L 08497-67 EWT(1)/FCC IJP(c) GW
ACC NR: AP6034239 (N) SOURCE CODE: UR/0120/66/000/005/0203/0206

AUTHOR: Vasilevskaya, D. P.; Denisov, Yu. N.; D'yakov, N. I. 34

ORG: Joint Institute of Nuclear Research, Dubna (Ob"yedinennyy institut yadernykh issledovaniy)

TITLE: A precision Hall magnetometer

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1966, 203-206

TOPIC TAGS: magnetometer, Hall effect

ABSTRACT: A magnetometer based on the Hall effect is described which comprises a thermostatically controlled InPAs Hall voltage detector 1.8 x 1.2 x 0.3 mm) in size (1), a Hungarian E149 ultra-sensitive thermostat(2), a stabilized current supply (3), a compensating circuit (4), and a potentiometer (5) (see Fig. 1). The thermostat, which is connected to the detector casing by two insulated rubber hoses, controls the temperature of the detector by circulating water around it. Detector temperature varies no more than ±0.2—0.3C for ambient temperature changes of ±5C and hose lengths of 7 and 14 m. The maximum measurement error for temperature changes of ±5C does not exceed 0.008—0.012%. The stabilized current supply provides excitation current (nominal value, 50 mamp) to the detector. This current is kept constant within about

Card 1/2 UDC: 621.317.444

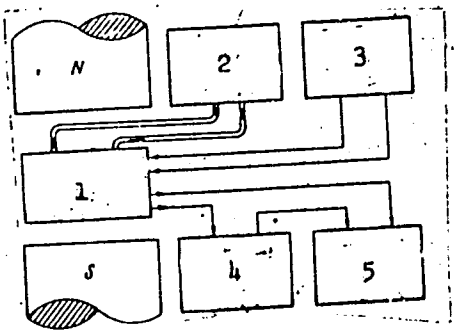

Fig. 1. Magnetometer block diagram

1 - Hall voltage detector; 2 - ultrasensitive thermostat; 3 - stabilized current supply; 4 - compensating circuit; 5 - potentiometer.

10^{-3}% by placing the critical control elements, which include a precision resistor used to generate a reference voltage and a comparison bridge, in the thermostat. The difference between the detected Hall voltage and the voltage across the precision resistor is measured with the potentiometer. The overall RMS measurement error, including calibration error, does not exceed 0.05%. The circuit, used since 1962, is built with solid-state components and can measure both uniform and varying magnetic fields with gradients up to 30 T/m. Orig. art. has: 4 figures.

SUB CODE: 08/ SUBM DATE: 12Nov65/ ORIG REF: 006/ ATD PRESS: 5103

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411720009-7"

KUZNETSOV, Nikolay Borisovich; D'YAKOV, N.F., red.

[Reconditioning of rear-axle housings of the TDT-40 and TDT-60 hauling tractors] Vosstanovlenie korpusa zadnikh mostov trelevochnykh traktorov TDT-40 i TDT-60. Moskva, Biuro tekhn. informatsii, 1963. 7 p. (MIRA 17:9)

D'YAKOV, N.V., podpolkovnik meditsinskoy sluzhby; FEDORETS, B.A., kapitan meditsinskoy sluzhby

Use of some forms of sanitary control in the navy. Voen.-med. zhur. no.7:44-46 Jl '61. (MIRA 15:1)
(NAVAL HYGIENE)

D'YAKOV, N.V.

Introducing a pneumatic chill casting machine. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. no.8:15-16 Ag '65. (MIRA 18:12)

27389
S/143/61/000/003/001/005
D201/D305

26.2351
9,2540 (1020, 1138, 1159)

AUTHORS: D'yakov, O.P., Engineer, Udalov, N.R., Candidate of Technical Sciences, Docent, Tishchenko, N.M., Candidate of Technical Sciences

TITLE: A contactless impulse generator

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 3, 1961, 41 - 44

TEXT: The article gives suggestions for the design and shows the experimental results of an investigation of the contactless pulse generator (CPG). The circuit diagram (Fig. 1) includes a heated element PTS, whose working body is connected in the control circuit, and the heat is connected in the winding of the contactless magnetic relay BMR. At zero control current, the current flowing through the heater is a maximum (Fig. 1b) and the working body of the semi-conductor thermoresistance PTS is heated to a temperature of $\theta_0 + \theta_\Pi$ where θ_0 = ambient temperature, and θ_Π = the temperatu-

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A contactless impulse generator

re rise of the PTS, corresponding to the maximum current flowing through the heater. The control current is

$$I_1' = \frac{U}{R_{(\theta_o + \theta_п)} + r_y + r_1},$$

where U - the voltage, $R_{(\theta_o+\theta_п)}$ - the value of the resistance of the semi-conductor thermoresistance PTS, r_y - the resistance of the control winding, r_1 - additional resistance. The working cycle of the PTS is as follows: when the current is flowing through the PTS its resistance decreases, the current I_y increases and at I_y = = I_{cp} (point 2 in Fig. 1b), the current is sharply reduced to a very small value, and the PTS starts cooling down. Its resistance increases and the control current I_y is reduced to the value $I_{отп}$ (point 3 in Fig. 1b). At $I_y = I_{отп}$ the current is suddenly increa-

Card 2/5

A contactless impulse generator

sed to a maximum value and the PTS is warmed up. These changes have a cyclic character. The calculation of the length of the pulses is reduced to calculating the dynamics of the control circuit, BMR. The calculation of a BMK with heated PTS does not differ from that of an ordinary PTS. For calculations the following initial conditions are required. 1) The volts-amps characteristics of the PTS at θ_o and at $\theta_o + \theta_\eta$; 2) The heating curve of the PTS; 3) The time constant of the PTS. Tests were carried out with an experimental pulse generator, whose circuit was connected as in Fig. 1. The contactless magnetic relay BMR was built as a thoroid of the band permalloy. The PTS-the semi-conductor thermo resistance of the type MMT-4 was used with a resistance of 100 K ohm at 20°C. Its temperature characteristic was given by $R = 3.3e\ 3010/T$. The resistance of the heater was 1000 ohms. The time constant of the heated PTS was $\tau = 66$ secs. The supply of energy was 40 volts, 1000 cycles per sec. As the period of oscillations depends strongly on the bias of the current stabilizing device was introduced with a silicon stabilizer A 808 (D808). This assured $U_{outlet} = 7.3$ volts at a coeffi-

Card 3/5

A contactless impulse generator

cient of stability 60. The maximum heating current was 25 m amps, which corresponded to a temperature rise of $\theta_n = 40^{\circ}C$. At the selected values of the parameters, the generator works at a variation of voltage from 60 to 100 volts. The dependence of t_2, t_3 and $T = t_2 + t_3$ from the supply voltage is shown. At tests at normal ambient temperatures the generator showed good stability: at U = 80 V I_{CM} = - 26 ma (the bias current) and $\theta_o = 20^{\circ}C$, the maximum deviation from T_{cp} = 90 sec. did not exceed 2 sec, i.e. about 2 %. There are 3 figures and 4 Soviet-bloc references.

ASSOCIATION: Moskovskiy ordena Lenina aviatsionnyy institut imeni S. Ordzhonikidze (Moscow Order of Lenin Aeronautical Institute imeni S. Ordzhonikidze)

SUBMITTED: April 25, 1960

Card 4/5

D'YAKOV, O.P. (Moskva); TISCHENKO, N.M. (Moskva); UDALOV, N.P. (Moskva)

Time relay using a thermisor and a magnetic relay. Avtom. i telem. 22 no.5:648-653 My '61. (MIRA 14:6)
(Electric relays) (Delay networks)

SAVVIN, L., inzh. (Moldaviya); YEKHLAKOV, A., inzh. (Sverdlovsk); TRUSOV, I., inzh. (Frunze); IVANOV, N.; PLAKSEYEV, G. (Kherson); KNOROZ, M. (L'vov); GROMENKO, P., rabochiy (Novosibirsk); TARASOV, O. (Novorossiysk); D'YAKOV, P., inzh. (Kamensk-Shakhtinskiy); BUTUSOV, V., dotsent (Moskva); SUNDAKOV, M., inzh., student; PORTNOV, Ya., kand. tekhn. nauk (Makhachkala); PETROV, Yu., inzhener-stroitel' (Ivanovo)

Readers argue, agree, advise. Tekh. mol. 31 no.6:6-9 '63. (MIRA 16:7)

1. Starshiy inzhener Usol'skogo mashinostroitel'nogo zavoda (for Ivanov). 2. Moskovskoye vyssheye tekhnicheskogo uchilishche imeni Baumana (for Butusov). 3. Zaochnoye otdeleniye fakul'teta zhurnalistiki Leningradskogo gosudarstvennogo universiteta (for Sundakov).
(Technological innovations)

D'YAKOV, P.

27-6-5/29

AUTHOR: D'yakov, P., Director of Construction School Nr. 4, Ivanovo.

TITLE: For the Construction Sites of Our Country (Dlya stroyek nashey strany)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, 1957, Nr. 6(145), p 6 (USSR).

ABSTRACT: The construction school # 4 has graduated more than 7,200 qualified bricklayers, carpenters, plasterers, fitters etc. A workhsop for reinforced-concrete practice has been recently established. The article points to the modern work methods applied by the students and the highly qualified specialists who serve as instructors. There are 3 photos.

ASSOCIATION: Building School Nr. 4, (Ivanovo) (Stroitel'naya shkola Nr. 4 (Ivanovo).

AVAILABLE: Library of Congress

Card 1/1

D'YAKOV, P.F.

Mandrel for machining surfaces for nuts and collars.
Mashinostroitel' no.2:24 F '65. (MIRA 18:3)

D'YAKOV, P.I.

RYTSLIN, A.M., inzhener; D'YAKOV, P.I., inzhener.

Organization of electric transmission line repairs with the aid of mechanized repair stations (RMS). Energetik 5 no.4:1-6 Ap '57.
(Electric lines) (MLRA 10:6)

SOV/91-59-1-2/26

AUTHORS: Rytslin, A.M. and D'yakov, P.I., Engineers

TITLE: On Expanding the Utilization Field of Mobile Telescopic Towers (Rasshireniye oblasti primeneniya avtoteleskopicheskikh vyshek)

PERIODICAL: Energetik, 1959, Nr 1, pp 4 - 9 (USSR)

ABSTRACT: The article is a report on new experiences in the Sergovskiy network area (belonging to the "Donbassenergo") on the expanded utilization of mobile telescopic towers. The authors describe and illustrate how such towers (mentioned are the VT-13.5 and VI-23 types installed on the ZIL-151 trucks) can be employed in exchanging some parts of the wooden power-transmission supports, in constructing power-transmission lines across RR tracks, telecommunication lines and other power-transmission lines, on how such towers may be used as truck tractors and be of help at the distributing installations of the substations. Work efficiency becomes higher. It will be the task of the plant producing

Card 1/2

the mobile telescopic towers (ORGRES), in cooperation with practicing electricians, to improve the present type of mobile telescopic tower. There are 2 tables and 5 diagrams.

Y
D'IAKOV, P. P.

Gidromekhanizatsiia zemlianykh rabot na zheleznodorozhnom transporte.
[Hydromechanization of earth works in railroad transportation] 7. 2. izd. Moskva, Transzheldorizdat, 1950. 404p.

SO: Soviet Transportation and Communications: A Bibliography, Library of Congress, Reference Department, Washington, 1952 Unclassified.

D'YAKOV, P.P.

Selecting optimum operating conditions for hydraulic pipeline dredges. Transp. stroi. 6 no.3:20-23 Mr '56. (MLRA 9:7)

1.Nachal'nik tresta Transgidromekhanizatsiya.
(Dredging machinery)

D'YAKOV, P.P., inzhener.

Automatic control of dredging machinery. Mekh.stroi. 14 no.3:19-21 Mr '57. (MLRA 10:4)
(Automatic control)
(Dredging machinery)

D'YAKOV, P.P.

Hydromechanization of operations in the construction of transportation facilities. Transp. stroi. 8 no. 6:3-8 Je '58. (MIRA 11:7)

1. Glavnyy inzhener tresta Transgidrostroy.
(Dredging machinery)

D'YAKOV, P.P.

Device for condensing and processing pulp in dredging machinery. Suggested by P.P.D'iakov. Rats.i izobr.v stroi. no.9:24-29 '59. (MIRA 13:1)

1. Po materialam tresta Transgidrostroy Ministerstva transportnogo stroitel'stva.
(Dredging machinery--Equipment and supplies)

L 25979-66 EWT(d)/EWT(l)/EWP(m) IJP(c) GS

ACC NR: AT6006923 SOURCE CODE: UR/0000/65/000/000/0369/0376

AUTHOR: D'yakonov, S. G.; Usmanov, A. G.

ORG: Kazan Chemico-technological Institute (Kazanskiy khimiko-tekhnologicheskiy institut)

TITLE: Application of similarity theory in statistical analysis of anisotropic turbulence

SOURCE: Teplo- i massoperenos. t. II: Teplo- i massoperenos pri vzaimodeystvii tel s potokami zhidkostey i gazov (Heat and mass transfer. v. 2: Heat and mass transfer in the interaction of bodies with liquid and gas flows). Minsk, Nauka i tekhnika, 1965, 369-376

TOPIC TAGS: anisotropic medium, fluid flow, statistic analysis, similarity theory

ABSTRACT: Assuming the similarity of systems with a large number of degrees of freedom, the authors attempt to evaluate the distribution function for the turbulent velocity pulsations in anisotropic turbulence. This offers the possibility of solving the Reynolds equation. The situation can be presented in the form of the functional relationship:

$$U = D\varphi(\Delta S),$$

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ACC NR: AT6006923

in which the form of the function remains identical for systems with an identical mechanism of internal transfer. The article demonstrates by an extended mathematical development that use of the above kinetic entropy equation for investigation of anisotropic turbulence makes it possible to close the system of equations for the turbulence and to obtain information on the internal structure of flow with transverse slip, without assumptions of any kind as to the distribution of any of the variables over the cross section of the flow. Orig. art. has: 24 formulas.

SUB CODE: 20/ SUBM DATE: 09Nov65/ ORIG REF: 002/ OTH REF: 002

Card 2/2 fv

D'YAKOV, S.I.

MALCHENKOV, A.M.; D'YAKOV, S.I.

Using the anoptral method of microscopy in bacteriological practice. Lab.delo 3 no.4:28-30 Jl-Ag '57. (MLRA 10:8)

1. Iz kafedry mikrobiologii Voyenno-meditsinskoy ordena Lenina akademii nauk S.M.Kirova
(PHASE MICROSCOPY) (BACTERIOLOGY)

D'YAKOV, S.I.

Intraspecific typing of Sonne dysentery bacteria according to antibiotic properties. Lab.delo 3 no.6:32-34 N-D '57. (MIRA 11:2)

1. Iz kafedry mikrobiologii Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.
(SHIGELLA PARADYSENTERIAE) (BACTERIAL ANTAGONISM)

D'YAKOV, S.I.

Antibiotic properties of dysentery bacteria; author's abstract.
Zhur.mikrobiol.epid. i immun. 28 no.9:80-81 S '57. (MIRA 10:12)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.
(ANTIBIOTICS, determination,
in Shigella dysenteriae (Rus))
(SHIGELLA DYSENTERIAE,
antibiotic properties (Rus))

COUNTRY : USSR
CATEGORY :
ABS. JOUR. : Microbiology.
AUTHOR : Ref Zhur-Biologiya, No 4, 1959, No. 14771
INST. : D'yakov, S.I.
TITLE : Military Medicine Acad.
ORIG. PUB. : Inter- and Intrarelationships and Antibiotic Action of Dysentery Bacteria (experimental Investigation).
ABSTRACT : Tr. Voyen.-med., akad., 1957, 77, 5-46

No abstract

CARD: 1/1

COUNTRY :
CATEGORY :

ABS. JOUR. :

No. 14770

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : of different types was absent. At the same time the interrelation in the same strain had both a non-antagonistic and an antagonistic character. The author is of the opinion that the character of the inter- and intrarelations cannot be of practical use in the delineation of dysentery bacteria according to types and variants. -- G.P. Kalina

CARD: 2/2

D'YAKOV, S.I.

A "new" criterion of species as applied to microorganisms; evaluation. Zhur. mikrobiol. epid. i immun. 29 no.12:109-112 D '58. (MIRA 12:1)

1. Iz kafedry mikrobiologii Voyenno-meditsinskoy akademii imeni Kirova.
(MICROBIOLOGY,
criterium of species (Rus))

DASHKEVICH, I.O.; D'YAKOV, S.I.; YERMAKOV, N.V.; IVANOVA, M.T.; MAYBORODA, G.M.

Staining Salmonella typhosa eith fluorescent antibodies. Zhur. mikrobiol.epid. i imun. 30 no.1:97-102 Ja '58. (MIRA 12:3)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(SALMONELLA TYPHOSA,
stain. by fluorescent antibodies (Rus))
(ANTIBODIES,
fluorescent antibodies, stain. of Salmonella typhosa (Rus))

D'YAKOV, S.I.; IVANOVA, A.N.; MALCHENKOV, A.M.

Comparative evaluation of microbiological applications of phase and anoptral methods of contrasting. Zhur.mikrobiol.,epid.i immun. 30 no.12:112-114 D '59. (MIRA 13:5)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(MICROSCOPY)
(MICROORGANISMS)

SINITSKIY, A.A.; D'YAKOV, S.I.; MIKHAYLOV, I.F.; NIKITIN, V.M.; OSIPOVA, I.V.

Use of an indirect method for staining P. pestis with fluorescent antibodies. Report No.1:Specificity of staining and morphological characteristics of plague vaccine cells. Zhur.mikrobiol.epid.i immun. 31 no.11:35-39 N '60. (MIRA 14:6)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(PLAGUE) (VACCINES) (ANTIGENS AND ANTIBODIES)

DASHKEVICH, I.O.; D'YAKOV, S.I.; YERMAKOV, N.V.; IVANOVA, M.T.; OSIPOVA, I.V.

Use of an indirect fluorescent antibody method in species- and type-specific of certain pathogenic bacteria. Zhur.mikrobiol.epod. i immun. 31 no.11:43-49 N '60. (MIRA 14:6)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(ANTIGENS AND ANTIBODIES) (SERUM DIAGNOSIS)

MIKHAYLOV, Ivan Fedorovich; D'YAKOV, Sergey Ivanovich. Prinimali uchastiye: DASHKEVICH, I.O.; YERMAKOV, N.V.; IVANOVA, M.T.; LI LI; OSIPOVA, I.V.; MAYBORODA, G.M.; USPENSKIY, V.I., red.; ZUYEVA, N.K., tekhn. red.

[Fluorescence microscopy; application in medical microbiology] Liuminestsentnaia mikroskopiia; primenenie v meditsinskoi mikrobiologii. Moskva, Medgiz, 1961. 222 p. (MIRA 15:1)
(FLUORESCENCE MICROSCOPY) (MICROBIOLOGY)

BUGROVA, V.I., kand. med. nauk; VINOGRADOVA, I.N., kand.biol. nauk; D'YAKOV, S.I., kand. med. nauk; ZHDANOV, V.M., prof.; ZHUKOV-VEREZHNIKOV, N.N., prof.; ZEMTSOVA, O.M., kand. med. nauk; IMSHENETSKIY, A.A., prof.; KALINA, G.P., prof.; KAULEN, D.R., kand. med. nauk; KOVALEVA, A.I., doktor med. nauk; KRASIL'NIKOV, N.A., prof.; KUDLAY, D.G., doktor biol. nauk; LEBEDEVA, M.N., prof.; PERETS, L.G., prof. [deceased]; PEKHOV, A.P., doktor biol. nauk; PLANEL'YES, Kh.Kh., prof.; POGLAZOVA, M.N., kand. biol. nauk; PROZOROV, A.A.; SINITSKIY, A.A., prof.; FEDOROV, M.V., prof. [deceased]; SHAMINA-VAGINA, V.I., kand.biol. nauk; VYGODCHIKOV, G.V., prof., zamestitel' otv. red.; ADO, A.D., prof., red.; BAROYAN, O.A., prof., red.; BILIBIN, A.F., prof., red.; BOLDYREV, T.Ye., prof., red.; VASHKOV, V.I., doktor med. nauk, red.; VYAZOV, O.Ye., doktor med. nauk, red.; GAUZE, G.F., prof., red.; GOSTEV, V.S., prof., red.; GORIZONTOV, P.D., prof., red.; GRINBAUM, F.T., prof., red. [deceased]; GROMASHEVSKIY, L.V., prof., red.; YELKIN, I.I., prof., red.; ZASUKHIN, L.N., doktor biol. nauk, red.; ZDRODOVSKIY, P.F., prof., red.; KAPICHNIKOV, M.M., kand. med. nauk, red.; KLEMPARSKAYA, N.N., prof., red.; KOSYAKOV, P.N., prof., red.; LOZOVSKAYA, Ye.S., kand. med. nauk, red.; MAYSKIY, I.N., prof., red.; MUROMTSEV, S.N., prof., red. [deceased];

(Continued on next card)

BUGROVA, V.I.---(continued) Card 2.
NIKITIN, M.Ya., red.; NIKOLAYEVA, T.A., red.; PAVLOVSKIY, Ye.N., akademik, red.; PASTUKHOV, A.P., kand. med. nauk, red.; PETRISHCHEVA, P.A., prof., red.; POKROVSKAYA, M.P., prof., red.; POPOV, I.S., kand. med. nauk, red.; ROGOZIN, I.I., prof. red.; RUDNEV, G.P., prof., red.; SERGIYEV, P.G., prof., red.; SKRYABIN, K.I., akad., red.; SOKOLOV, M.I., prof. red.; SOLOV'YEV, V.D., prof., red.; TRIBULEV, G.P., dotsent, red.; CHUMAKOV, M.P., prof., red.; SHATROV, I.Y., prof., red.; TIMAKOV, V.D., prof., red.toma; TROITSKIY, V.L., prof., red. toma; PETROVA, N.K., tekhn.red.;

[Multivolume manual on the microbiology, clinical aspects, and epidemiology of infectious diseases] Mnogotomnoe rukovodstvo po mikrobiologii klinike i epidemiologii infektsionnykh boleznei. Otv. red. N.N.Zhukov-Verezhnikov. Moskva, Medgiz. Vol.1. [General microbiology] Obshchaia mikrobiologiia. Otv. red. N.N.Zhukov-Verezhnikov. 1962. 730 p. (MIRA 15:4)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Zhdanov, Zhukov-Verezhnikov, Vygodchikov, Bilibin, Vashkov, Gromashevskiy, Zdrodovskiy, Rudnev, Sergiyev, Chumakov, Timakov, Troitskiy).

(Continued on next card)

BUGROVA, V.I.---(continued) Card 3.

2. Chlen-korrespondent Akademii nauk SSSR (for Imshenetskiy, Krasil'nikov). 3. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Planel'yes, Baroyan, Boldyrev, Gorizontov, Petrishcheva, Rogozin). 4. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Muromtsev).

(MICROBIOLOGY)

DASHKEVICH, I.O.; D'YAKOV, S.I.; NIKITIN, V.M.; OSIPOVA, I.V.

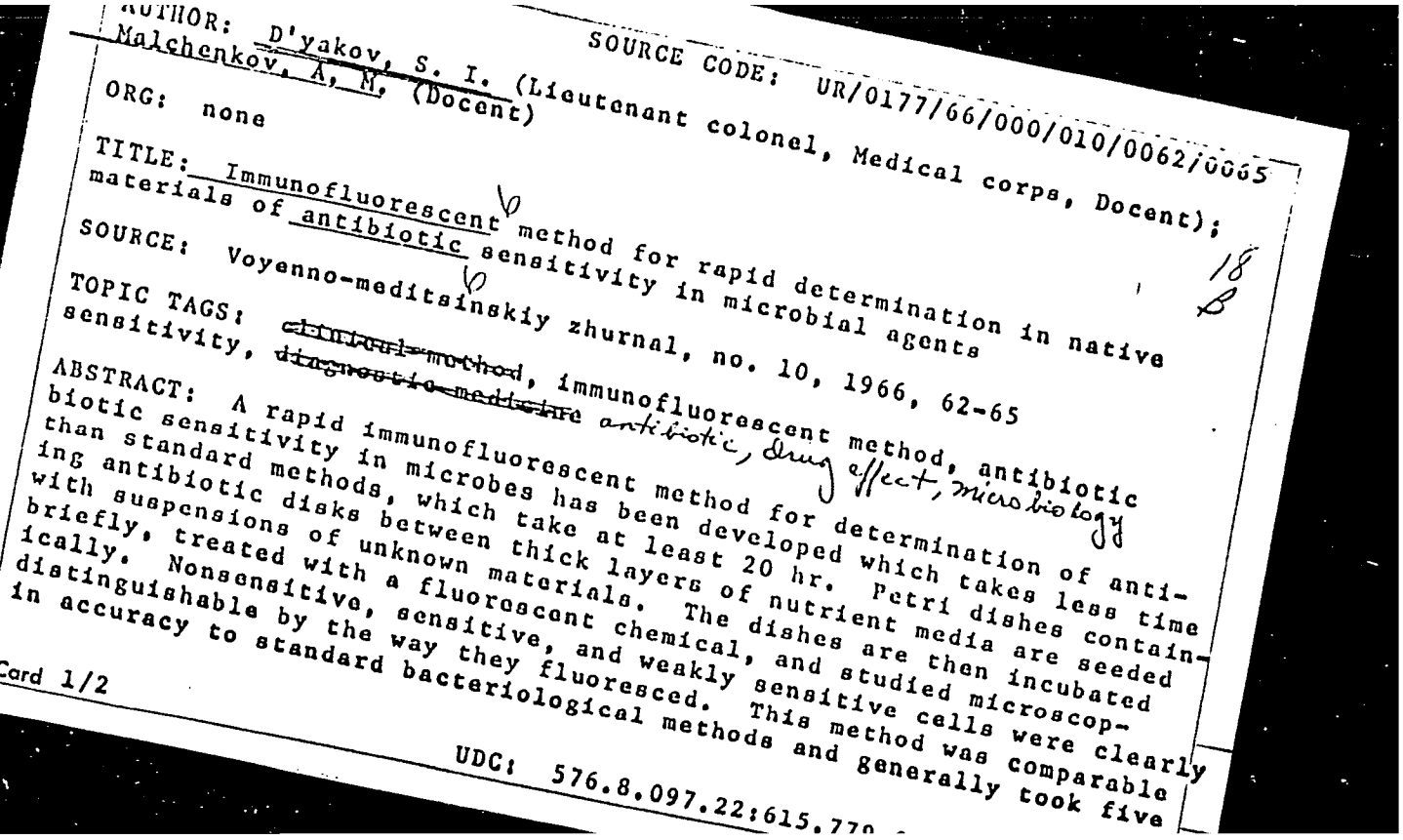
Methodology for the treatment of bacteriological preparations with fluorescent antibodies. Zhur. mikrobiol., epid. i immun. 33 no.7:101-107 Jl '62. (MIRA 17:1)

1. Iz kafedr mikrobiologii i biokhimii Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

D'YAKOV, S.I.

Method of intravital fluorochromizing of microorganisms in an agar culture medium chamber. Lab. delo no.8:489-491 '65.
(MIRA 18:9)

1. Kafedra mikrobiologii Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova, Leningrad.



AUTHOR: D'yakov, S. I. (Lieutenant colonel, Medical corps, Docent); Malchenkov, A. M. (Docent) SOURCE CODE: UR/0177/66/000/010/0062/0065

ORG: none

TITLE: Immunofluorescent method for rapid determination in native materials of antibiotic sensitivity in microbial agents

SOURCE: Voyenno-meditsinskiy zhurnal, no. 10, 1966, 62-65

TOPIC TAGS: ~~clinical method~~, immunofluorescent method, antibiotic sensitivity, ~~diagnostic medicine~~ antibiotic, drug effect, microbiology

ABSTRACT: A rapid immunofluorescent method for determination of antibiotic sensitivity in microbes has been developed which takes less time than standard methods, which take at least 20 hr. Petri dishes containing antibiotic disks between thick layers of nutrient media are seeded with suspensions of unknown materials. The dishes are then incubated briefly, treated with a fluorescent chemical, and studied microscopically. Nonsensitive, sensitive, and weakly sensitive cells were clearly distinguishable by the way they fluoresced. This method was comparable in accuracy to standard bacteriological methods and generally took five

Card 1/2

UDC: 576.8.097.22:615.770

L 08555-67

ACC NR: AP6033919

hr, as opposed to 20—24 hr for standard methods. Orig. art. has: 3 figures. [W.A. 50]

SUB CODE: 06/ SUBM DATE: none

D'YAKOV, S. M., Cand of Agric Sci -- (diss) Comparative Study of the Growth and Development and Meat Quality of the Young /Sic/ Red Steppe Breed and its Mixture With the Kurganskiy /Breed/," Kiev, 1959, 19 pp (Ukrainian Academy of Agricultural Sciences) (KL, 50-60, 128)

D'YAKOV, S.P. Deceased

Physics See ILC

L 22851-66 EWP(j)/T/ETC(m)-6 IJP(c) WW/RM

ACC NR: AP6012336 (A) SOURCE CODE: UR/0409/66/000/002/0169/0171

35
34
10

AUTHOR: Dyankov, S. S.; Shopov, D. M.

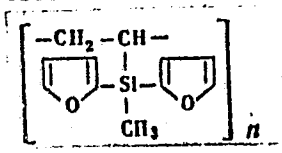
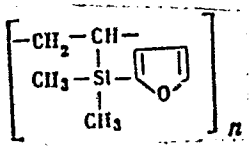
ORG: Institute of Organic Chemistry, Bulgarian Academy of Sciences, Sofia (Institut organicheskoy khimii Bolgarskoy akademii nauk)

TITLE: Synthesis and polymerization of difurylmethylvinylsilane and dimethylfurylvinylsilane

SOURCE: Khimiya geterotsiklicheskikh soyedeneniy, no. 2, 1966, 169-171

TOPIC TAGS: difurylmethylvinylsilane, dimethylfurylvinylsilane, polymerization, thermally stable polymer

ABSTRACT: Difurylmethylvinylsilane and dimethylfurylvinylsilane have been synthesized from furyllithium and methyldichloro- and dimethylethoxy-vinylsilane in yields of 50.0 and 58.5%, respectively. Polymerization of the monomers in the presence of 2% ethyllithium yielded solid polymers. The polymers were white powders insoluble in cyclohexane, benzene and chlorobenzene. IR spectroscopy indicated that the polymers have the following structures:

A  B 

Card 1/2 UDC: 547.722+546.287+543.422+542.956

L 22851-66

ACC NR: AP6012336

The results of differential thermal analysis showed that the polymers withstand temperatures up to 350C. Orig. art. has: 2 figures. [BO]

SUB CODE: 07, 11/ SUBM DATE: 02Jul65/ OTH REF: 003/ SOV REF: 002/ ATD PRESS: 4229

Card 2/2 BK

D'YAK[illegible], V.; [illegible]N, Ye.

[illegible] the delivery [illegible] of canned fruit and vegetables. Mor. flot 25 no.9:10-11 S '65. (MIRA 18:9)

1. Zamestitel' nachal'nika pogruzochnogo uchastka Reniyskogo porta (for D'yakov). 2. Starshiy dispetcher-telefonist pogruzochnogo uchastka Reniyskogo porta (for Sych).

V. A. RYAKOV, V. A.

Propagation of Waves

1963 ON THE GENERAL THEORY OF THE TRANSMISSION OF ELECTRICAL ENERGY ALONG LINES - V. A. Ryakov & V. I. Ivanov. (*Automatics & Telemechanics* [in Russian], No. 4/5, 1941, pp 10-17)

With reference to Kovalenkov's paper, 1863, above the importance is emphasised of pooling knowledge gained in various branches of electrical engineering regarding the transmission of electrical energy, and of developing a general theory of transmission. The following factors are briefly discussed:—(1) The number of conductors (2) the types of e.m.f. applied to a group of conductors (3) the impedances of the transmitting and receiving apparatus, and (4) the asymmetry of the conductors. Some of the possible steps in the development of a general theory are also indicated, as for example the derivation of formulae for determining the voltages and currents on the line in terms of its secondary parameters, the determination of tertiary parameters of an equivalent four-pole circuit network, the investigation (with the aid of a model) of the solutions of differential equations representing the processes taking place on the line, etc.

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D'YAKOV, V. A.

In 1943 defended his thesis "Osnovnyye polozheniya teorii mnogoprovodnykh liniy i prilozheniye yeye k raschetam vysokochastotnykh kanalov po linii elektroperedachi" for degree of Doktor tekhnicheskikh nauk at Energeticheskiy institut im. Krzhizhanovskogo.

Source: Elektrichestvo, 1947, No. 12, p. 64-65.

F-5025

D'YAKOV, V. A.

D'Yakov, V. A. - "On a method of investigating nonstationary processes in linear electrical systems", Isvestiya Akad. nauk Latv. Ssr, 1949, No. 4, p. 11-22, (Resume in Latvian).

SO: U-4392, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 21, 1949).

D'YAKOV, V. A.

(4)

Standardization of the methods for calculating the composition of metal alloys. V. A. D'yakov, V. S. Sivatlov, and J. Daube (Inst. Phys. Math. Latvian S.S.R., Riga). *Latvijas PSR. Zinātņu Akad. Vestis* 1950, No. 12, (Whole No. 41), 171–84 (in Russian; Latvian summary).—A study showed that it is possible to det. mathematically the proportions of various metals to be used in production of alloys of the desired properties. The calcn. is based on a series of equations whose no. depends on the no. of the components in the given alloy. The math. evaluation of the problem permitted construction of a potentiometer instrument which was expected to facilitate routine calcns. of similar nature in foundries and specialized casting plants.

M. O. Holowaty

SPIVAKOVSKIY, A.O.; MEDVEDEV, L.G.; POTAPOV, M.G.; D'YAKOV, V.A.

Prospects of expansion and ways of improving conveyer-transportation in open-pit mining. Ugol' 36 no.2:17-21 F '61. (MIRA 14:2)
(Strip mining) (Conveying machinery)

D'YAKOV, V.A., inzh.; KOTOV, M.A., kand. tekhn. nauk

Problem of selecting a means of conveyer transportation in coal mining by short walls with remote control of the equipment. Nauch. soob. IGD 26:48-61 '65. (MIRA 18:9)

KOST, G.N., kand. tekhn. nauk; D'YAKOV, V.A., inzh.

Experimental testing of the elasticity of rubber rope belts in the field. Nauch. soob. IGD 26:71-74 '65. (MIRA 18:9)

D'YAKOV, V.A., inzh.

A device for testing the interaction between the elastic lining of a drive drum and the conveyer belt. Nauch. soob. IGD 26:88-94 '65. (MIRA 18:9)

D'YAKOV, V.A., inzh.; KOTOV, M.A., kand. tekhn. nauk

Operating conditions of the drive drum of a belt conveyer. Nauch. soob. IGD 26:116-129 '65. (MIRA 18:9)

L 15[illegible] EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b) MJW/GD/RM/WE

ACC NR: AP6003310 SOURCE CODE: UR/0129/66/000/001/0049/0052

AUTHOR: D'yakov, V. G.; Abramova, Z. A.

ORG: Giproneftemash

TITLE: Kh23N7SL steel as a replacement for EI316 high-nickel steel in the production of heat-resistant castings

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 1, 1966, 49-52

TOPIC TAGS: cast steel, structural hardware, petroleum industry equipment, metal oxidation, high temperature strength / Kh23N7SL Cr-Ni steel

ABSTRACT: Normally EI316 (EI319) steel (22-26% Cr, 11-14% Ni) is used in the USSR to cast accessories for petroleum-refinery pipe-stills (the equivalent steels used abroad for this purpose are Cr-Ni steels of the 25-12 type); this includes the casting of such accessories as the mounts serving to support tubes in the furnace-arch zone, which are exposed to gases as hot as 800-1000°C and experience stresses of 0.8-1.2 kg/$/mm^2$. These mounts are moreover exposed to contamination with sulfur, since the furnace nozzles and burners operate mostly with liquid high-sulfur fuel (fuel oil, petroleum) and the furnace gases are saturated with sulfur compounds. In this connection, Kh23N7SL steel, which contains 21-25% Cr and 6-8% Ni and up to 1.2% Si, was selected for tests as a replacement for EI316 steel. The cast structure of Kh23N7SL steel re-

Card 1/2 UDC: 669.14.018.15

L 15701-66

ACC NR: AP6003310

presents an austenite with hetero-phase sectors which appear to consist of δ-ferrite, austenite and carbides and have a microhardness of 300-580 compared with 260-350 for the basic solution. The mechanical properties of both steels at room temperature and at 700-950°C were determined by means of short-time tensile tests which showed that at 700-950°C Kh23N7SL steel is not inferior in strength and plasticity to EI316 steel. At 20°C (room temperature), however, the impact strength of Kh23N7SL steel is lower (0.8-1.4 kg/mm^2 compared with ~3 kg/mm^2 for EI316 steel, which is apparently due to the presence of an eutectic component in the structure. Extrapolation of experimental findings on stress-rupture strength to 10,000 and 100,000 hr shows that at 750-850°C the high-temperature strength of Kh23N7SL steel surpasses that of EI316 steel, while at 900-950°C it becomes nearly equal. What is more, the oxidation resistance of Kh23N7SL steel is almost as high as that of EI316 steel (the corrosion rate of Kh23N7SL steel specimens tested for 1800 hr in the thermal-cracking and pipe-still furnaces of the Moscow Petroleum Refinery was 0.04 mm/year against 0.03 mm/year for EI316 steel). The findings on proneness to embrittlement in the process of long-term aging are equally satisfactory. For all these reasons, Kh23N7SL type Cr-Ni steel may be recommended for the production of cast accessories for, in particular, petroleum-refinery furnaces. Orig. art. has: 7 figures, 3 tables.

SUB CODE: 05, 11, 13, 20/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000

Card 2/2

D'YAKOV, V.G.

FOKIN, Vladimir Yakovlevich; PERALK, Vladimir L'vovich; L'VOVA, L.A., redaktor; D'YAKOV, V.G., retsenzent; KARZHEV, V.I., retsenzent; POLUBOYARINOV, G.N., retsenzent; ROZHINSKIY, P.S., retsenzent; SAPSAYENKO, I.I., retsenzent; CHERNYSHEVA, I.G., retsenzent

[Equipment of factories producing synthetic liquid fuel; installation, maintenance, and operation] Oborudovanie zavodov iskusstvennogo zhidkogo topliva; montazh, remont i ekspluatatsiia. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1955. 400 p. (Liquid fuels) (MLRA 9:3)

D'yakov, V.G.

USSR/ Engineering - Metals testing

Card 1/1 Pub. 128 - 15/28

Authors : Vol'fson, S. I., Cand. of Mech. Sc.; D'yakov, V. G., Cand. of Mech. Sc.; and Abramova, Z. A., Eng.

Title : Low-alloy silicon-manganese steel, Mark MK

Periodical : Vest. mash. 35/6, 65 - 67, Jun 1955

Abstract : The MK silicon-manganese steel specimens consisting of electric welded pipes measuring 529 x 9 mm, and sheets 16 mm thick, were tested at 700 to 900° temperatures to determine their plasticity and the impact strength. Technical data is given on chemical composition and types of specimens used. The above mentioned steel is manufactured by the "Il'in" plant. Illustrations; diagrams; tables.

Institution : .....

Submitted : .....

D'yakov, V. G.

2

/ Low-alloy structural steels MK and M. V. G. D'yakov
and S. I. Vol'fson. *Stal'* 16, 655-6(1956).—Mech. proper-
ties are given of steel MK, contg. C 0.10–0.15, Mn 1.2–1.4,
Si 0.6–0.8, and Cr 0.10–0.15% and of M steel, contg. C 0.10,
Mn 1.4, Si 0.2, and Cu 0.3%, for the −70 to +350° range.
Their yield point at 350° is not less than 20 kg./sq. mm., and
the impact strength on Mesnager bars at −70° is not lower
than 4 kg./m./sq. cm. for MK and 7 kg./m./sq. cm. for M
steel. Both steels age pronouncedly. I. D. Gal.

AUTHOR: D'yakov, V. G., Candidate of Technical Sciences. 129-9-3/14

TITLE: Properties of the Steel ЭИ579. (Svoystva Stali EI579)

PERIODICAL: Metallovedeniye i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.9, pp.9-16 (U.S.S.R.)

ABSTRACT: According to the standard specifications the composition of this steel is as follows:-

0.16-0.22 % C, 0.40_{max} % Si, 0.25-0.50% Mn, 2.5-3% Cr, 0.35-0.50% Mo, 0.30-0.50% W, 0.70-0.85% V, 0.25_{max} % Ni, 0.030_{max} % S, 0.030_{max} % P.

After hardening or normalisation annealing followed by high temperature tempering, this material is successfully used for highly stressed components operating between 500 and 520 C and,under special conditions,also inside hydrogen saturated media. The author and Z. A. Abramova investigated the metal of six industrial melts, the compositions of which are given in Table 2, p.10. The influence was studied of the fluctuations of the chemical composition within the specified limits on the properties of the steel. Furthermore, the mechanical properties of the steel were investigated at various temperatures (20,450,500,550 and 600 C); the impact strength was measured at +20 and -50 C and also after

Card 1/3

Properties of the Steel ЭИ 579. (Cont.) 129-9-3/14

holding for 2000 hours at 450, 500, 550 and 600 C. Equally, the thermal brittleness and the thermal stability were studied. It is concluded that after heat treatment this steel has a high strength and toughness and also a satisfactory ductility which are conserved at elevated temperatures and also at sub-zero temperatures. For this steel the following stable mechanical properties can be obtained at 20 and 550 C respectively:

Temperature °C	σ_b kg/mm^2	σ_s kg/mm^2	δ_{10} %	ψ %	a_k kgm/cm^2
20	85	75	14	60	6
550	50	40	12	60	2 at -50°C

In the temperature range 450-500 C a certain tendency to thermal brittleness was observed, long duration annealing at 600 C leads to a decrease in the short duration strength. The results obtained for the long duration strength and creep indicate that this steel has a relatively high thermal stability. The stresses which bring about fracture after 10 000 hours and a creep speed of 10^{-5} mm/mm·hr are respectively 10.5 and 7.6 kg/mm^2 at 600 C and 17 and 13 kg/mm^2 at 550 C.

Card 2/3

Properties of the Steel ЭИ579. (Cont.) 129-9-3/14

The permissible fluctuations of the chemical composition of this brand of steel show an appreciable influence on the critical points, mechanical properties and the tendency to develop thermal brittleness and, therefore, it is advisable to establish the correct heat treatment for each melt on the basis of results of short duration tensile and impact strength tests. The properties of this steel are such that it can be considered suitable for components of highly stressed equipment operating at 550 C inclusive.
There are 12 tables, 6 figures and one Slavic reference.

ASSOCIATION: GIPRONEFTEMASh.

AVAILABLE:

Card 3/3

DYAKOV V.G.

133-9-17/23

AUTHOR: D'yakov, V.G., Candidate of Technical Sciences.

TITLE: The Influence of Cold-rolling Conditions on Properties of 8% Chromium Steels. (Vliyaniye rezhima kholodnoy prokatki na svoystva 8%-nykh khromistykh staley)

PERIODICAL: Stal', 1957, No.9, pp. 837 - 840 (USSR).

ABSTRACT: The influence of the number of passes (up to 5 passes) at a constant total reduction (up to 50%) during cold-rolling on the tendency to work-hardening of steels X8, X8T, X8BT, X8CM (chemical compositions given in Table 1) was investigated. The investigations were carried out on rods 40 mm diameter, forged from 35 kg ingots (end of forging at 950 - 1 000 °C) and annealed at 780 - 800 °C for 30 minutes and cooled with furnace (30 °C/min). Specimens 6 x 10 x 25 mm cut out longitudinally from these rods were cold-rolled on a laboratory mill 210. The hardness of the specimens was measured before and after rolling. The micro-structure of rolled specimens was observed on transverse polished specimens. From the initial and rolled specimens rectangular beams 3 x 3 x 25 mm were cut out along the direction of rolling with a notch 1 mm deep. The latter were statically bent on a Gagarin's press with a special device (Fig.1). During bending the force P and the depth of curvature f were automatically

Card1/2 recorded (typical records are shown in Fig.2). The dependence

SOV/133-59-6-32/41

AUTHORS: D'yakov, V.G., Candidate of Technical Sciences and Abramova, Z.A., Engineer

TITLE: On the Problem of Calculating the Strength of Low Alloy Steels (K voprosu o raschete prochnosti nizkolegirovannykh staley)

PERIODICAL: Stal', 1959, Nr 6, pp 562-563 (USSR)

ABSTRACT: These are remarks on the paper by M.S.Mikhalev and M.I.Gol'dshteyn (Stal', 1958, Nr 10) on the same subject. The original authors suggested the use of some formulae for calculating the strength of low alloy steels. The present authors are in agreement with the original authors and quote some statistical results for the degree of agreement between the calculated and actual values. There is 1 table.

ASSOCIATION: Giproneftemash

Card 1/1

ZAKHAROCHKIN, L.D.; D'YAKOV, V.G.

Present status of the corrosion protection of the equipment of refineries processing sulfur-bearing crudes. Khim.i tekh.topl.i masel 5 no. 11:46-49 N '60. (MIRA 13:11)
(Petroleum refineries--Equipment and supplies)
(Corrosion and anticorrosives)

S/184/61/000/001/005/014
A104/A029

AUTHOR: D'yakov, V.G., Candidate of Technical Sciences

TITLE: Corrosion-Resistant Heat Exchanging Tubes of X8 (Kh8) Steel

PERIODICAL: Khimicheskoye Mashinostroyeniye, 1961, No. 1, pp. 32-34

TEXT: Inadequate corrosion resistance of X5M (Kh5M) steel tubes operating in oil-processing plants necessitated investigations into more suitable materials. Inspection of Kh8 steel containing 8% chromium developed by the Giproneftemash showed that its corrosion resistance is 2-2.5 times higher than the corrosion resistance of Kh5M steel. In 1957 the Nikopol'skiy Yuzhnotrubnyy zavod (Nikopol' Southern Tube Plant) made test series of 19 x 1.5 mm and 25 x 2.5 mm heat exchanging pipes made of Kh8 steel according to ЧМТУ 5464-56 (ChMTU 5464-56). Experimental tests were carried out on 90-mm diameter samples made by the "Dneprospetsstal" Plant. Chemical analysis showed that Kh8 steel fully meets all technical requirements. Air hardening and annealing properties were tested by continuous air hardening at 880°C of 90 x 90 mm cylinders cut from annealed ingots. Kh8 steel has a tendency to air hardening; hardness increased

Card 1/3

S/184/61/000/001/005/014
A104/A029

Corrosion-Resistant Heat Exchanging Tubes of X8 (Kh8) Steel

from HB 137-144 to HB 343-368 and its annealing properties are satisfactory. Results of mechanical tests proved that after tempering at 740°C (water cooling) and 780°C (cooling in furnace) the tensile strength, plasticity and resilience of Kh8 steel met the requirements of ЧМТУ 2968-51 (ChMTU 2968-51). Particularly after processing at 780°C the steel surpasses these requirements (HB 130-144, δ_{10} = 26.7%) which is important for rolling tubes into heat exchanging bundles. Tempering at 780° followed by slow cooling in the furnace is recommended because it reduces the hardness and improves the plastic properties of steel. The effect of continuous aging was determined by comparing the strength values σ_v, σ_s and the plasticity value δ at 20°C to resilience strength a_k at 20 and -40°C before and after continuous aging at 300-500°C. Tests proved that Kh8 steel retains its high properties at reduced and increased temperatures of up to 500°C and there were no signs of thermal brittleness or weakening in consequence of continuous aging. Cold tubes were tested for expansion, flattening and tenacity with determination of the tensile

Card 2/ 3

Corrosion-Resistant Heat Exchanging Tubes of X8 (Kh8) Steel

strength limit and proportional elongation. Expansion up to 30% and total flattening revealed no fractures and confirmed the high elasticity of Kh8 steel. Tensile strength tests provided satisfactory values σ_v = 46.6 $\div$ 57.2 kg/mm^2 and δ_{10} = 23 $\div$ 38%. These results were confirmed during the production of 310 19 x 1.5 mm tubes in the Orskiy nefteperer-abatyvayushchiy zavod im. Chkalova (Orsk Ore Refinery im. Chkalov). At 8°C air temperature all tubes were easily rolled similar to tubes made of annealed low-carbon steel 10. Assembling and sheeting confirmed the satisfactory properties of cold rolled Kh8 tubes and two years of operational experience snowed their high corrosion resistance in aggresive sulfurous media. Based on these results Gosgortekhnadzor of the RSFSR approved of the use of Kh8 steel pipes in plants operating at high pressure and at temperatures of -40°C to +420°C.

S/133/61/000/006/011/017
A054/A129

AUTHOR: D'yakov, V. G., Candidate of Technical Sciences

TITLE: Properties of heat-exchanger tubes made of Kh8 (Kh8) type steel

PERIODICAL: Stal', no. 6, 1961, 538-540

TEXT: Heat-exchanger tubes made of molybdenum-containing Kh5M (Kh5M) steel and used in oil refineries are not sufficiently corrosion-resistant in sulfur-containing media. Therefore, Kh8 (Kh8), Kh8T (Kh8T), Kh8VT (Kh8VT) and Kh8SM (Kh8SM) steels were tested for their application in tube production, as their corrosion-resistance is 2 - 2.5 times higher than that of Kh5M steel. The tests were carried out in the UkrNITI with the cooperation of A. I. Rizol' and A. I. Dorokhov. As a result Kh8 steel was recommended for the production of heat-exchanger tubes. The tube blanks of this steel were made in arc-furnaces of the "Dneprospetsstal'" Plant. Before tapping, the metal was deoxidized by aluminum, (0.75 kg/t) and bottom-cast into 2.8-ton 480 x 480-mm ingots. The cold ingots were heated to 1,300°C in soaking pits, rolled on the blooming mill to 180-mm diameter tubings (with 17 passes, average reduction/pass: 50 mm). The tube blanks were heated in a pusher-type furnace (holding time at 1,240°C at least

Card 1/3

Properties of heat exchanger tubes ...

30 min), rolled on the breaking-down stand into 90-mm diameter tubings. The metal temperature at the beginning of rolling was 1,120 - 1,170°C, at the end no less than 800°C. In the Nikopol'skiy yuzhnotrubnyy zavod (Nikopol' Southern Tube Plant) tubes of 19 x 1.5 and 25 x 2.5 mm size were produced according to the ChMTU 5464-56 technology from the "Dneprospetsstal'" tube blanks of Kh8 steel. The properties of the Kh8 steel grade were tested in the GIPRONEFTEMASh and the "Dneprospetsstal'". The composition (%) of the products 90 mm in diameter was as follows: C - 0.08; Mn - 0.4; Si - 0.35; Cr - 8.1; Ni - 0.1; Cu - 0.6; S - 0.015; P - 0.2. Hardness after hardening on air was tested on 90 mm diameter cylinders, 90 mm in height, at 880°C and it was found that Kh8 steel has a tendency to air-hardening and can be hardened thoroughly. The elongation and notch-toughness tests showed that the values required by the prescription ChMTU 2968-51 were obtained upon annealing at 740°C and cooling in water, and annealing at 780°C with slow cooling in furnace. The above ChMTU-prescription requires: $\sigma_B \geqslant 40$ kg/mm^2, $\sigma_s \geqslant 17$ kg/mm^2, $\delta_5 \geqslant 24\%$, $\psi \geqslant 50\%$, $a_k \geqslant 10$ kgm/cm^2, $H_B \leq 170$. The required values for hardness and relative elongation were obtained by the first annealing conditions, while, when applying 780°C and slow cooling the values were higher than those required. This is important when mounting and flanging the tubes. The strength of the products could be maintained best at

Card 2/3

Properties of heat exchanger tubes ...

high temperatures when annealing at 740°C and cooling in water. At temperatures of -60° and -70°C the specimens annealed at 740°C and cooled in the furnace displayed a sudden decrease in notch-toughness and a tendency to annealing brittleness. This was not observed when annealing took place at 780°C. By comparing the strength, the plasticity (at 20°C) and notch-toughness (at 20°C and -40°C) of Kh8 steel before and after a long holding time in the furnace at 300 - 500°C, it was established that this steel did not soften and did not become brittle. The steel only showed a trend to brittleness at annealing. Thus when brittleness has to be considered, for instance, in the heat treatment of the tube during the cold rolling process, high annealing temperature and sudden cooling should be applied. Tubes made of Dneprospetsstal'-tube blanks were used in the zavod im. Chkalova (Oil Refinery im. Chkalov) in boilers and it was found that they could be easily assembled and had a high corrosion resistance in sulfurous media. With this as a guide, the technology for Kh8M molybdenum steel, which has a lower corrosion resistance and is more expensive, can be replaced by Kh8 steel. In these tests, from the part of UkrNIITI the following persons co-operated: A. I. Rizol', Yu. Ye. Kovalenko, A. I. Dorokhov, while the Southern Tube Part was represented by: P. I. Vatutin, I. Yu. Korobochkin, N. S. Yakumenko, O. S. Vil'yams, A. N. Kondrat'yeva, T. D. Dupliy et al. There are 2 figures, 2 tables and 2 Soviet-bloc references.

Card 3/3

SHIBRYAYEV, B.F.; D'YAKOV, V.G.

Experience in operating the condenser refrigerating equipment cooled by sea water at the petroleum refinery of the Anglo-Egyptian Company in Suez. Khim.i tekh.topl.i masel 6 no.1:71-72 Ja '61. (MIRA 14:1)

(Suez, Egypt—Petroleum refineries)

D'YAKOV, V.G.; SHIBRYAYEV, B.F.

Control of the corrosion of heat exchanging brass pipes at petroleum refineries. Khim.i tekh.topl.i masel 6 no.3:45-48 Mr '61. (MIRA 14:3)

(Heat exchangers—Corrosion)

D'YAKOV, V.G., kand.tekhn.nauk

Properties of heat-exchanger tubes made of Kh8 steel. Stal' 21 no.6:538-540 Je '61. (MIRA 14:5)
(Heat exchangers)
(Chromium steel)

S/123/62/000/010/001/013
A004/A101

AUTHORS: D'yakov, V.G., Shibryayev, B.F., Myagkov, M.P.

TITLE: Steels for fastening parts of high-temperature flanged joints

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 10, 1962, 18, abstract 10A109. ("Novosti neft. i gaz. tekhn. Neft. oborud. i sredstva avtomatiz.", 1961, No. 3, 29 - 32)

TEXT: Tensile strength tests at 20 - 450°C, [illegible] tness tests after protracted holding at 300 - 600°C and relaxation tests (at 42[illegible]°C and σ_0 = 10 kg/mm^2) of the steel grades 30 X (30Kh) and 38 XA (38KhA) were carried out with the aim to replace the 30 XMA (30KhMA) grade steel, whose Mo is in short supply. After heat treatment, the steel grades 30Kh and 38KhA possess a high strength and ductility, and up to 400°C they do not tend to hot brittleness. As to relaxation resistance at 425°C they are inferior to the 30KhMA grade steel. The steel grades 30Kh and 38KhA are recommended for fastening parts which are operating at temperatures up to 400°C. Investigations of the X18 H25C 2 (Kh18N25S2) grade steel revealed that it is not expedient to use it in high-load fastening parts instead

Card 1/2

Steels for fastening....

S/123/62/000/010/001/013
A004/A101

of the 4X 14H 14B 2M (4Kh14N14V2M) grade steel.

[Abstracter's note: Complete translation]

Card 2/2

[illegible] V. V., [illegible]

Effect of additions of Ti, V, Mo and Si on the properties of chromium steel. Metalloved. i t.m. obr. met. no.10:17-20 O '62. (MIRA 15:10)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut tyazhelogo mashinostroyeniya.
(Chromium steel—Testing)
(Steel alloys—Metallurgy)

D'YAKOV, V.G.; LEVIN, I.A.; SHREYDER, A.V.

Aluminum, titanium, and OKH21N5T and KH21N6M2T low-nickel steels as materials for the equipment of petroleum refineries and petrochemical plants. Mash. i neft. obor. no.4:27-33 '63. (MIRA 17:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut neftyanogo mashinostroyeniya.

ACCESSION NR: AT4013943 S/2659/63/010/000/0164/0168

AUTHOR: D'yakov, V.G.; Abramova, Z.A.

TITLE: Investigation of substitutes for high-nickel steel, grade EI-316, for cast parts of tubular ovens in oil refineries.

SOURCE: AN SSSR. Institut metallurgii. Issledovaniya po zharoprochny*m splavam, v. 10, 1963, 164-168

TOPIC TAGS: steel, oil refinery, sulfur-resistant steel, steel brittleness, high-nickel steel, oil refinery oven, heat-resistant steel

ABSTRACT: High-nickel steel under relatively high stress is used for heat-resistant parts of ovens where temperatures reach 1000C and the oil contains sulfuric compounds. The steel required for these parts must resist these unfavorable conditions. The author therefore investigated existing substitutes of grade EI-316 steel and this steel itself. On the basis of tests performed, (see Fig. 1 in the enclosure) it was found that grade kh24N7 steel can be used as a substitute. The chemical composition of this steel is 0.35-0.5% C, 0.5-1.0% Mn, 0.5-1.5% Si, 22-25% Cr, 6-8% Ni, 0.035% S, and 0.035% P.

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Grade EI-921 steel has low impact strength under initial conditions and has high brittleness after prolonged operation under high temperatures. Hence, it cannot be used for parts of high-temperature ovens in oil refineries. Orig. art. has: 3 figures and 5 tables.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy AN SSSR)

SUBMITTED: 00	DATE ACQ: 27Feb64	ENCL: 02
SUB CODE: MM	NO REF SOV: 000	OTHER: 000

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ACCESSION NR: AT4013943

ENCLOSURE:01

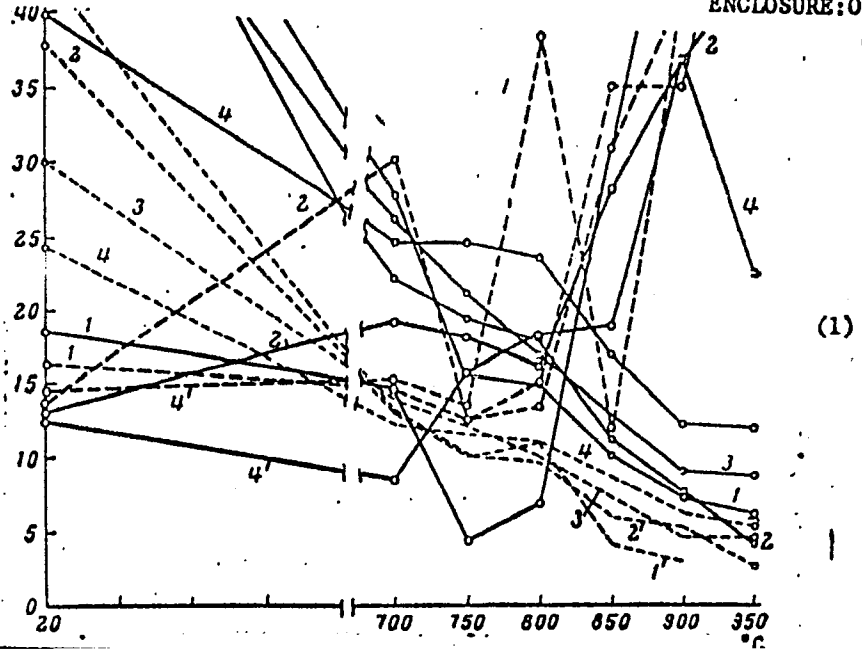

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Fig. 1. Mechanical properties of EI-316, EI-921 and kh22G8N4 steel at normal and high temperatures.

1 - kh22G8N4 steel after hardening;
2 - the same as supplied;
3 - EI-921 steel;
4 - EI-316 steel.

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D'YAKOV, V.G.; LEVIN, I.A.; CHESKIS, Kh.I.

Electrically welded pipes used in place of seamless pipes for petroleum refineries and petrochemical plants. Mash. i neft. obor. no.4:16-17 '64. (MIRA 17:6)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut neftyanogo mashinostroyeniya.

ACCESSION NR: AP4043487 S/0133/64/000/008/0734/0735

AUTHOR: Levin, I. A., Maksimova, G. F., D'yakov, V. G.

TITLE: Corrosion resistance and possible uses of arc welded pipes made of steel Kh17N13M2T

SOURCE: Stal', no. 8, 1964, 734-735

TOPIC TAGS: steel, steel Kh17N13M2T, corrosion resistance, steel corrosion, arc welded steel, steel pipe, welded steel pipe

ABSTRACT: The corrosion resistance of argon-shield arc-welded seams of pipes made of Kh17N13M2T steel, which are widely used in processes involving fatty acids, was tested to evaluate the applicability of such pipes in certain branches of the petroleum and crude oil industries. The corrosion resistance of pipes 1. annealed at 1050C as in the regular manufacturing process, 2. additionally annealed at 870C, and 3. additionally annealed at 1100C for 3 hrs. with subsequent water quenching, was determined in acetic, caproic, capric, stearic and sulfuric acids and H_2S-saturated 0.03N hydrochloric acid. In addition, the weld-seam resistance to intercrystallite and point corrosion was tested in a sulfuric-acid solution of copper sulfate and by determining the protective-film failure potential in

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ACCESSION NR: AP4043487

0.1N sodium chloride. The results of the tests were quite satisfactory. Under all conditions, the corrosion rate of the weld seam was practically identical to that of the base metal, varying from as low as 2-30μ to 33mm/yr. (60% H_2SO_4). These pipes can be recommended for use in the petroleum industry. The pipe was manufactured at the Moskovskiy trubny*y zavod (Moscow Pipe Plant). Orig. art. has: 2 tables.

ASSOCIATION: Giproneftemash

SUBMITTED: 00 ENCL: 00

SUB CODE: FP, MM NO REF SOV: 002 OTHER: 000

Card 2/2

D'YAKOV, V.G., kand.tekhn.nauk; SHREYDER, A.V., kand.tekhn.nauk; ZAKHAROCHKIN, L.D., inzh.

Basic trends in controlling the corrosion of petroleum refinery equipment. Khim.i neft. mashinostr. no.8:4-5 Ag '65.
(MIRA 18:12)

L 24532-66 EWT(d)/EWT(m)/EWA(d)/T/EWP(t)/EWP(h)/EWP(l) IJP(c) JD/HW/WR/WE

ACC NR: AP6015855 SOURCE CODE: UR/0314/65/000/008/0004/0005

AUTHOR: D'yakov, V. G. (Candidate of technical sciences); Shreyder, A. V. (Candidate of technical sciences); Zakharochkin, L. D.

ORG: none

TITLE: Basic directions in corrosion control of petroleum refinery equipment

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 8, 1965, 4-5

TOPIC TAGS: chromium steel, low alloy steel, carbon steel, steel corrosion resistance, high alloy steel, pipeline, petroleum refinery equipment, heat exchanger, furnace, monel alloy/1Kh8VF steel, Kh5M steel, Kh5VF steel, 16GS low alloy steel, OKh13 high alloy steel, 1Kh18N9T high alloy steel, Kh17N13M2T high alloy steel, 18-8 steel, NMZhMtS monel alloy

ABSTRACT: An 8% chromium steel grade Kh8 was created to replace pipelines made of carbon or low-alloy chromium steels (whose service life does not exceed 1-1.5 years). The corrosion resistance of lines made from this steel, in sulfurous media at elevated temperatures, surpasses the corrosion resistance of lines made from 5% chromium steel by 2-2.5 times and lines made from carbon steels by 5-8 times. However, for certain heat exchange equipment the corrosion resistance of steel Kh8 tubes is still insufficient; in this case steel OKh13 tubes should be used.

Steel 1Kh8VF (containing 7-9% chromium), which is 2-2.5 times more corrosion resistant than steels Kh5M and Kh5VF, is being widely used for furnaces and

Card 1/2 UDC: 620.193:665.52

L 24532-66

ACC NR: AP6015855

hot-processing lines in petroleum refineries. However the corrosion resistance of steel 1Kh8VF is unsatisfactory in some cases. Additionally, the strength properties of these steels sometimes do not satisfy operating conditions at high temperatures.

The parts of equipment used in processing sulfurous and highly sulfurous crudes, in many instances, should be made from a clad sheet with the base layer made of carbon or low-alloy (type 16GS) steels and the cladding layer made of high-alloy (Type Okh13, 1Kh18N9T, Kh17N13M2T) steels or monel (NMZhMts 28-2.5-1.5). Trilayered sheet (such as brass-carbon steel-brass, or steel 18-8-carbon steel-steel 18-8, can be effectively used for separate items of the equipment. [JPRS]

SUB CODE: 13, 11, 20 / SUBM DATE: none

Card 2/2

D'YAKOV, V.I.

Electrode level indicators. Khim.prom. no.3:261
Ap-My '60. (MIRA 13:8)
(Liquid level indicators)
(Electrodes)

D'YAKOV, V.I., inzh.; KUTUZOV, V.Ye., tekhnik

Transformer type electric soldering tool. Vest.elektroprom. 31 no.6:73-74 Je '60. (MIRA 13:7)
(Solder and soldering)

D'YAKOV, V.I.

In regard to M.M.Snegirev's article" Simple liquid-level signalers."
Prom. energ. 15 no.10:33 O '60. (MIRA 13:11)
(Liquid level indicators)
(Snegirev, M.M.)

S/128/62/000/003/007/007
A004/A127

AUTHOR: D'yakov, V. I.

TITLE: Induction pumps for liquid nonmagnetic metals

PERIODICAL: Liteynoye proizvodstvo, no. 3, 1962, 46

TEXT: The author points out that induction pumps, which are used in nuclear reactors for the pumping of liquid metals, are being introduced also in the metallurgical and foundry industry. He presents the schematics of induction pumps for magnetic and nonmagnetic metals, describes their design and derives a number of formulae to determine the magnitude of liquid metal pressure. According to the formulae, the main characteristic of the pressure magnitude is the magnetic induction over the whole airgap of the flat stator. A large airgap results in a low induction, increase of the electromagnetic inductor load and extensive leakage fluxes. The suggested pump design for nonmagnetic metals partly eliminates these deficiencies and the author enumerates a number of advantages of this design over pumps with bilateral inductor. There are 1 figure and 2 Soviet-bloc references.

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D'YAKOV, Vasiliy Ivanovich; GETLING, B.V., kand. tekhn. nauk, red.; TYU-TYUNIK, M.S., red.; TOKER, A.M., tekhn. red.

[Standard designs of electric equipment; electrician's manual] Tipovye raschety po elektrooborudovaniiu; v pomoshch' tsekhovym elektrikam. Izd.2., perer. i dop. Pod red. B.V.Getlinga. Moskva, Vses. uchebno-pedagog. izd-vo Proftekhizdat, 1961. 125 p. (MIRA 14:7)

(Electric apparatus and appliances)

D'YAKOV, V.I.; ZAKHAROV, Yu.V.

Simplifying the circuit of the MRShchPr-54 control millivoltmeter.
Priborostroenie no.5:27 My '62. (MIRA 15:5)
(Voltmeter)

D'YAKOV, V.I., inzh.

Concerning the design of an induction motor with a flat stator for tipping the shuttles of metal-weaving machines. Vest. elektroprom. 33 no.9:75-76 S '62. (MIRA 15:10)
(Electric motors, Induction)

D'YAKOV, V.I.

Induction motor with a flat starter for the shuttle propulsion in a loom for metallic fiber weaving. Izv.vys.ucheb.zav.; tekh. tekst.prom. no.6:117-120 '62. (MIRA 16:2)

1. Ivanovskiy energeticheskiy institut imeni V.I.Lenina.
(Looms--Electric driving)

D'YAKOV, V.I., inzh.

Induction motor with plane stator for tripping the shuttle of a metal fiber loom. Prom. energ. 18 no.3:18-20 Mr '63. (MIRA 16:6)

(Electric motors, Induction)
(Looms—Electric driving)

D'YAKOV, V.I.

Approximation method for calculating the curve of the start of a metal-weaving loom shuttle in case of the replacement of the picking mechanism by an induction motor with flat stator. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.1: 117-120 '64. (MIRA 17:5)

1. Ivanovskiy energeticheskiy institut imeni Lenina.

D'YAKOV, V.I.; SOROKINA, M.I., red.

[Standard electrical equipment calculations] Tipovye raschety po elektrooborudovaniiu. Izd.3., perer. i dop. Moskva, Vysshaia shkola, 1965. 130 p. (MIRA 18:4)