"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

ACC NR: AP7005572 (N) SOURCE CODE: UR/0145/66/000/011/0096/0100

AUTHOR: Ivanov, V. L. (Candidate of technical sciences); Chun'kov, G. A. (Engineer)

ORG: None

TITLE: Experimental investigation of clogging in the radiators of air-cooled gas turbine blades

SOURCE: IVUZ. Mashinostroyeniye, no. 11, 1966, 96-100

TOPIC TAGS: radiative heat transfer, gas turbine engine, turbine blade

ABSTRACT: The authors study the tendency to clogging in the radiators of gas turbine blades with self-contained cooling systems where the secondary heat-transfer agent is air flowing over the heat-exchange surface of the radiator. The radiator design and dimensions of the fins are shown in the figure. The construction material was 2Kh13. Contamination of the cooling air was evaluated by weighing the air filter with an accuracy of 5 mg before and after passage of a given amount of air. The pressure drop across the radiator, pressure and temperature at the radiator input and average temperature of the radiator wall were held constant during the experiment. The tests were carried out for ten hours each day for twenty days with a finely dispersed suspension of oil (6.4 mg/m^3) in the cooling air which is approximately 50 times the maximum contamination of the air flow in a gas turbine engine. No changes were observed in the thermal characteristics of the ribbed radiator surfaces. The behavior of the

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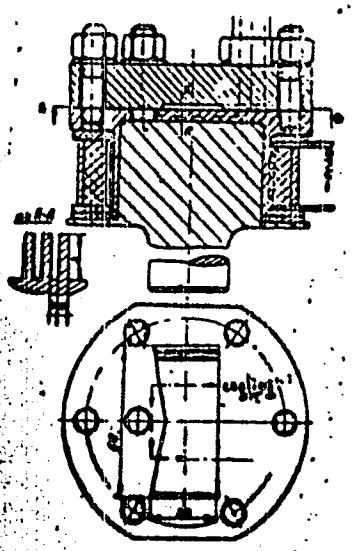
material suspended in the flow is determined by radiometric forces which prevent the formation of deposits on the heat-exchange surface with the exception of the output zone of the radiator where the air temperature is high and forces of thermophoresis decrease. Only trace deposits were observed even in this region. The article was presented for publication by Doctor of technical sciences V. V. Uvarov, Professor at the Moscow Technical College im. N. E. Bauman. Orig. art. has: 3 figures.



SUB CODE: 21,20/ SUBM DATE: 30Mar66/ ORIG REF: 05

Card 2/2

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 46032-66 EWT(1)

ACC NR: AR6013637 SOURCE CODE: UR/0058/65/000/010/G034/G034

49
B

AUTHOR: Aleksandrov, G. N.; Ivanov, V. L.

REF SOURCE: Sb. Proboy dielektrikov i poluprovodnikov. M.-L., Energiya, 1964, 39-44

TITLE: Discharge characteristics in long air gaps under the influence of damped oscillating voltage

SOURCE: Ref. zh. Fizika, Abs. 10G237

TOPIC TAGS: voltage stabilization, electric discharge, ELECTRIC ARC

TRANSLATION: The results of a study of electrical strength of air gaps between electrodes of the types: rod-plane, rod-rod and wire-plane under the influence of damped oscillating voltage pulses (with a frequency of 50-125 cycles/sec and a maximum of 1.25 Mv) are presented. In the course of the initial increase in voltage, the rise time ranged between 2000 and 4500 μsec. A considerable scattering in breakdown voltages is observed for voltage pulses with a slow rise time, when applied to gaps of the first two types and with a length greater than 2 m. Arcing across these gaps took place on the leading edge of the pulse long before it reached its maximum. The magnitudes of voltages which brought about arcing are subject to a considerable statistical scattering. In the shorter gaps the streamers which feed the leader terminal reached the opposite electrode. In the longer gaps, the leader terminal is fed by streamers

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which do not cover the whole discharge gap; the result is a zig-zag discharge path. For gaps of the wire-plane type, with a wire length of 300 m, the scatter of electrical strength is considerably less when slow rising voltage pulses are applied. In this case arc-over may occur along a considerable length of wire (100-150 m).

SUB CODE: 09/ SUBM DATE: none

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.L., aspirant

Detecting Brucella carriers by means of specific provocation of brucellosis. Veterinariia 41 no.3:34-35 Mr '65. (MIRA 18:4)

1. Donskoy sel'skokhozyaystvennyy institut.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Effect of adrenalectomy and the administration of some corticosteroids on antibody formation. Vest AMN SSSR 18 no.11:19-24 '63 (MIRA 17:7)

1. Moskovskiy institut vaktsin i syvorotok imeni I.I. Mechnikova Ministerstva zdravookhraneniya SSSR.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

SHISHKOV, Ye.N.; IVANOV, V.M., inzh.

Laboratory of the Dzerzhinskii Glass Works as a communist labor team. Zav.lab. 29 no.5:631 '63. (MIRA 16:5)
(Glass factories) (Chemical laboratories)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

USSR / General Problems of Pathology. Pathophysiology of the Infectious Process. U

Abs Jour: Ref Zhur-Biol., No 11, 1958, 51594.

Author : ~~Ivanov, V. M.~~
Inst : Not given.
Title : The Role of the Pituitary in the Resistance of Rats to Diphtheria. Toxin.

Orig Pub: Byul. eksperim. biol. i meditsiny, 1957, 44, No 9, 56-58.

Abstract: The experiments were carried out on male rats, normal, hypophysectomized (HR) and HR receiving ACTH. Hypophysectomy lowered by 40% the resistance of the animals to diphtheria toxin. Administration of ACTH increased resistance of HR by 10%.

Chair of Pathophysiology, II Moscow Med Inst im I. V. Stalin

Card 1/1

30

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

VEPRIKOV, N.N.; IVANOV, V.M.

Hashimoto's goiter. Vest. khir. 92 no.1:74-75 Ja '64. (MIRA 17:11)

1. Iz khirurgicheskogo otdeleniya (zav. - N.N. Veprikov) mediko-sanitarnoy chasti (glavnyy vrach - N.T. Zabolot'ko), Perm.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, Vsevolod Mikhaylovich; KROTOV, Fedor Grigor'yevich; IVANOVA, V.P., red.; TIKHONOVA, I.M., tekhn. red.

[Technically minded workers in the service of communism]Tekhnicheskuiu mysl' rabochikh - na sluzhbu kommunizmu! Leningrad, Lenizdat, 1962. 200 p. (MIRA 16:2)
(Leningrad—Efficiency, Industrial)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

VOLOKHOV, I.M.; IVANOV, V.M.

Lysaya gabbro-pyroxenite-peridotite massif. Geol. i geofiz. no.11: 74-85 '61. (MIRA 15:2)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(Sayan Mountains--Geology)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

KASHIN, I.V.; IVANOV, V.M.

Elimininating the fitting of ball-bearing tracks. Av.prom. 26 no.8:60-62 Ag '57. (MIRA 15:4)
(Ball bearings)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Automatic upsetting machine for small rivets. Av.prom. 26 no.8:78 Ag '57. (MIRA 15:4)
(Forging machinery)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

LIVCHAK, I.F.; IVANOV, V.M.; GRUDZINSKIY, M.M.

Hot-air heating with exhaust ventilation in modern apartment houses and public buildings. Vod. i san. tekh. no.8:5-11 Ag '58. (MIRA 11:9)
(Hot-air heating) (Exhaust systems)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

GRUDZINSKIY, M.M., kand. tekhn. nauk; IVANOV, V.M., inzh.

[Temporary instructions for the design of hot-air heating systems, combined with supply-exhaust ventilation, in residential buildings] Vremennye ukazaniia na proektirovanie sistem vozdushnogo otopleniia, sovmeshchennogo s pritochno-vytiazhnoi ventiliatsiei v zhilykh domakh. Vtoraia redaktsiia. Moskva, 1961. 125 p. (MIRA 15:4)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut sanitarnoy tekhniki.

(Dwellings—Heating and ventilation)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, Viktor Mikhaylovich; GRIGOR'YEVA, A.I., red.; FAYNSHMIDT, F.Ya., tekhn.red.

[Amateur sound recording] Liubitel'skaia zvukozapis'. Moskva, Izd-vo DOSAAF, 1959. 31 p. (Bibliotechka zhurnala "Radio," no.4) (MIRA 12:8)

(Sound-Recording and reproducing)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

ALEKSEYEV, S.M.; BOL'SHOV, V.M.; VITKOV, M.G.; GUKIN, V.I.; IVANOV, V.M.; MALININ, R.M.; PILTAKYAN, A.M.; PLENKIN, Yu.N.; SOBOLEVSKIY, A.G.; BURLYAND, V.A., red.; BORUNOV, N.I., tekhn. red.

[Handbook for beginning radio amateurs] Spravochnik nachinaiushchego radioliubitelia. Pod obshchei red. R.M.Malinina. Izd.2., stereotipnoe. Moskva, Gosenergoizdat, 1963. 623 p. (Massovaia radiobiblioteka, no.400) (MIRA 16:5)

(Radio--Handbooks, manuals, etc.)
(Radio operators--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

SONIN, Yevgeniy Konstantinovich; IVANOV, V.M., red.; VORONIN, K.P., tekhn.red.

[Portable transistorized magnetic tape recorder] Portativnyi magnitofon na tranzistorakh. Moskva, Gos.energ.izd-vo, 1961. 30 p. (Massovaia radiobiblioteka, no.392) (MIRA 14:4)
(Magnetic recorders and recording)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

GRUDZINSKIY, M.M.; IVANOV, V.M.

Concerning I.N.Kuranov's article "Two-pipe riser system with decentralized mixing." Vod. i san.tekh. no.4:22 Ap '59. (MIRA 12:5)

(Hot-water heating) (Kuranov, I.N.)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

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Substitutes for natural drying oil. V. M. Ivanov. *Byull. Maj[illegible]nol Tekh.* 1939, No. 3, 7; *Khim. Referat. Znur.* 1939, No. 9, 104.—The suitability of the following products was investigated: (1) natural linseed oil alone and mixed with prepd. cottonseed oil and in the ratio of 43:57 "Oksol" drying oil (55.4%) in a mixt. with cottonseed oil. For inside work these drying oils are suitable for pigments of all colors, including white. The slight yellow color observed in white paints was caused by the light-unstable lithopone. Observations on outside paints are not yet complete. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V. M.

Ca

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PROCESSES AND PROPERTIES INDEX

The purification and decolorization of wool fat lanolin. A. Vodsinkaya, V. Ivanov, L. Leites, S. Raikhman, S. Tisanova and L. Shalilova. *Sherstyanoe Delo* 10, No. 3-4, 12-13(1940); *Chem. Zentr.* 1940, II, 2530-7.—A method is reported for the purification and decolorization of tech. lanolin obtained by the extn. of a linse-lanolin ppt with benzene. The benzene ext. of such a ppt. was extd. with dil. alc. acidified with H_2SO_4. In this way the gray lime was completely removed from the soln. in the form of a dense ppt. The best results were obtained by the use of 33% alc. and 10% of 20% H_2SO_4, calcd. on the vol. of the benzene soln. By distg. off the benzene directly with steam the lanolin was obtained as a light-colored, transparent, practically anhyd. product of acid no. 11-13. The yield was about 92%. M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Hydrometeorological conditions in the northern part of the Atlantic Ocean. Probl.Arkt. no.4:5-14 '58. (MIRA 11:12)
(Atlantic Ocean--Meteorology, Maritime)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Coniferous trees of Korea for prospective introduction in the U.S.S.R. Biul.Glav.bot.sada no.32:25-31 '58. (MIRA 12:5)
(Korea, North--Coniferae) (Plant introduction)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

BELEN'KIY, G.I.; BREYTER, M.Ye.; IVANOV, V.M.; KALINKIN, V.S.; KOZHUSHKEVICH, V.G.; PETRAKOVSKIY, V.M.; RABINOVICH, A.A.; RUBINSKIY, I.A.; SINAYSKIY, M.M.; FEYLER, G.O.; KHOROSHILKIN, L.L.; KOMAR, M.A., red.; BUL'DYAYEV, N.A., tekhn. red.

[Electrical equipment of cranes] Elektricheskoe oborudovanie kranov. Moskva, Gosenergoizdat, 1963. 399 p. (MIRA 16:12)

1. Kollektiv inzhenerov moskovskogo zavoda "Dinamo" imeni S.M.Kirova (for all exept Komar, Bul'dyayev).
(Cranes, derricks, etc.—Electric equipment)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

(11)

IVANOV, V.M.

PHASE I BOOK EXPLOITATION SOV/5660

Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Tsentral'noye pravleniye. Sektsiya remonta i modernizatsii oborudovaniya

Modernizatsiya i remont oborudovaniya mashinostroitel'nykh zavodov (Modernization and Repair of Machine-Building Plant Equipment) Moscow, Mashgiz, 1959. 261 p. Errata slip inserted. 6,100 copies printed.

Ed. (Title page): N.A. Roskin, Candidate of Technical Sciences; Ed. (Inside book): A.T. Popov, Engineer; Tech. Ed.: V.D. Kl'kind; Managing Ed. for Literature on Metalworking and Machine-Tool Construction (Mashgiz): E.D. Beytel'man, Engineer; Editorial Board: N.A. Roskin (Chairman), Candidate of Technical Sciences; Yu.S. Borisov, Engineer; V.D. Pletnev, Engineer; V.I. Mikhaylovskiy, Engineer; and V.P. Golov, Engineer.

PURPOSE: This collection of articles is intended for technical personnel dealing with modernization and overhaul of equipment.

COVERAGE: The articles in this collection deal with the basic trends and a number of specific problems in the modernization of the machine industry. Modernization of foundry, forging-shop, and crane equipment and problems in the automation of equipment repair are discussed. Information is given on the use of unitized subassemblies in the modernization of metal-cutting machine tools, on measures for prolonging the life of forging hammers, on methods of automatic vibro-electric hard facing of worn parts, on sulfidation, and on vibroisolation of forging-hammer foundations. No personalities are mentioned. References follow several of the articles.

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Mansurov, I.E. [Engineer]. Basic Trends in the Modernization of Press Equipment 3

Sheynfeld, Ye.M. [Engineer]. Prolongation of the Life of [Piston] Rods for Forging Hammers 31

Damaskin, V.N. [Engineer, NIILITMASh]. Basic Trends in the Modernization of Foundry Equipment 39

Ostroumov, N.K. [Engineer]. Automation of Metal-Cutting Machine Tools 49

Ivanov, V.M. [Engineer, VPTI]. Organization of Heavy Repair of Jig Boring and Inspection of Repair-Work Quality 61

Pilatnikov, N.V. [Engineer, Khar'kovskiy zavod transportnogo mashinostroyeniya imeni Malysheva (Khar'kov Plant of Transportation - Machinery Construction imeni Malyshev)]. Repair of Worn Ways of Metal-Cutting Machine Tools by External Broaching 108

Pevtsov, N.A. [Engineer, Stankoremtrest]. Use of Unitized Subassemblies in the Modernization of Metal-Cutting Machine Tools 112

Afanas'yev, P.S. [Candidate of Technical Sciences, NIIDrevmash]. Basic Trends in the Modernization of Woodworking Equipment 132

Nikolayevskiy, G.M. [Candidate of Technical Sciences, NIILITMASh]. Basic Trends in the Modernization of Existing Crane Equipment 136

Riss, V.P. [Engineer]. Modernization and Repair of Crane Equipment 155

Shishkin, Ye.I. [Engineer, Uralmashzavod]. Modernization of Unique Equipment 165

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APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; DUBLIANSKIY, V.M. [Dublians'kyi, V.M.]; DOMBROVSKIY, O.I. [Dombrovs'kyi, O.I.]

Studies of karst caves in the Crimean mountain region by the General Karst Expedition of the Ukrainian Academy of Sciences in 1959. Dop.AN URSR no.4:553-555 '60. (MIRA 13:7)
(Crimea--Karst)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

VOLKHOV, I.M.; IVANOV, V.M.; KUZNETSOV, Yu.A., otv. red.; KOROLEVSKAYA, B.N., red.; OVCHINNIKOVA, T.K., tekhn.red.

[Lysaya gabbro-pyroxenite-dunite intrusive complex in the Western Sayan Mountains] Lysogorskii gabbro-piroksenit-dunitovoi [sic] intruzivnyi kompleks Zapadnogo Saiana. Otv. red. IU.A.Kuznetsov. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1963. 99 p. (MIRA 16:11)

1. Chlen-korrespondent AN SSSR (for Kuznetsov).
(Sayan Mountains--Geology)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; SAVITSYN, G.M.[Savitsyn, H.M.]

Some problems of Tertiary and Jurassic water-bearing sediments in the Rudky gas field. Geol. zhur. 23 no.2:71-78 '63. (MIRA 16:6)

1. Ukrainskiy nauchno-issledovatel'skiy gornorudnyy institut.
(Carpathian Mountain region—Water, Underground—Analysis)
(Carpathian Mountain region—Gas, Natural—Geology)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IOFFE, Aleksandr Borisovich; IVANOV, V.M., redaktor. ;LARIONOV, G.Ye., tekhnicheskiy redaktor.

[Electric traction machinery; theory, construction, design] Tiagovye elektricheskie mashiny; teoriia, konstruktsiia, proektirovanie. Moskva, Gos.energ.izd-vo, 1957. 247 p. (MLRA 10:5)
(Electric locomotives)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, Vsevolod Mikhaylovich; KANEV, Serafim Nikiforovich; PITKIN, L.M., red.; TIKHONOVA, I.M., tekhn.red.

[The time of peaceful work; how the Leningrad party organization struggled for the restoration of Leningrad industry from 1921 to 1925] Na mirnoi osnove; Leningradskaia partiinaia organizatsiia v bor'be za vosstanovlenie promyshlennosti goroda, 1921-1925 gg. Leningrad, Lenizdat, 1961. 293 p. (MIRA 14:6)
(Leningrad--Industries)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Study of the temperature and moisture condition in staircases of multistory buildings heated by hot-air systems with gravity circulation. Sbor. trud. NIIST no.7:61-76 '61. (MIRA 15:1)
(Hot-air heating) (Staircases)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

GRUDZINSKIY, M.M., kand. tekhn. nauk; IVANOV, V.M., inzh.

[Provisional instructions for designing systems of air heating combined with plenum and exhaust ventilation in apartment houses] Vremennye ukazaniia na proektirovanie sistem vozdushnogo otopleniia, sovmeshchennogo s pritochno-vytiazhnoi ventiliatsiei, v zhilykh domakh. Vtoraia redaktsiia. Moskva, 1963. 125 p. (MIRA 18:3)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut sanitarnoy tekhniki.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

ANOKHIN, V.I., kand. tekhn. nauk.; IVANOV, V.M., inzh.

Operation of hydraulic torque converters with tracor engines under variable load. Mekh.i elek.sots.sel'khoz. 16 no.5:11-16 '58. (MIRA 11:11)

1. Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Tractors--Transmission devices)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V. M., Candidate Tech Sci (diss) -- "Investigation of the operation of a tractor engine with a turbine drive under variable load". Krasnoyarsk, 1959. 20 pp (Min Agric USSR, Moscow Inst of the Mechanization and Electrification of Agric), 150 copies (KL, No 23, 1959, 166)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

SHISHKOV, Ye.N.; IVANOV, V.M.

Laboratory of communist labor. Stek. i ker. 20 no.7:43-44 Jl '63. (MIRA 17:2)

1. Gusevskoy stekol'nyy zavod imeni Dzerzhinskogo.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV V.M

[illegible] owing to intense evap[illegible] and better mixing of [illegible] caused by small size emulsion droplets (1–1.5 mm. in diam.) and their microexplosions in the combustion chamber (cf. [illegible] 49 [illegible]). A. P. Kotlobai

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V. M.

AID P - 1831

Subject : USSR/Engineering

Card 1/1 Pub. 110-a - 8/16

Author : Ivanov, V. M., Kand. of Tech. Sci.

Title : Temperature calculation and fuel burning in a furnace with a cylindrical water-tube wall

Periodical : Teploenergetika, 3, 29-33, Mr 1955

Abstract : The author investigates the combustion process accounting for the flow and the burning of the fuel and heat emission and heat transfer in the fire chamber, making use of experimental data characterising the process. He develops formulae for the computation of the distribution of temperature along the cylindrical water-tube wall operating on a simplified aerodynamic scheme with pressure feed. Eleven diagrams, 5 Russian references (1942-1954)

Institution: Institute of Combustible Minerals of the Academy of Sciences of the USSR

Submitted : No date

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

CHERNYSHEV, Andrey Borisovich; LAVROV, N.V., doktor tekhnicheskikh nauk, otvetstvennyy redaktor; FARBEROV, I.L., doktor tekhnicheskikh nauk, redaktor; SHISHAKOV, N.V., doktor tekhnicheskikh nauk, redaktor; AL'TSHULER, V.S., doktor tekhnicheskikh nauk, redaktor; IVANOV, V.M., kandidat tekhnicheskikh nauk, redaktor; PITIN, R.N., kandidat tekhnicheskikh nauk, redaktor; KLIMOV, V.A., redaktor izdatel'stva; SOMOROV, B.A., tekhnicheskiy redaktor

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akademii nauk SSSR, 1956. 368 p. (MLRA 9:8)

1. Chlen-korrespondent AN SSSR (for Chernyshev)
(Coal gasification)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

AID P - 5015

Subject : USSR/Engineering

Card 1/1 Pub. 110-a - 17/17

Authors : Kantorovich, B. V., Prof. Dr. Tech. Sci., V. M. Ivanov, Kand. Tech. Sci.

Title : On the book by G. F. Knorre "Combustion, What Is It?" Gosenergoizdat, 1955, 223 p. (Book-Review).

Periodical : Teploenergetika, 9, 64, S 1956

Abstract : This is an favorable book review, although some shortcomings are pointed out.

Institution : None

Submitted : No date

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

Ivanov, V. M.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor and Jet Fuels. Lubricants. I-8

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2583

Author : Ivanov, V.M., Kantorovich, B.V., Rapiovets, L.S., Khotuntsev, L.L.

Inst : Academy of Sciences USSR

Title : Fuel Emulsions for Combustion and Gasification.

Orig Pub : Vestn. AN SSSR, 1957, No 5, 56-59

Abstract : In a laboratory combustion chamber, with an air-excess coefficient σ = 1.0; 1.1; 1.2; 1.5 and 2.0, combustion was carried out of stable water emulsions of highly viscous fuels, of the "water - oil" type, produced in a high-speed disperser of the Khotuntsev-Pushkin design. Emulsions fed into the combustion chamber were preheated:

Card 1/3

[illegible] was noted, which decreases the dimensions of the drops, contributes to increased rate of

Card 2/3

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USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor and Jet Fuels. Lubricants. I-8

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2583

evaporation and ensures more intensive mixing of fuel vapor and air. A diagram and description of the disperser are included and the domains of utilization of the emulsions are enumerated.

Card 3/3

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

Ivanov, V.M.

24-8-21/34

AUTHORS: Delyagin, G.N., Ivanov, V.M. and Kantorovich, B.V. (Moscow).

TITLE: On the application of solid processed fuel in gas turbines. (O primenenii tverdogo formovannogo topliva v gazoturbinnykh ustanovkakh).

PERIODICAL: "Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk" (Bulletin of the Ac.Sc., Technical Sciences Section), 1957, No.8, pp.134-137 (U.S.S.R.)

ABSTRACT: Use of solid fuel in gas turbines would be facilitated by a process of "pyrogenetic" breaking down of gas and weakly coking coal proposed by L. M. Sapozhnikov (3), since it enables obtaining strong fuel of any desired dimensions and shape with a porosity of 40 to 50%. The process consists of crushing the coal to sizes of between 0 and 3 mm, feeding the powder in a vortex chamber where it is heated by means of hot gases for 0.5 to 2 secs to a temperature corresponding to the plastic state, i.e. 380 to 450 C and subsequently shaping the thus obtained mass into bits of suitable shape and dimension by applying a pressure of 2 to 5 kg/cm^2. It is claimed that high quality fuel can be obtained by this process and that the obtained fuel is more suitable for gas turbines than otherwise processed fuel. Another method which is at present being tested by the Institute of Mined Fuels Ac.Sc. (Institut Goryuchikh Iskopayemykh AN SSSR) is the production by the above mentioned process of a

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24-8-21/34

On the application of solid processed fuel in gas turbines. (Cont.)

cylindrical fuel column which is then fed from the press directly into a cylindrical combustion chamber. Some of the experimental results obtained for this latter mentioned process are discussed.
There are 2 figures and 3 Slavic references.

SUBMITTED: May 4, 1957.

AVAILABLE: Library of Congress

Card 2/2

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

Ivanov, V. M.

133-10-25/26

AUTHOR: Druskin, L. I., Candidate of Technical Sciences
Ivanov, V. M., Candidate of Technical Sciences and
B.V. Kantorovich, Professor, Doctor of Technical Sciences.

TITLE: Calculation of Temperatures in Tunnel-Type Gas Burners (Raschet temperatur v tunnel'nykh gazovykh gorelkakh)

PERIODICAL: Stal', 1957, No.10, pp. 951-957 (USSR).

ABSTRACT: On the basis of experimental data a method of calculating the temperature along the chamotte tunnel is proposed. The experimental part of the work was carried out by L. I. Druskin on an experimental installation of the Institute of Mospodzemproyekt, the diagram of which is shown in Figure 1, and the experimental tunnel burners are shown in Figure 2. Data on air-gas mixtures used in the experiments - Table 1. Experimental results are shown in Figures 3-8 and Table 2. It is concluded that: 1) Satisfactory flameless combustion of gas in chamotte tunnel burners can be obtained with excess air not exceeding 1.1 (providing the mixing of gas and air is good). 2). The combustion of air-gas mixture in chamotte tunnel burners with incandescent walls takes place practically uniformly across the whole cross-section of the burner. 3). During the process

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133-10-25/26

Calculation of Temperatures in Tunnel-Type Gas Burners

of combustion of air-gas mixture in such burners at temperatures 1000-1500°C intermediate combustion products - methanol and formaldehyde are formed. 4) The approximate formulae derived on the basis of general equations of combustion of a gas stream for calculating the distribution of oxygen concentrations, burning out of the combustion mixture and the temperature along the length of a chamotte tunnel burner as well as the coefficient m, characterising the combustion process which was obtained on the basis of generalising the experimental results, allowed the plotting of calculated curves of the distribution of oxygen concentrations and temperatures along the length of the burner (taking into consideration radiation through the outlet) which agreed satisfactorily with the experimental data. 5) The treatment of experimental data in the dimensionless form within the limits of the combustion zone and cooling zone indicated the existance of straight line relationships (26) and (27), using which the calculation of temperatures in tunnel burners is even more simplified. There are

Card 2/3 8 figures, 1 table and 4 references, all are Slavic.

ASSOCIATION: Institute of Mineral Fuels AS USSR (Institut Goryuchikh Iskopayemykh AN SSSR)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

133-10-25/26

Calculation of Temperatures in Tunnel-Type Gas Burners

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APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

Ivanov, V.M.

PHASE I BOOK EXPLOITATION SOV/5751

Akademiya nauk SSSR. Institut goryuchikh iskopayemykh

Gazifikatsiya i goreniye topliva (Fuel Gasification and Combustion) Moscow, Izd-vo AN SSSR, 1959. 227 p. (Series: Its: Trudy, Vol 11) Errata slip inserted. 1,800 copies printed.

Ed.: N. V. Lavrov; Ed. of Publishing House: V. N. Pokrovskiy; Tech. Ed.: I. N. Dorokhina.

PURPOSE: This collection of articles is intended for scientific research workers and engineers studying combustion processes and solid fuel gasification.

COVERAGE: This collection concerns the theoretical and experimental study of the mechanism of chemical reactions occurring in combustion and gasification. Results of the isotopic method of studying the gas generating process and its reactions, and the reaction of carbon monoxide and heated coal are analyzed and the pilot plants used in this study are described. Reactions of coal combustion, coal oxidation, methane dissociation and conversion are discussed and their equilibrium constants given in tables. The processes of methane oxidation by oxygen and synthesis-gas production by oxidizing natural gas with the subsequent reduction of oxidation products by carbon are analyzed as is the effect of an excessive amount of air on the burning process of powdered solid fuel. The utilization of heavy petroleum residue and tar for combustion and gasification purposes is also discussed along with the principles of fluidization. Analysis, routine control and intensification of physical and chemical processes by means of ultrasonic vibrations are also covered. No personalities are mentioned. References accompany all but the first article.

Al'tshuler, V.S., and G.P. Sechenov. Some Conditions of Normal Operation of Gas Generators With a Fluidized Bed 139

Finyagin, A.P. Problem of Relative Velocity of Powdered Solid Fuel and of Air as an Aerosol Stream in an Experimental Combustion Chamber 148

Ivanov, V.M., B.V. Kantorovich, L.S. Rapiovets, and L.L. Khotuntsev. Utilization of an Emulsion of Heavy Petroleum Residues and Tar for Combustion and Gasification Purposes 156

Ivanov, V.M. Combustion of Liquid Fuel With the Simultaneous Evaporation of Water Spray in a Common Reaction Chamber 169

Sechenov, G.P., and V.S. Al'tshuler. Effect of Pressure on the Behavior of a Fluidized Bed 188

Nikolayeva, V.A. Gas Formation Process in a Coal Conduit During the Steam-Oxygen Blast 198

Bogdanov, P.F., N.V. Lavrov, and Ye. P. Mednikov. Ultrasonic Vibrations as a Means of Investigating, Controlling and Intensifying the Physico-chemical Processes of Fuel Production 205

Lebedev, V.V. Continuous Hydrogen Production by Means of the Metal-Steam Method 215

AVAILABLE: Library of Congress

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JA/edv/fal
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APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; KANTOROVICH, B.V.; RAPIOVETS, L.S.; KHOTUNTSEV, L.L.

Utilization of heavy petroleum residues and tars in the form of fuel emulsions for burning and gasification. Trudy IGI 11:156-168 '59. (MIRA 13:6)
(Petroleum as fuel) (Coal tar) (Emulsions)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Combustion of liquid fuel and the simultaneous vaporization of atomized water in a common reaction zone. Trudy IGI 11:169-187 '59. (MIRA 13:6)

(Liquid fuels) (Water vapor) (Combustion)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M., kand. tekhn. nauk; KANTOROVICH, B.V., doktor tekhn. nauk; RAPIOVETS, L.S., inzh.; KHOTUNTSEV, L.L., kand. tekhn. nauk

Water-soaked peat tars from gas producers used as fuel. Torf. prom. 36 no.7:30-32 '59. (MIRA 13:3)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Peat) (Tar) (Fuel)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

KANTOROVICH, Boris Veniaminovich. Prinimal uchastiye IVANOV, V.M., kand. tekhn.nauk. AGROSKIN, A.A., prof., doktor tekhn.nauk, retsenzent; PITIN, R.N., kand.tekhn.nauk, nauchnyy red.; LANOVSKAYA, M.R., red.izd-va; KARASEV, A.I., tekhn.red.

[Introduction to the theory of coal combustion and gasification] Vvedenie v teoriiu goreniia i gazifikatsii tverdogo topliva. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1960. 355 p. (MIRA 13:10)
(Combustion) (Coal gasification)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V. M., SMIRNOV, Ye.V., and NEFEDOV, P. I.

"On the Behavior of Liquid Drops in Immovable Highly Heated Gas Medium."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

35744
S/124/62/000/003/017/052
D237/D301

11.6300 26.2131

AUTHORS: Kantorovich, B.V., and Ivanov, V.M.

TITLE: Process of combustion of a stream of fuel with simultaneous vaporization of water within the reaction space

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1962, 45, abstract 3B258 (Sb. Ispol'zovaniye goryuchikh gazov v nar. kh-ve. M., AN SSSR, 1961, 22 - 31)

TEXT: An original system is considered of obtaining a gas-water vapor mixture of high parameters ($P = 60$ kg/cm^2 and $T = 600^\circ$-750°C) for gas-water vapor turbines. Its distinct feature is that of high intensity combustion of fuels in the combustion chamber with high thermal gradients and simultaneous vaporization of atomized water, injected into the reaction zone of the chamber. Experimental investigations of such a process have shown that it is possible, in principle, to design it with the coefficient of air excess near to unity, pressures of 30 - 90 kg/cm^2 and thermal intensities of 200 x 10^6 - 300 x 10^6 kcal/m^{3}hr. At the same time, heat losses to the sur-

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rounding medium do not exceed 0.5 %. Experiments were performed in a combustion chamber of diameter 120 mm and length 335 mm and natural gas, paraffin, Diesel fuel and water-fuel emulsions of the above fuels were used, in a stream of nitrogen-oxygen mixture where the oxygen concentration was near to that in air, under pressures up to 50 kg/cm^2, with coefficients of air excess from 0.9 to 1.5; maximum gas temperature in the combustion zone was 1500 - 1600°C and differed from the temperature of the wall by 300°C. A deduction was made on completion, under experimental conditions, of the process of combustion within the reaction space of the combustion chamber with a high degree of combustion and in the absence of hydrogen and carbon monoxide in the products of combustion. In the zone of vaporization of water the combustion ceases and the temperature fell to 600 - 650°C. An analysis is given of the aerodynamical investigation of distribution of gaseous streams in the combustion chamber and it shows that the most important in the system was the arrangement resulting in the motion of the gas with a high water-vapor content along the walls of the chamber towards the base of the flame jet. This arrangement resulted in favorable conditions

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for the performance of the steam generator. The stream motion is ingeniously investigated by determining the concentration distribution of CO_2 contained in air. Also, the results are given of the investigation of the process of evaporation of a separate drop of water in the stationary medium which was based on the method of continuous feed of the drop, making it possible to conduct the investigation with a constant area of evaporation. Given are the relationships between the coefficient of heat transfer of the drop during its evaporation, radius of the drop and the temperature of the surrounding medium, with the radius varied from 0.5 to 1.6 mm, and the temperature from 400°C to 850°C, which show a complex interdependence of the coefficient of heat transfer, radius of the drop and temperature of the medium during the evaporation of a drop. [Abstractor's note: Complete translation].

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[illegible], V.[illegible], kand.tekhn.nauk; [illegible], I.[illegible], kand.tekhn.nauk;
[illegible], T.L., starship laborant

Thermal conductivity of fuel-water emulsions. Teploenergetika
[illegible] no.[illegible]:68-72 Ag '61. (MIRA 14:10)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Heat—Transmission)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

PHASE I BOOK EXPLOITATION SOV/6105

Ivanov, Viktor Mikhaylovich

Toplivnyye emul'sii (Fuel Emulsions). Moscow, Izd-vo AN SSSR, 1962. 215 p. Errata slip inserted. 1500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po toplivnoy promyshlennosti. Institut goryuchikh iskopayemykh.

Resp. Ed.: B. V. Kantorovich, Doctor of Technical Sciences, Professor; Ed. of Publishing House: V. M. Popov; Tech. Ed.: I. N. Dorokhina.

PURPOSE: This book is intended for scientists and technical personnel in various branches of the national economy.

COVERAGE: The book gives the results of studies of the efficient combustion of fuel/water systems (emulsion and suspensions) and the intensive combustion of

Card 1/02

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

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fuels under high pressure in combustion chambers of steam/gas units [turbines] where vaporization takes place simultaneously [with combustion] in the reaction zone. These studies have been in progress since 1954 at the Laboratoriya goreniya topliv, Institut goryuchikh iskopayemykh, AN SSSR. This work has made it possible for the Soviet Union to utilize heavy, hydrated, viscous mazuts (which are abundant in the USSR) and decontaminate industrial waste water containing harmful organic impurities. Positive results are also reported for the efficient combustion of water/coal suspensions, an important step toward the practical utilization of coal dust obtained in the hydraulic mining and transporting of coal, and in other industrial processes. The hydraulic transporting of finely ground coal for long distances, and the direct combustion of coal suspensions in the boilers of electric power stations without preliminary dehydration and drying, are held in prospect. No personalities are mentioned. There are 148 references: 140 Soviet, 6 English, and 2 German.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; NEFEDOV, P.I. [deceased]

Experimental investigation of the combustion of particles of natural and emulsified liquid fuels. Trudy IGI 19:35-45 '62. (MIRA 16:4)
(Liquid fuels) (Combustion)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; SMIRNOVA, Ye.V.; Prinimala uchastiye SMETANNIKOVA, T.L.

Experimental investigation of the rate of evaporation of a drop of liquid in a stationary high temperature medium. Trudy IGI 19:46-58 '62. (MIRA 16:4)

(Liquids) (Evaporation)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

S/846/62/019/000/006/008
E071/E151

AUTHORS: Delyagin, G.N., Ivanov, V.M., and Kantorovich, B.V.

TITLE: The effective utilisation of fuels together with water

SOURCE: Akademiya nauk SSSR. Institut goryuchikh iskopayemykh. Trudy. v.19. 1962. Novyye metody szhiganiya topliv i voprosy teorii goreniya. 59-65

TEXT: This is a survey of work of the Institute and associated organisations on the efficient utilisation of fuels with a high moisture content. The hydro-transportation of coal is associated with an increase in the amount of coal slurries, which require the development of efficient methods for their combustion. Nearly all high viscosity fuel oils are also of high moisture content. Various methods of preparation of oil-water emulsions and their combustion have been investigated. As an example, the disposal is quoted of an effluent containing toxic organic substances, which was incorporated into fuel oil (10-25%) as an emulsion and then burned in works boilers. The possibility of processing fuel-water emulsions into industrial and domestic fuel

Card 1/2

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gases is mentioned; in this case the water becomes a reagent and not simply a diluent. The direct combustion of water-coal suspensions is also mentioned. The most promising method is the simultaneous combustion of fuel and the evaporation of water carried out in the same space, the mixture of steam and combustion products being used in a steam gas-turbine for the production of power.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

S/846/62/019/000/007/008
E071/E151

AUTHORS: Alekseyev, A.M., Ivanov, V.M., and Frenkina, Z.I.

TITLE: Investigation of combustion of gaseous fuel with the simultaneous evaporation of sprayed water in a steam-gas generator

SOURCE: Akademiya nauk SSSR. Institut goryuchikh iskopayemykh. Trudy. v.19. 1962. Novyye metody szhiganiya topliv i voprosy teorii goreniya. 66-94

TEXT: One of the newest methods of fuel and heat utilisation in thermal power stations is the steam-gas cycle, based on the combustion of liquid or gaseous fuel and evaporation of sprayed water in the same space. This complex process allows a sharp increase in the intensity of combustion and of heat exchange and is a most economical method for the production of the working medium for steam-gas turbines of large power generating installations. The use of natural gas for this purpose was investigated on a laboratory installation in which the observation of the whole process from the introduction of the reacting substances to the outgoing of the working medium (steam-gas) was possible.

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

Investigation of combustion of ... S/846/62/019/000/007/008
E071/E151

The apparatus and experimental procedure are described. The advantages of this application of gaseous fuel are discussed. The optimum conditions for combustion of gaseous fuel in steam-gas installations were experimentally established, namely: in a swirling stream with premixing and without any thermal stabilisation of the combustion process. It was shown that the best conditions for combustion and evaporation in a common space depend on: the temperature and the excess of combustion air, the efficiency of the mixing of the gaseous fuel and air, the pressure in the combustion chamber, the velocity of the air-gas mixture flowing from the burner, the fineness of the water spray, and the temperature of the water introduced into the stream of hot combustion products. The main conditions for production of steam-gas at a pressure of 5 atm.abs. were determined. Some applications of the principle in the chemical industry, e.g. for concentrating salt solutions, are briefly discussed.
There are 16 figures and 6 tables.

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; KRAMARENKO, S.S.

Problem of burning high-moisture fuels under pressure. Trudy IGI 19: 95-103 '62. (MIRA 16:4)

(Fuel) (Combustion)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; FRENKINA, Z.I.

Aerodynamic investigations using a laboratory model simulating the motion of gas flow in a steam and gas producer. Trudy IGI 19:104-113 '62. (MIRA 16:4)

(Gas flow) (Gas producers)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; KANTOROVICH, B.V.; LEBEDEVA, G.Ye.; TRIFONOVA, K.B.

Prospects for using steam and gas processes for technological purposes. Trudy IGI 19:114-121 '62. (MIRA 16:1)

(Gas producers)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, Viktor Mikhaylovich; KANTOROVICH, Boris Veniaminovich; TARSHIS, D.M., red.izd-va; OBUKHOVSKAYA, G.P., tekhn. red.

[Fuel emulsions and suspensions] Toplivnye emul'sii i suspenzii. Moskva, Metallurgizdat, 1963. 182 p. (MIRA 16:12)

(Fuel, Colloidal)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M., kand. tekhn. nauk

Combustion of fuels under pressure and the prospects of using this technique in power engineering. Teploenergetika 10 no.12: 52-56 D '63. (MIRA 17:8)

1. Institut goryuchikh iskopayemykh AN SSSR.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M., kand. tekhn. nauk; ALEKSEYEV, A.M., inzh.; FRENKINA, Z.I., inzh.

Combustion of gaseous fuel under high pressure in the presence of water and other inert media. Teploenergetika 11 no.3: 12-18 Mr '64. (MIRA 17:6)

1. Institut goryuchikh iskopayemykh.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 14479-66 EWT(1)/EWT(m)/T IJP(c) WW/JW/JD/WB/GS

ACC NR: AT6004586 SOURCE CODE: UR/0000/65/000/000/0106/0111

AUTHOR: Alekseyev, A. M.; Kantorovich, B. V. (Doctor of technical sciences; Professor); Golovina, G. S.; Ivanov, V. M.; Pitin, R. N.; Ponnik, Yu. A.; Frenkina, Z. I.; Cheredkova, K. I.

ORG: none

TITLE: Study of the effect of a magnetic field on a stream of burning fuel

SOURCE: AN SSSR. Institut goryuchikh iskopayemykh. Novyye metody szhiganiya topliv i voprosy teorii goreniya (New methods in the combustion of fuels and problems in the theory of combustion). Moscow, Izd-vo Nauka, 1965, 106-111.

TOPIC TAGS: combustion, propulsion, magnetic field, gas combustion

ABSTRACT: It has been previously shown that the shape of a flame can be substantially changed and the burning velocity can be increased by the application of a magnetic field. Therefore, the use of a magnetic field to intensify combustion processes is considered in the present study, by determining the effect of a magnetic field on a burning CH_4-oxygen jet issuing from a combustion chamber through a 19.5 x 9.4 mm nozzle into air. Two cooled poles of a magnet 120 mm long were placed 15 mm from the nozzle outlet to generate a magnetic induction of 16 kgs in the 10-mm-wide gap through which the jet passed. The velocity of the gas jet was close to sonic. Measurements were made of the velocity, the flame temperature, and concentrations along the axis in the presence and absence of the magnetic field. The results

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L 14479-66

ACC NR: AT6004586

showed that due to the magnetic field the flame temperature increased by 100—200C, the velocity decreased, and the dilution with ambient air decreased. These changes are attributed to the partial conversion of kinetic into thermal energy caused by the magnetic field. Orig. art. has: 5 figures. [PV]

SUB CODE: 21/ SUBM DATE: 09Sep65/ ORIG REF: 002/ ATD PRESS: 4194

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 13458-66 EPA/EWT(1)/EWT(m)/ETC(F)/EWP(f)/EPF(n)-2/EWG(m)/T/EWA(h)/EWA(c)/ETC(m)
ACC NR: AT6004582 WW/JW/WE SOURCE CODE: UR/0000/65/000/000/0040/0064

194
162
134
21,44,55

AUTHOR: Ivanov, V. M.

ORG: none

21,44,55

TITLE: The effect of pressure on the combustion parameters and heat transfer in high performance combustion chambers

SOURCE: AN SSSR. Institut goryuchikh iskopayemykh. Novyye metody szhiganiya topliv i voprosy teorii goreniya (New methods in the combustion of fuels and problems in the theory of combustion). Moscow, Izd-vo Nauka, 1965, 40-64

11,44,55

TOPIC TAGS: heat transfer, combustion, combustion chamber, gas turbine

ABSTRACT: An analysis of the effect of pressure on the combustion of liquid or gaseous fuels in combustion chambers was made under the following assumptions: 1) The fuel is uniformly distributed in the air stream; 2) the liquid droplets have the same size and pressure changes do not affect atomization; 3) the velocity of the fuel droplets and the gas stream are equal, and 4) the fuel consumption and air flow rates are constant so that the combustion process takes place at a constant air excess factor. Relationships were derived for the length of the combustion zone of liquid and gaseous fuels as a function of

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L 13458-66

ACC NR: AT6004582

pressure. The effect of pressure on heat transfer in the combustion chamber was also analyzed. The results were compared with previous experimental data obtained with kerosene, diesel fuel, and solar oil. The analysis showed that the length of the combustion zone of gaseous and liquid fuel decreases inversely in relation to the pressure while the heat release per unit volume increases with the square of the pressure. Radiative heat transfer does not exceed 25—30% of the total heat transfer so that no separate section for radiative transfer is required in the type of combustion chambers studied. Orig. art. has: 70 formulas and 5 diagrams. [PV]

SUB CODE: 21/ SUBM DATE: 09Sep65/ ORIG REF: 012/ ATD PRESS: 4187

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 16096-66 EWT(m)/T WE/GS

ACC NR: AT6004585 SOURCE CODE: UR/0000/65/000/000/0095/0105

AUTHOR: Ivanov, V. M.; Alekseyev, A. M.; Volnyanskaya, L. A.

ORG: none

64
B+1

TITLE: The effect of mixing on the combustion of a gaseous fuel in high velocity streams

SOURCE: AN SSSR. Institut goryuchikh iskopayemykh. Novyye metody szhiganiya topliv i voprosy teorii goreniya (New methods in the combustion of fuels and problems in the theory of combustion). Moscow, Izd-vo Nauka, 1965, 95-105

TOPIC TAGS: combustion, combustion chamber, air breathing propulsion thruster, gas combustion

ABSTRACT: The effect of mixing of components on the combustion of gaseous fuel was studied in a test assembly consisting of a mixer and a combustion chamber equipped with a Laval nozzle at the outlet. The assembly was designed so that combustion could be carried out in the following two regimes: 1) Air is preheated by cooling of the chamber walls and enters the mixer through 4 radial openings. The fuel enters axially through a central orifice so that the fuel and oxidizer

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L 16096-66

ACC NR: AT6004585

flows intersect at an angle of 90° and then pass through a turbulizer into the combustion chamber. 2) The air enters via the turbulizer, but the fuel enters independently into the chamber through the central orifice. In this arrangement, mixing starts in the combustion chamber. In the first case, the combustion regime is purely kinetic, while in the second, it is diffusional. The results showed that in the kinetic regime, the combustion efficiency is considerably higher and the length of the combustion zone shorter than in the diffusional regime. Other experiments were conducted with the injection of secondary oxygen into the combustion chamber. Studies of the heat transfer to the walls at flow velocities of 1000 m/sec are also mentioned. The following conclusions were drawn: 1) Mixing in high velocity gas streams (M = 1) has a controlling effect on the combustion process. 2) Introduction of secondary oxygen into the partial combustion products is much less effective than primary mixing. When the gaseous fuel is well mixed with air in the first stage, then its combustion in the chamber as well as behind the nozzle is more intensive and more complete than in the combustion of nonmixed fuel-air mixtures. The reacting components are mixed during passage through the throat area and, therefore, combustion efficiency is not increased. Orig. art. has: 6 diagrams. [PV]

SUB CODE: 21/ SUBM DATE: 09Sep65/ ORIG REF: 002/ ATD PRESS: 4202

Card 2/2 Sm

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 16070-66 EWT(1)/EWT(m)/ETC(f)/EPF(n)-2/EWG(m)/EWA(d)/T/EWP(k) IJP(c)

ACC NR: AT6004589 SOURCE CODE: UR/0000/65/000/000/0146/0161

WW/JW/GG/WE/GS

AUTHOR: Ivanov, V. M.; Frenkina, Z. I.

ORG: none

TITLE: Combustion processes and heat transfer in the combustion of liquid fuel at high pressure

SOURCE: AN SSSR. Institut goryuchikh iskopayemykh. Novyye metody szhiganiya topliv i voprosy teorii goreniya (New methods in the combustion of fuels and problems in the theory of combustion). Moscow, Izd-vo Nauka, 1965, 146-161

TOPIC TAGS: combustion, liquid fuel combustion, heat transfer

ABSTRACT: As a part of the program of comprehensive studies of combustion and heat transfer at high pressures, an experimental investigation was made of diesel fuel combustion under 8 atm of air and up to 50 atm of oxygen-steam. The experiments were conducted in two combustion chambers with diameters of 0.22 and 0.32 and lengths of 1.65 and 2 m. The length of the combustion zone was determined as a function of the air excess factor and pressure. A previously derived formula for calculating the length of the combustion zone as a function of the air excess

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 16070-66

ACC NR: AT6004589

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factor, flow velocity, and fuel density was found to give results in good agreement with the experiments. Temperature, velocity, and concentration profiles and heat transfer coefficients were also obtained. Orig. art. has: 15 figures. [PV]

SUB CODE: 21/ SUBM DATE: 09Sep65/ ORIG REF: 005/ ATD PRESS: 4202

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

DUBROVSKIY, V.A., inzh.; IVANOV, V.M., inzh.; SHAKOV, V.S., kand. tekhn. nauk

Studying the seaworthiness and strength of catamarans. Sudostroenie 30 no.7:63-65 Jl '64. (MIRA 18:9)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

PAVLOV, Yevgeniy Grigor'yevich; IVANOV, V.M., inzhener, retsenzent; KHATUN-TSEV, N.A., retsenzent; ZAYTSEV, V.P., kandidat tekhnicheskikh nauk, spetsredaktor; MOROZOVA, I.I., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor

[Refrigeration on ships of the fishing industry] Kholod na sudakh rybnoi promyshlennosti. Moskva, Pishchepromizdat, 1956. 237 p. (Refrigeration on ships) (MLRA 10:1)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

ZHUCHENKO, Mikhail Melet'yevich; IVANOV, Vasiliy Mikhaylovich; POLYAKHOV, N.N., professor, otvetstvennyy redaktor; OSYENSKAYA, A.A., redaktor KAMOLOVA, V.M., tekhnicheskiy redaktor

[Marine engines] Sudovye dvizhiteli. Pos obshchei red. N.N.Poliakhova. Leningrad, Gos. soiuznoe izd-vo sudostroit. promyshl., 1956. 343 p. (MIRA 10:1)
(Marine engines)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M., inzhener.

Controlled pitch propeller of the tandem type. Sudostroenie 23 no.2:65-67 F '57. (MLRA 10:5)
(France--Ocean liners)
(Propellers)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M., inzh.

Testing controlled-pitch tandem-type propeller models. Sudostroenie 24 no.3:76-79 Mr '58. (MIRA 11:4)
(Propellers--Testing)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

ZAGLUBOTSKIY, P.M.; DURNOV, G.P.; LAVRUSEVICH, V.V.; MIKHAYLENKO, V.I.; IVANOV, V.M., spetsred.; SHUIN, V.I., red.; FORMALINA, Ye.A., tekhn.red.

[Practices of efficiency promoters in ship repairing] Opyt ratsionalizatorov v sudoremonte. Moskva, 1959. 53 p. (MIRA 13:9)

(Ships--Maintenance and repair)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

VOYTKUNSKIY, Yaroslav Iosifovich; PERSHITS, Robert Yakovlevich; TITOV, Igor' Anatol'yevich. Prinimali uchastiye: YEGOROV, I.T.; RUSETSKIY, A.A.; IVANOV, V.M.; ZHUCHENKO, M.M. KRIVTSOV, Yu.V., otv.red.; FIRSOV, G.A., otv.red.; OSVENSKAYA, A.A., red.; KONTOROVICH, A.I., tekhn.red.

[Handbook on the theory of ship construction; propulsive speed and maneuverability] Spravochnik po teorii korablia; khodkost' i upravliaemost'. Leningrad, Gos.soiuznoe izd-vo sudostroit. promyshl., 1960. 688 p. (MIRA 13:10)
(Naval architecture--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

ZHUCHENKO, M.M., kand.tekhn.nauk; IVANOV, V.M., inzh.

Diagram for the design of controllable pitch propellers placed in tandem. Sudostroenie 26 no. 11:14-15 N '60. (MIRA 14:1)
(Propellers)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Relationship between hydrometeorological processes in the Atlantic area of the Arctic and the thermal and dynamic state of the Gulf Stream. Probl. Sev. no.4:27-45 '61. (MIRA 15:1)
(Gulf Stream) (Arctic regions--Hydrometeorology)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

BUSEV, A.I.; IVANOV, V.M.

Pyridine azo compounds in analytical chemistry: survey. Zhur.anal.khim. 19 no.10:1238-1250 '64. (MIRA 17:12)

1. M.V.Lomonosov Moscow State University.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.; CHISTYAKOV, S.F., red.; MIKHAYLOVA, V.V., tekhn. red.

[Reference manual on heat regulation and automatic control in ferrous metallurgy] Spravochnik po teplovomu kontroliu i avtomatike v chernoi metallurgii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1951. 603 p. (Heating engineering) (Metallurgy) (Automatic control)(MIRA 11:9)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

Increasing the productivity of the 280 rolling mill by installation of guide rounds. Metallurg no.3:18-21 Mr '56. (MLRA 9:9)

1. Zamestitel' nachal'nika tekhnicheskogo otdela Kazakhskogo metallurgicheskogo zavoda.
(Rolling mills)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, V.M.

BATALOV, Nikolay Mikhaylovich; BELYY, Balentin Antonovich; IOFFE, Aleksandr Borisovich; RABINOVICH, Aron Abramovich; SINAYSKIY, Mikhail Mikhaylovich; IVANOV, V.M., red.; VOROMIN, K.P., tekhn.red.

[Electric motors for cranes and metallurgical plants; theory, construction, use] Kranovo-metallurgicheskie elektrodvigateli; teoriia, konstruktsiia, primenenie. Pod obshchei red. A.A.Rabinovicha. Moskva, Gos. energ. izd-vo, 1958. 168 p. (MIRA 11:5)
(Electric motors)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IVANOV, Viktor Mikhaylovich; KOZHUSHKEVICH, Vladimir Georgiyevich; SINAYSKIY, M.M., red.; BORUNOV, N.I., tekhn.red.

[Direct current motors for crane hoists; regulations on installation, maintenance, and repair] Kranovye elektrodvigateli postoiannogo toka; rukovodstvo po ustanovke, ukhodu i remontu. Moskva, Gos.energ.izd-vo, 1960. 62 p. (Kranovoe elektrooborudovanie, no.4). (MIRA 13:7)
(Electric cranes) (Electric motors, Direct current)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

IOFFE, Aleksandr Borisovich; NAKHODKIN, N.I., doktor tekhn. nauk, retsenzent; IVANOV, V.M., inzh., red.

[Electric traction machines; theory, construction and design] Tiagovye elektricheskie mashiny; teoriia, konstruktsiia, proektirovanie. Izd.2., perer. i dop. Moskva, Energiia, 1965. 231 p. (MIRA 18:3)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

ACC NR: AP6[illegible]

SOURCE CODE: UR/0000/66/000/000/0013/0014

AUTHOR: Agre, A. L.; Ivanov, V. M.; Trukhachev, V. T.

ORG: none

29

B+1

TITLE: Problem of the possibility of mineralizing water-fecal mixtures by the pressure cooking method [Paper presented at conference on problems of space medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 13-14

TOPIC TAGS: life support system, biologic metabolism, metabolic waste

ABSTRACT:

Experiments have demonstrated that it is possible to mineralize 90—93% of a urine-fecal mixture by a pressure cooking (wet combustion) method with air as the oxidizing agent.

Card 1/3

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 08283-67

ACC NR: AT6036468

The effects of various factors (temperature, pressure, and duration) were carefully studied under laboratory conditions. The relationships between feces and water, the required amount of the oxidizing agent (oxygen of the air) and the degree of mineralization were carefully observed. The degree of mineralization was determined on the basis of the difference between the initial chemical oxygen requirement and its terminal value expressed in terms of percentage. The chemical requirement of oxygen was determined by a bichromatic method.

In the course of the experiments it was determined that the optimum duration of cooking was 2 hr, with a temperature of 275° C, and pressure between 120 and 130 atm. This process, which develops a slight excess of air-oxygen in comparison with the initial chemical-oxygen requirement, results in mineralization of 90—93% of the fecal mixture.

The liquid which forms after mineralization is a transparent solvent with a specific aroma and a small amount of flaky sediment, which consists largely of non-water-soluble calcium and magnesium salts. The gas which forms during mineralization of the water-fecal mixture consists chiefly of carbon dioxide and residual oxygen and nitrogen.

Card 2/3

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 08283-67

ACC NR: AT6036468

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The water-fecal solvents which result from the pressure cooking method contain 5—7% residual organic substances, which act as inhibitors during cultivation of higher and lower plants on a mineralized medium. The extraction of residual organic substances results in a nutrient solution which is nontoxic for plants. [W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3 LS

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 21550-66 EWT(m)/T DJ

ACC NR: AP6006310 (A) SOURCE CODE: UR/0413/66/000/002/0020/0021

AUTHORS: Gor'yev, A. S.; Ivanov, V. M.; Yastreb, Ye. F.

ORG: none

TITLE: A device for regulating the flow rate of a mixture of components. Class 12, No. 177312

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 20-21

TOPIC TAGS: flow regulator, flow control

ABSTRACT: This Author Certificate presents a device for regulating the flow rate of a mixture of components, for example, the flow rate resulting with the mixing of a bulk carrier substance with a pigment. The device includes a slave hydraulic drive connected with a system of oil lines. These oil lines are fitted with a safety valve and a pump. The device also has an oil tank (see Fig. 1). The design maintains the homology of the mixture flow rate at a rigid ratio of the components. A chamber with a membrane is established in the mixture pipeline. The membrane interacts with a separating chamber the shaft of which is connected with a throttle valve mounted in the oil line between the slave hydraulic drive and the oil tank.

Card 1/2 UDC: 621.646.3.002.612.3

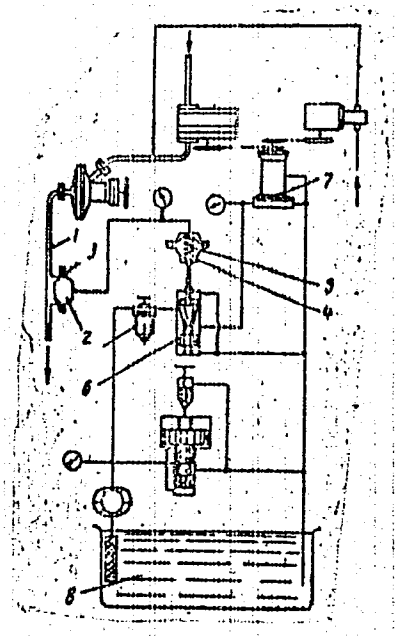
APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

L 24550-66

ACC NR: AP6006310

Fig. 1. 1 - pipeline; 2 - chamber; 3 - membrane; 4 - separating chamber; 5 - shaft; 6 - throttle valve; 7 - slave hydraulic drive; 8 - oil tank.



Orig. art. has: 1 figure.

SUB CODE: 13, 14/ SUBM DATE: 30Mar64

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

KRZHECHKOVSKIY, A.K., inzhener; IVANOV, V.M.

Welding of tank roofs to the bracing with an electric riveting machine. Trudy VNIISTROINEFT' no.7:15-17 '56. (MLRA 9:11)
(Tanks--Welding)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

VOLCHENKO, V.N., IVANOV, V.M.

Automatic welding in carbon dioxide. Med. prom. 12 no.11:41-47 N '58 (MIRA 11:12)

1. Zhdanovskiy metallurgicheskiy institut i Zhdanovskiy mashinostroitel'nyy zavod.
(ELECTRIC WELDING)
(CARBON DIOXIDE)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7

BAGRYANSKIY, K.V., kand. tekhn. nauk; KASSOV, D.S., inzh.; IVANOV, V.M., inzh.

Arc welding of copper anodes under ceramic flux. Svar. proizv. no.2:33-35 F '59. (MIRA 12:1)

1.Zhdanovskiy metallurgicheskiy institut.
(Copper--Welding) (Electric welding)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000619130004-7"