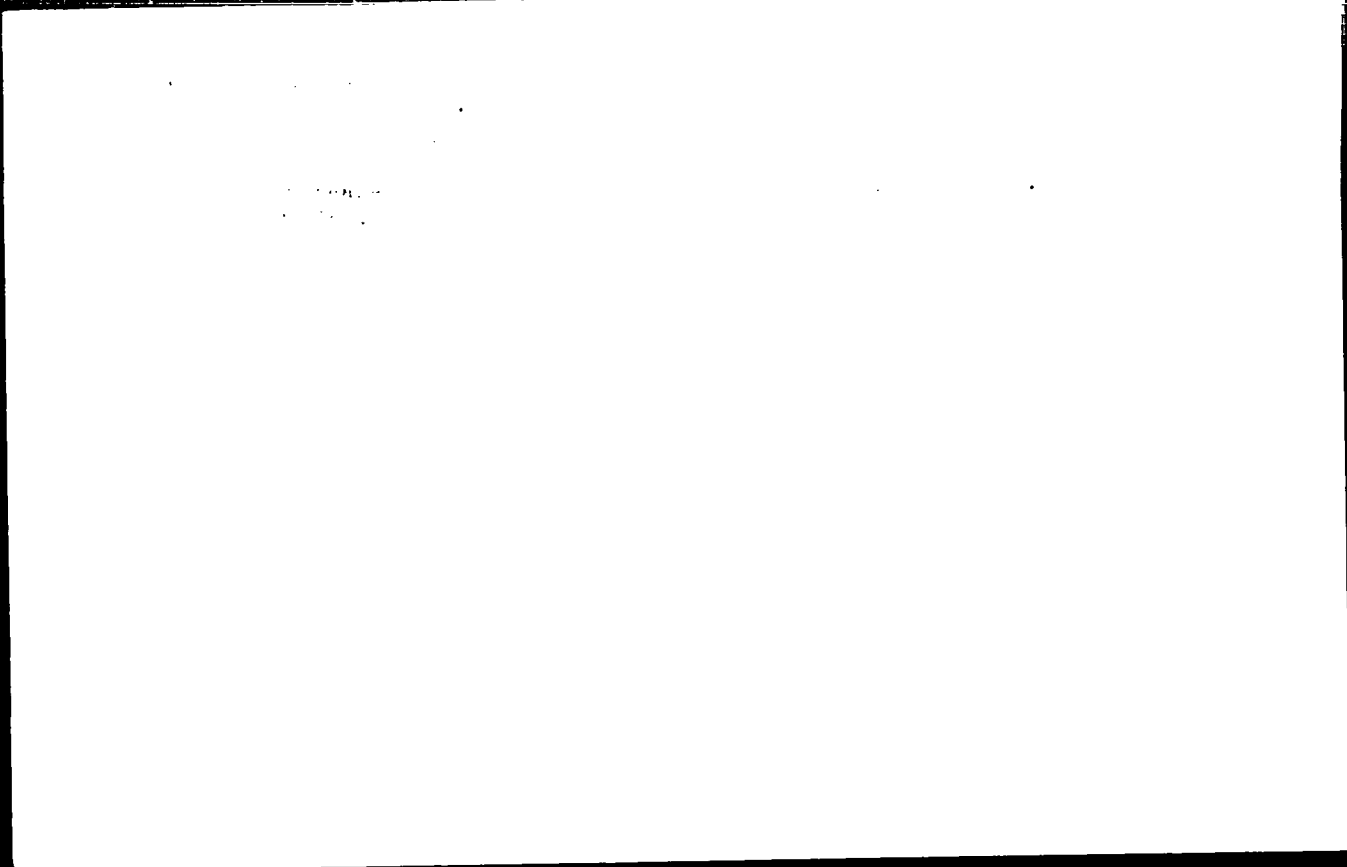
(Collective farms—Accounting)

OVSYANNIKOV, T.N.; GRIGOR'YEVA, A.I., red.; TRUKHINA, O.N., tekhn.
red.

[Controlling wild oats and other weeds; from practices used on the "Kharitonovskii" State Farm in Zav'yalovo District, Altai Territory] Bor'ba s ovsiugom i drugimi sorniakami iz opyta sovkhosa "Kharitonovskii" Zav'yalovskogo raiona, Altaiskogo kraia. Moskva, Sel'khozizdat, 1963. 22 p.

(MIRA 16:7)

1. Glavnyy agronom sovkhosa "Kharitnovskiy" Zav'yalovskogo rayona Altayskogo kraia (for Ovsyannikov).
(Weed control) (Wild oats)



RAT, D.; OVSYANNIKOV, V.; DRIBINSKAYA, D.

Improving the system of collecting profit deductions. Fin. SSSR 16
no.5:66-69 My '55. (MLRA 8:6)

1. Nachal'nik sektora finansirovaniya narodnogo khozyaystva L'vov-
skogo gorfinotdela (for Rat). 2. Zamestitel' nachal'nika planovo-
finansovogo otdela tresta "Dal'rybtara" (for Ovsyannikov). 3. Za-
mestitel' nachal'nika Upravleniya gosdokhodov Ministerstva finansov
Azerbaydzhanskey SSR (for Dribinskaya).
(Tax collection)

22779

S. 057, 61, 031, 001, 010, 020
B104, B205

26.2321

AUTHORS: Ovsyannikov, V. A., Bulvinskiy, D. G., Galaktionov, B. V.,
and Dolmatova, K. A.

TITLE: Method of measuring the temperature of plasma in systems
with magnetic plugs. I. The electron model

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 6, 1961, 1000-1061

TEXT: The authors describe a method that can be used to measure the velocity distribution of both electrons and ions in plasma. In test installations with magnetic fields of plug configuration, the plasma particles perform oscillations between the plugs. If an additional coil is installed near one of the plugs, which compensates the "plug" magnetic field for a short time, the plasma can escape from the traps in longitudinal direction. If an electrostatic analyzer is installed in the path of the plasma, it is possible to measure the energy distribution of the released plasma portion. The maximum permissible time for opening the plug is determined, during which the magnetic trap is not destroyed. The maximum opening time is 1-2 μ sec. A retarding grid or collector is used

Card 1/4

Method of measuring...

22779
S/057/61/031/001/010/000
B104, BPO5

and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Fiziko-tekhnicheskii institut im. A. F. Ioffe AN SSSR
Leningrad Institute of Physics and Technology named
A. F. Ioffe, AS USSR, Leningrad

SUBMITTED: March 21, 1960

Legend to Fig. 1: 1) Rectifier; 2) power supply of the additional circuit;
3) generator of retarding pulses; 4) FV1-2 (GIC-2); 5) starting device;
6) oscilloscope.

Card 3/4

22779

31722
S/057/61/031/012/009/013
B104/B112

10 1300

AUTHORS: Mishin, G. I., and Ovsyannikov, V. A.

TITLE: Effect of the gas-dynamic relaxation of CO₂ on the drag factor of a sphere at supersonic speeds

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 12, 1961, 1467-1471

TEXT: Results of a measurement of the drag factor of a sphere in free flight at long and short relaxation times of the deformation vibrations of CO₂ molecules are presented. The required time for the establishment of thermodynamic equilibrium for the deformation vibrations of CO₂ molecules was regulated by proper choice of the CO₂ humidity. The experiments were made with a ballistic device at atmospheric pressure and temperatures around 19.5°C ($1.6 < M < 4.9$, $2.8 \cdot 10^5 < Re < 0.9 \cdot 10^6$; diameter of the sphere, 5 mm). Fig. 1 shows the experimental drag factor C_x as a function of M . Before the experiments, the gas was carefully dried with acetone and dry ice. The required degree of humidity was achieved with distilled water. The gas density in the ballistic tube

Card 1/4

Effect of the gas-dynamic relaxation... ³¹⁷²²
 S/057/61/031/012/009/013
 B104/B112

was measured with a gas pycnometer. The speed of sound in dry and humid CO₂ was measured with a sound interferometer. The formula

$$C_s = \left[\frac{2}{\gamma+1} + \frac{\gamma-1}{\gamma_1(\gamma+1)M_1^2} \right] \cdot \left[1 + \frac{\gamma-1}{\gamma} \frac{\gamma_1+1}{2\gamma_1 M_1^2 - (\gamma-1)} \right]^{\frac{1}{\gamma-1}} \quad (13)$$

is derived for the drag factor of a sphere of varying specific heat. Here $\gamma_1 = C_{p1}/C_{v1}$, $\gamma_2 = C_{p2}/C_{v1}$, C_{p1} and C_{p2} denote the specific heat in front of and behind the shock wave, $\bar{\gamma}$ is found from the integral

$$\bar{\gamma}R/(\gamma-1) = \int_{T_1}^{T_2} C_p dt / (T_2 - T_1). \quad \text{Eq. (13) describes } C_x(M) \text{ in supersonic}$$

flows at varying specific heat for both excitation and relaxation of vibrations of a free molecule. From a comparison of experimental and theoretical data it results that 1) the effect of relaxation manifests itself only slightly, as the measurements were made at atmospheric pressure and the zone of relaxation was smaller; 2) with increasing M, the effect

Card 2/4

317??
S/057/61/031/012/009/013
B104/B112

Effect of the gas-dynamic relaxation...

of relaxation, at constant pressure in the oncoming flow, on the drag factor of a sphere decreases, since the width of the zone in which thermodynamic equilibrium is established, narrows more quickly than the dropout of the shock wave decreases. V. R. Lazovskaya, I. M. Dement'yev, V. P. Yermakov, and N. P. Mende are thanked for participating in the experiments. There are 2 figures and 9 references: 3 Soviet and 6 non-Soviet. The three most recent references to English-language publications read as follows: A. Kantrowitz. J. Chem. Phys., 10, no. 2, 145, 1942; 14, no. 3, 150, 1946; W. Griffith, D. Brickl, V. Blackmann. Phys. Rev., 102, no. 5, 1209, 1955; F. Durham. J. Appl. Mech., 19, no. 1, 57, 1952.

ASSOCIATION: Fiziko-tehnicheskly institut im. A. F. Ioffe AN SSSR
Leningrad (Physicotechnical Institute imeni A. F. Ioffe
AS USSR, Leningrad)

SUBMITTED: January 9, 1961

Card 3/A

S/057/63/033/002/008/023
B108/B106

AUTHORS: Bulyginskiy, D. G., Galaktionov, B. V., Dolmatova, K. A.,
and Ovsyannikov, V. A.

TITLE: A method of measuring the energy spectrum of the particles
escaping from a plasma

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 33, no. 2, 1963, 183-190

TEXT: The energy spectrum of the electrons and ions escaping from a plasma was studied using a vacuum device with corkscrew geometry of the magnetic field. The plasma pulses were produced by the discharge of a capacitor. The analyzer, three plane grids and the collector, were in a steel cylinder closed by a grid diaphragm to reduce the plasma concentration. The measurements were made by the delayed-potential method described by V. A. Ovsyannikov et al. (ZhTF, 31, 5, 577, 1961). The maximum energy of the electrons increased with increasing magnetic field strength, equaling about 50 ev at 1000 oe. The ion energy was independent of the magnetic field strength, reaching a maximum of some 200 ev (15 kv at the capacitor, $1-2 \cdot 10^{-4}$ mm Hg). Some of the results of this paper were reported at the
Card 1/2

▲ method of measuring the ...

S/057/63/033/002/008/C23
B108/B186

International Conference on Research in the Field of Plasma Physics and
Controlled Nuclear Fusion, Salzburg, 1961. There are 10 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut im. A. F. Ioffe AN SSSR,
Leningrad (Physicotechnical Institute imeni A. F. Ioffe
AS USSR, Leningrad)

SUBMITTED: February 12, 1962

Card 2/2

L 13490-66 EWT(1)/ETC(F)/EPY(n)-2/EWO(m) IJP(6) AT

ACC NR. AP0002440

SOURCE CODE: UR/0067/69/035/012/2176/2184

AUTHOR: Golant, V. Ye.; Karavichiy, M.G.; Ovyanikhov, V.A.; Piliya, A.D.

ORG: Physics-technical Institute in. A.F. Joffe, AN SSSR, Leningrad (Fiziko-
tehnicheskii institut AN SSSR)

21,44,55

59
50
B

TITLE: A toroidal machine for adiabatic compression of plasma

SOURCE: Izurnal tekhnicheskoy fiziki, v. 35, no. 12, 1985, 2176-2184

TOPIC TAGS: plasma heating, plasma compression, ~~plasma containment~~, ~~plasma device~~,
nonhomogeneous magnetic field, *magnetic field*, *physics laboratory instrument*

ABSTRACT: There is briefly described a new machine, the "Tuman", for ohmic heating and subsequent adiabatic compression of plasma. The chamber is in the form of a racetrack with 60 cm long straightaways and 20 cm radius semicircular ends. In order to meet the conflicting requirements for stable, efficient ohmic heating and high adiabatic compression ratio, the quasistationary longitudinal magnetic field (half-period 3 millisecc) was made strong (up to 50 kOe) in the semicircular end regions and weak (1.5-3 kOe) in the straightaways. The radius of the chamber in the semicircular end regions is 2 cm, and the plasma is stabilized by a 5 mm thick copper liner, which is slotted to permit penetration of the magnetic field. The radius of the chamber in the straightaways is 8.5 cm and the walls are of glass, there being no metallic liners that might reduce the rate of rise of the compressing magnetic

UDC: 533.9

Card 1/3

L 15040-66 EWT(1)/ETC(f)/EPE(n)-2/EVD(m) LIP(c) AT

ACC NR: AP6004880 SOURCE CODE: UR/0057/68/036/001/0067/0079

AUTHOR: Golant, V. Ye. ; Keganskiy, M.G. ; Oveyannikov, V.A. 60

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TITLE: Investigation of plasma in the "Tuman" installation B

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ABSTRACT: The first experiments with the "Tuman" installation are reported. The machine which is of race-track construction, was recently described by the authors and A.D. Diliya (ZhTF, 35, No.12, 1965). In the semicircular end sections the diameter of the chamber is small and the longitudinal magnetic field strength is made high to facilitate ohmic heating; in the straightaways the diameter of the chamber is larger and the initial longitudinal magnetic field strength is made low, to facilitate adiabatic magnetic compression of the plasma. The present experiments were undertaken mainly to explore the conditions of electrodeless discharge and ohmic heating. The pressure was pumped down to 10^{-6} mm Hg before the experiments and was cleaned with several dozen preliminary discharges, but it was not baked out. The experiments were performed with a steady flow of hydrogen. Preliminary ionization was effected with a

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with the current in opposite directions. It is not clear how the signal due to paramagnetism was evaluated or eliminated. From the diamagnetic moment of the plasma its density and temperature were estimated. At hydrogen pressures of 0.02 to 0.002 mm Hg ionizations of 50 to 90% were achieved with plasma temperatures of 4 to 8 eV. At 0.01 mm Hg hydrogen pressure and magnetic fields from 1 to 2 kOe, a plasma density of $5 \times 10^{14} \text{ cm}^{-3}$ was reached. Energy balance considerations indicated that the plasma was confined for approximately 20 μsec . Preliminary magnetic compression experiments were performed, with the field increasing to a maximum of from 4.5 to 18 kOe in from 20 to 30 μsec . High speed photographs showed that the diameter of the plasma filament was decreased by several times. The authors thank A.B. Berexin for performing spectroscopic measurements, S. G. Kalwykov for performing the microwave measurements, V. L. Pautov for active participation in the work, and the staff of the laboratory for assistance and valuable advice. Orig. art. has: 4 formulas, 8 figures, and 2 tables. [15]

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no. 1:38-39 Ja '61. (MIRA 14:5)

1. Glavnyy inzhener Pinskikh putevykh masterskikh Belorusskoy
dorogi.

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BAKHTIYCHUK, P.V.; OVSIANNIKOV, V.D.

Strong and inexpensive tie plates. Put' i put.khos. no.6:36-37
Je '57. (MIRA 10:7)

1. Nachal'nik Pinskikh putevykh dorozhnykh masterskikh (for
Bakhtiychuk). 2. Glavnyy inzhener Pinskikh putevykh dorozhnykh
masterskikh (for Ovsyannikov).
(Railroads-Ties)