Liepolt, R.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application. Water Treatment. Sewage. H

Abs Jour: Ref Zhur-Khimiya, No 9, 1959, 31832.

Author : Liepolt, R.
Inst : Not given.
Title : The Purification of Sewage Waters by Power Installations.

Orig Pub: Energetika (Ceskosl.), 1956, No 11, Priloha, 15-24.

Abstract: The genesis, harmfulness and means of purification of sewage waters were examined in the coal industry, coal tar chemical and gas plants, heat electrostations and atomic energy installations. -- S. Yavorovskaya.

Card 1/1

LIER, K.

Seperation of wort from grain.

P. 199 (Kvasny Prumysl) Vol. 3, No. 9, Sept. 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

LIER, Kazimierz

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LIERNERTH, A.

"Examination of the heat-transfer coefficient in the the bubble evaporation in enameled apparatus." p. 51

PERIODICA POLYTECHNICA. (Budapesti Muszaki Egyetem) Budapest, Hungary
Vol. 3, No. 1, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959
Uncl.

HEYM, E.; KRAUSE, H.; LIESEGANG, E.; VOGEL, G.; WESTPHAL, W.

Model experiments on influencing the irritability of skeletal muscles in various functional states of the superior central areas. Acta physiol. hung. 9 no.1-3:179-192 1956.

1. Institut for Veterinar-Physiologie der Humboldt-Universitat, Berlin.

(Muscles, physiol.
eff. of various indirect stimulations on chronaxy in skeletal musc. of frogs (Ger))

LESNOY, D.A. [Liesnoi, D.A.]; IVANOV, Yu.K.

Study of uranium minerals in solid bitumens using electron microscopy. Geol. zhur. 25 no.3:110-114 '65. (MIRA 18:11)

1. Institut geologicheskikh nauk AN UkrSSR.

LIES', O.

"Controlling the smoothness of the rove in wool carders."
Industria Textile, Bucuresti, Vol 5, No 5, May 1954, p. 204

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

LIESS, O.

Reasons for losses in the finishing process with woolen and part-wool materials and possibilities of thier reduction. p. 312.
Vol. 6, no. 9. Sept. 1955. INDUSTRIA TEXTILA. Bucuresti.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, No. 2. Feb. 1956.

LIESS, O.

Rational methods for the creation of patterns by color combinations. p. 15.
(INDUSTRIA TEXTILA. Vol. 8, no. 1, Jan. 1957. Rumania)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

Page 79

LIESS, O.

New technological textile proceedings. p. 29.

INDUSTRIA TEXTILA. (Asociatia Stiintifica a Inginerilor si Technicienilor din Rominia si Ministerului Industriei Usoare) Bucuresti, Rumania. Vol. 10, No. 1, Jan. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959.
UNCL

LIESS, O.

Possibilities of reducing the consumption of raw materials. p. 112.

INDUSTRIA TEXTILA. (Asociatia Stinifica a Inginerilor si Technicienilor din Rominia si Ministerul Industriei Usoare) Bucuresti, Rumania. Vol 10, no.3 Mar. 1959

Vol 8

Monthly List of East European Accessions (EEAI) LC, no. 8, Aug. 1959

Uncl.

JUGAREANU, V.; LIESS, O.

Experience of the Constantin David Plant in creating and producing cloth of good endurance with low primary wool content. Ind text Rum 13 no.11:444-447 N '62.

LIESS, O.

News from carded wool spinning mills. Ind text Rum 14 no.9: 392-394 S '63.

LIESS, O.

Specialization of enterprises and the problem of tissue assortment. Ind text Rum 15 no. 1:24-25 Ja '64.

DOROSZKIEWICZ, Roman Stefan; LIETZ, J.

Photoelastic studies on a high-power generator rotor. Mechan teor stosow 2 no.2:27-34 '64.

1. Department of Mechanics of Continuous Media of the Institute of Basic Technical Problems of the Polish Academy of Sciences, Warsaw. Submitted April 12, 1964.

S/583/62/000/010/001/002
I001/I210

AUTHOR: Zabrodkin, A. G., Zelenin, N. I., Lieva, V. Yu., Feofilov, E. E. and Vasiliev, M. L.

TITLE: Industrial tests of synthetic adhesives based on shale-phenols boiling up to 300°C

SOURCE: Estonian SSR. Institut slantsev. Khimiya i tekhnologiya goryuchikh slantsev i produktov ikh pererabotki, no. 10, Leningrad, 1962, 246–252

TEXT: The development of the plywood industry required by the 7-year Plan needs new and cheaper adhesives. TsNIIFM developed a new method for the preparation and condensation of a water-soluble resin from shale-phenols with addition of tricresol. The resin was controlled under industrial conditions at the Ust'-Izharsk plywood factory. The finished product responded to the standard requirements ГОСТ 3916–55 (GOST–3916–55). Phenols were obtained in 1960 at the pilot plant of the shale works im-Lenina. The use of this resin economizes 50% of tricresol compared with the resin ЦНИИФМ-С-35 (TsNIIFM-S–35) and it can be introduced into ФСФ (FSF) brand plywood. There are 5 tables and 1 figure.

ASSOCIATION: Soviet narodnogs khazyaystva ESSR repravlenie slantsevoy i khimicheskay promish-levnosti: Nauchno-issledovatelskiy institut po dubychei pererabotke slantsev "Institut slantsev" (Soviet of National Economy of Estonian SSR, Administration of Shale and Chemical Industry. Scientific Research Institute for Extraction and Processing of Shales -- "Shale Institute")

Card 1/1

S/583/62/000/010/002/002
I001/I210

AUTHORS: Zabrodkin, A. G., Zelenin, N. I., Vasiliev, M. L., Feofilov, E. E. and Lieva, V Yu

TITLE: Industrial tests of synthetic adhesives based on phenols of shale resin, boiling at a temperature higher than 300°C, and admixed with tricresol

SOURCE: Estonian SSR. Institut slantsev. Khimiya i tekhnologiya goryuchikh slantsev i produktov ikh pererabotki, no. 10, Leningrad, 1962, 235-256

TEXT: This is a continuation of previous works (Zelenin, N. I., Vasiliev, M. L., Feofilov, E. E., Khimia i tekhnologiya goryuchikh slantsev i produktovikh pererabotki, no. 9, 1960, 204; Zabrodkin, A. G., Lieva, V. Yu., Vasiliev, M. L., ibidem 236). The adhesive resin prepared in the laboratory was tested in the Ust'-Izhorsk plywood factory and the results showed that the resin with admixture of tricresol, and ethyl alcohol as a solvent could be used in the production of bakelized plywood. There are 4 tables and 1 figure.

ASSOCIATION: Soviet narodnogs khazyaystva ESSR repravlenie slantsevoy i khimicheskay promishlevnosti: Nauchno-issledovatelskiy institut po dubychei pererabotke slantsev "Institut slantsev" (Soviet of National Economy of Estonian SSR, Administration of Shale and Chemical Industry. Scientific Research Institute for Extraction and Processing of Shales—"Shale Institute")

Card 1/1

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; RUMYANTSEV, A.M., prof.; KOHNIYENKO, A.A., dotsent, kand.ekon.nauk; SHNEYERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon. nauk; FISHEVSKIY, Yu.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.Kh., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon. nauk; AVRAMCHUK, F.P., kand.ekon.nauk; AL'TER, L.B., doktor ekon. prof., doktor ekon.nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, dotsent, kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; BUNKINA, M.K., T.A., kand.ekon.nauk; IEVREYSKOV, A.V., kand.ekon.nauk; FADEYEVA, KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon. nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; RUMYANTSEV, A.M., prof.; KORNIYENKO, A.A., dotsent, kand.ekon.nauk; SHNEYERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon. nauk; FISHEVSKIY, Yu.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.Kh., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon. nauk; AVRAMCHUK, F.P., kand.ekon.nauk; AL'TER, L.B., doktor ekon. nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., prof., doktor ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; BUNKINA, M.K., dotsent, kand.ekon.nauk; YEVREYSKOV, A.V., kand.ekon.nauk; FADEYEVA, T.A., kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon. nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

LIFANOV, A., gvardii mladshiy serzhant

Concern of the elders. Komm. Vooruzh. Sil 4 no.6:62 Mr '64.
(MIRA 17:4)

FEL'TGEYM, P.E.; LIFANOV, A.I.

Air dustiness due to wet boring of horizontal holes. Bez.truda v prom. 6 no.1:20-21 Ja '62. (MIRA 15:1)

1. TSentral'nyy nauchno-issledovatel'skiy gornorazvedochnyy institut tsvetnykh, redkikh i blagorodnykh metallov.
(Mine dust--Safety measures)

SACHKOV, A.F., kand.tekhn.nauk; LIFANOV, A.I., inzh.; LOMONOSOV, V.Yu., inzh.

Removing dust from the air in drilling holes in upraises. Gor. zhur. no.8:68-69 Ag '63. (MIRA 16:9)

1. TSentral'nyy nauchno-issledovatel'skiy gornorazvedochnyy institut tsvetnykh, redkikh i blagorodnykh metallov, Moskva.
(Mine dusts—Removal)

LIFANOV, A. N.

Hemp

Retting tanks in hemp factories. Tekst. prom., 12, No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

LIFANOV, B., mayor

Method for testing the operation of aimed pieces. Voen.vest. 42 no.5:89-90 My '62. (MIRA 15:11)
(Antiaircraft artillery)

LIFANOV, B.V.; KHELEMSKIY, A.M.

Foam concrete and mineral cork insulation shields for refrigerators. Khol. tekh. 42 no.4:48-50 Jl-Ag '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy promyshlennosti.

LIFANOV, I.A.; VASILENKO, P.I., redaktor.

[Reservoir basin organization; flooding and high-water damage in hydrotechnical construction] Organizatsiia chashi vodokhranilishcha; zatopleniia i podtopleniia v gidrotekhnicheskom stroitel'stve. Pod red. P.I.Vasilenko. Moskva, Gos.energ.izd-vo, 1946. 224 p.(MLRA 8:5)
(Reservoirs)

LIFANOV, I. A., Eng. Cand. Tech. Sci.

Dissertation: "Organization of the Basin of a Reservoir." Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev, 21 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17836)

LIFANOV, Ivan Afanas'yevich, kandidat tekhnicheskikh nauk; LASTOCHKINA, L.A., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Reservoirs for hydroelectric power stations] Vodokhranilishcha gidroelektrostantsii. Moskva, Gos. energ. izd-vo, 1955. 69 p. (V pomoshch' gidroenergeticheskim stroikam, no. 20). (MLRA 8:8)
(Hydroelectric power stations) (Reservoirs)

DYUZHEN, A.T.; LIFANOV, I.I.

Automatic recording of the elongations of a tested specimen using dilatometers with P.G.Strelkov's kinematics. Izm.tekh. no.6:11-13 Je '65. (MIRA 18:8)

1. LIFANOV, I. I.

2. USSR (600)

4. Fruit Culture - Kemerovo Province

7. For more rapid development of fruit growing in Kemerovo Province. Sad i og. no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

LIFANOV, I. I.

USSR/Physics - Superconductivity

FD-751

Card 1/1 : Pub 146-21/22

Author : Alekseyevskiy, N. Ye., Zhuravlev, N. N., and Lifanov, I. I.

Title : Problem of superconductivity of Bi_2Pd

Periodical : Zhur. eksp. i teor. fiz., 27, 125-126, Jul 1954

Abstract : Letter to the editor. Studies of tetragonal modification of Bi_2Pd at low temperatures revealed superconductivity at 4.28°K. Indebted to Prof. G. S. Zhdanov for experimental work. 5 references.

Institution : Institute of Physical problems; Acad. Sci USSR

Submitted : February 3, 1954

LIFANOV, I. I.

The transformation of austenite into martensite at temperatures near zero absolute. A. P. Gulyaev and I. I. Lifanov. *Trudy Moskov. Vechern. Mashinostroit. Inst.* 1955, No. 2, 139-44; *Referat. Zhur., Met.* 1956, No. 701.—Kinetics of the martensite transformation were studied directly in the process of cooling of samples from room temp. to 4°K. by means of liquid H and liquid He. In an alloy containing C 0.85, Cr 0.87, Ni 14.8, and Mn 2.1%, cooled at rates of 1.3°/min. and 8°/min., the transformation occurred at temps. as low as 4-20°K. Hence it is concluded that the martensite transformation is not the ordinary thermic transformation, inasmuch as it can occur in the region of temp., in which heat deviations are very small.

Alexis N. Pestof

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THE EFFECT OF UNIFORM COMPRESSION ON THE SUPERCONDUCTING PROPERTIES OF THE α-β-MODIFICATIONS OF Bi_3Pd. N. E. Alekseevskii and I. I. Lifanov (Academy of Sciences, USSR). Soviet Phys. JETP 3, 294-5(1956) Sept. (In English). Zhur. Eksptl. i Teoret. Fiz. 30, 405-6(1956) Feb. (In Russian)

A determination was made of the displacement of Tc, the transition temperature for superconductivity, under uniform compression for both forms of the compound Bi_3Pd. The experimental procedures are described in some detail, and results are shown in graphical form. (B.J.H.)

Inst. Physical Problems

85347

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S/120/60/000/005/017/051
E032/E514

AUTHORS: Lifanov, I. I. and Strelkov, P. G.

TITLE: A Dilatometer for Studying Porous Materials at Various Temperatures and Humidities

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.5, pp.76-80

TEXT: The dilatometer can be used to investigate small specimens of porous materials, the optimum dimensions of the specimens being 10-40 mm long and 8-15 mm in diameter. The dilatometer is similar to the quartz dilatometer described by Strelkov in Refs.1-3. The dilatometer is shown in Fig.1. The specimen 15 rests on the support 16 and is covered by a plane parallel quartz plate. A quartz rod 1 rests on this plate and passes out of the dewar in which the specimen is located. This quartz rod carries a short steel sleeve 2 at its upper end which is attracted by the pole-piece 4 of the external magnet 5. A small steel roller is placed between this steel sleeve and the pole-piece. When the specimen expands, the quartz rod 1 is pushed in the upward direction and as a result the steel roller between the steel sleeve and the pole-piece is rotated. The rotation of the roller is measured by a special autocolimating tube. The sensitivity of the instrument is 1.7×10^{-5}

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85347

S/120/60/000/005/017/051
E032/E514

A Dilatometer for Studying Porous Materials at Various Temperatures and Humidities

to $2,5 \times 10^{-5}$ mm. Fig.3 shows the natural expansion of the instrument as a function of temperature. The instrument has been used to determine the coefficient of thermal expansion of various specimens of concrete. The results obtained are shown in Figs. 6-8. In all cases the relative change in length was found to be a linear function of the temperature. The results obtained suggest that the dilatometer is capable of recording changes in length of the order of 0,001%. Effects associated with the presence of moisture in the specimens can be easily detected. There are 8 figures and 3 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy
(All Union Scientific Research Institute for Physical-Technical and Radio Technological Measurements)

SUBMITTED: July 15, 1959

Card 2/2

MIRONOV, S.A., doktor tekhn. nauk, prof.; MALININA, L.A., kand. tekhn. nauk; LIFANOV, I.I., inzh.; MALINSKIY, Ye.N., inzh.

Dilatometric studies of structures of cement mortars subjected to various heat treatments. Trudy NIIZHB no.32:66-76 '63. (MIRA 17:1)

GORCHAKOV, G.I., inzh.; LIFANOV, I.I., inzh.

Precise dilatometric investigations for evaluating the frost resistance of concrete. Standartizatsiia 29 no.10:13-14 O '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy.

LIFANOV, I.K.

Two problems posed by Mardeshich. Dokl. AN SSSR 162 no.5:997-1000 Je '65. (MIRA 18:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Submitted December 23, 1964.

LIFANOV, M.I., kand.filosof.nauk, nauchnyy red.; VASIL'YEV, A.V., red.izd-va; GURDZHIYEVA, A.M., tekhn.red.

[For healthy living] Za zdorovyi byt. Izd.3., ispr. i dop. Leningrad, 1960. 272 p. (MIRA 14:2)

1. Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR. Leningradskoye otdeleniye.
(HYGIENE)

LIFANOV, M. N., and BIRYUKOV, D. A.

"Central Nervous System Changes Produced by Ionizing Radiation."

paper to be presented at the 2nd Un Intl.' Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sept 58.

LIFANOV, P., otvetstvennyy za vypusk, YUSUPOV, G.G., otvet.red.; LIFANOV, P.K., red.; POGREBINSKAYA, K.A., red.; KRAYNYUK, P.K., red.; KHODASEVICH, V.G., red.; KHAMRAYEV, L., red.; BARKOVSKIY, I.I., red. YUGINBURG, S.M., red.; KOGAN, V.S., tekhn.red.

[Economy of Samarkand Province; a statistical manual] Narodnoe khoziaistvo Samarkandskoi oblasti; statisticheskii sbornik. Samarkand, 1958. 95 p. (MIRA 11:9)

1. Samarkand (Province). Oblastnoye statisticheskoye upravleniye (Samarkand Province--Statistics)

ACC NR: AP6031022 SOURCE CODE: UR/0109/66/011/009/1586/1588

AUTHOR: Novostruyeva, L. I.; Stolpyanskiy, M. P.; Filatov, K. V.; Shteynshleyger, V. B.; Lifanov, P. S.

ORG: none

TITLE: A maser with a microcooler operating at 40°K

SOURCE: Radiotekhnika i elektronika, v. 11, no. 9, 1966, 1586-1588

TOPIC TAGS: maser, waveguide

ABSTRACT:

A ruby maser with a miniature closed-cycle cooler for operation at a temperature of 40°K is described (see Fig. 1). The resonator head (1) is a silver-coated ruby in the form of a parallelepiped with sapphire signal and pumping waveguides coupled to ordinary stainless-steel waveguides. The resonator is mounted between the poles of a

Card 1/4 UDC: 621.375.8

ACC NR: AP6031022

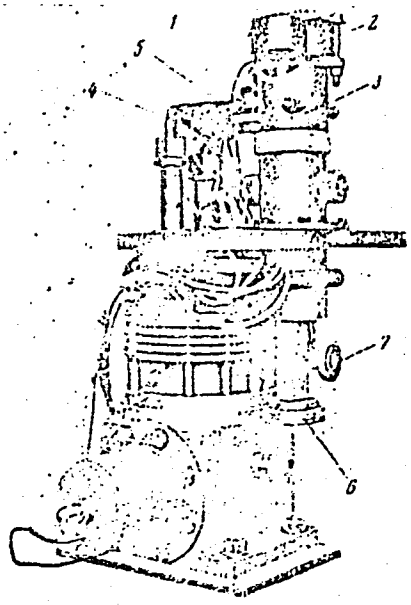

Fig. 1. Maser with microcooler

1 - Resonator head; 2 - magnet; 3 - support; 4 - microcooler cold zone tube; 5 - contact reed; 6 - air-tight flange of signal waveguide; 7 - air-tight flange of pumping waveguide.

miniature permanent magnet (2) rigidly attached to a support (3) which

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is maintained at normal temperature ($\sim$ 300°K). A copper reed (5) provides thermal contact between the cold zone (4) of the microcooler and the resonator head.

Total heat flux through the maser head is about 2 w at 10^{-3} mm Hg. By separating the resonator head from the waveguides, this heat flux is reduced to below 0.5 w.

The ruby maser was operated at the 3-cm wavelength in the push-pull mode. At a temperature of 40°K and with a chromium concentration in the ruby of 0.1% the quantity $(\sqrt{G}-1)\Delta f$ (G is the gain and Δf is the bandwidth), which determines the bandwidth characteristic of the amplifier, reached 19 Mc.

The observed dependence of gain on temperature (see Fig. 2) indicated that, with proper chromium concentration, variations in gain caused by changes in the microcooler temperature can be considerably reduced.

The measured noise temperature of the maser did not exceed 70°K, which was in agreement with the theory. Its amplitude characteristic was linear up to an input power level of $\sim$0.15 μw in the

presence of a cw signal and up to an input energy level of 1.5×10^{-9} joule in the presence of a pulse signal of low repetition rate. No irreversible processes were observed, even in the presence of very strong pulse signals.

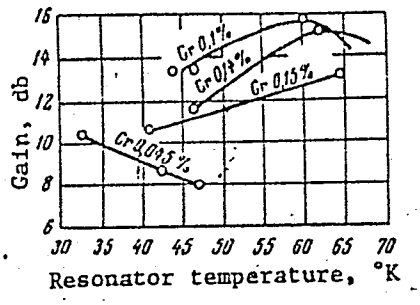

Fig. 2. Temperature dependence of maser gain

The maser was found to have a narrower transmission band and a higher noise temperature at 40°K than at liquid helium temperature. However, these disadvantages are offset by the economy and smaller size and weight of the maser. In addition, because of the relatively low noise level, high reliability, and physicochemical stability of the ruby crystal, the maser operating at 40°K can often match the performance of other types of low-noise amplifiers. Orig. art. has: 3 figures. [FSB: v. 2, no. 8]

SUB CODE: 20 / SUBM DATE: 13Jul65 / ORIG REF: 004 / OTH REF: 003

9.6130

S/144/61/000/003/004/004
E194/E435

AUTHORS: Lifanov, V.A., Candidate of Technical Sciences, Docent, Head of Department of Electrical Machines and Instruments and Dorm, A.G., Senior Instructor

TITLE: An Investigation of Commutation Armature Reaction in d.c. Machines using Hall-Effect Pick-ups

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1961, No.3, pp.109-115

TEXT: This article describes a method of obtaining curves of magnetic induction distribution in the air gap of a d.c. machine using Hall-effect pick-ups. Hall-effect pick-ups used in this work were single crystals of germanium made in the Laboratoriya elektricheskikh mashin ChPU (Electrical Machines Laboratory of ChPU) and their dimensions were 10 x 4 x 0.45 mm. Calibration work showed that with inductions in the range 100 to 15000 gauss and currents of 30 to 50 mA, the signals obtained could be measured in an ordinary electromagnetic voltmeter without preliminary amplification. The pick-up was used to investigate magnetic fields in the air gap of a motor type ПН-10 (PN-10);

An Investigation of Commutation ...

machine acting as both generator and motor. Under both conditions the speed, armature and field currents are the same. The work was done on a d.c. generator type ПН-100 (PN-100) of 115 V, 13.3 kW, 116 A, 1480 r.p.m. A single crystal germanium Hall-effect pick-up made in the Institut poluprovodnikov AN SSSR (Semiconductors Institute AS USSR) was used, its dimensions were 5 x 3 x 0.45 mm. The operating current during the test was 10 mA. The results are plotted in Fig.5. The point of intersection of the generator and motor curves corresponds to the case when the fluxes in the machines are equal in both cases. This is valid provided only that there are no m.m.f. of commutating currents, which corresponds to straight line commutation. Fig.5 also plots the difference between the generator and motor voltages and so in effect shows the change of voltage on passing from the generator to the motor conditions. This change is due to the m.m.f. of commutation currents. This m.m.f. may be determined by a special test which consists in taking a curve of the voltage on the output of the Hall-effect pick-up as function of the field current at no-load. The curve, Fig.7, is then readily constructed; it shows the relationship between the m.m.f. of commutational armature

reaction and the boost current in the d.c. motor. It will be seen that the boost current of 3.6 A corresponds to straight line commutation. It is concluded that this method of determining the magnetic field in the air gap of a d.c. machine is simple and easy and can be used both on the factory test bed and in teaching laboratories. The proposed method of determining the m.m.f. of commutating currents permits rapid and accurate assessment of machine commutation. There are 7 figures, 2 tables and 4 references: 3 Soviet and 1 non-Soviet.

ASSOCIATION: Kafedra elektricheskikh mashin i apparatov Chelyabinskogo politekhnicheskogo instituta (Department of Electrical Machines and Instruments of the Chelyabinsk Polytechnical Institute)

SUBMITTED: October 6, 1960

LIFANOV, V. A. Cand Tech Sci -- (diss) "~~The~~ Study of ~~the~~ distribution of ~~pressure~~ stresses in the elements of gear wheels" Mos, 1955. 10 pp 23 cm. (Min of Higher Education USSR. Mos ~~Motorvehicle~~ Motor Vehicle and Road Inst im V. M. Molotov). 100 copies (KL, 22-57, 105)

LIFANOV, V.A.

Special features in performance and bases for design of small d.c. electric motors equipped with a centrifugal vibration governor in the excitation circuit. Izv. vys. ucheb. zav.; elektromekh. 1 no.4:61-66 '58. (MIRA 11:8)
(Electric motors, Direct current) (Governors (Machinery))

LIFANOV, V.A., kand.tekhn.nauk

Experimental determination of the magnetomotive force of the commutational reaction in d.c. machinery. Elektrichestvo no.7:81-84, Jl '61. (MIRA 14:9)

1. Chelyabinskiy politekhnicheskiy institut.
(Electric machinery—Direct current)

LIFANOV, V.A., dotsent, kand.tekhn.nauk

Stabilization of the angular velocity of an electric motor with parallel excitation using the action of a centrifugal vibrational controller in the rotor circuit. Energ. sbor. no.2:32-45 '59. (MIRA 15:1)

(Electric motors, Direct current)

LIFANOV, V.A., kand.tekhn.nauk; DORM, A.G., inzh.

Use of Hall transducers for measuring the rotor angle of synchronous machines. Vest. elektroprom. 34 no.2:62-63 F '63. (MIRA 16:2)
(Electric machinery, Synchronous—Measurements)

LIFANOV, V.A., kand. tekhn. nauk, dotsent; IGRM, A.G., inzh.; ROTENBERG, M.I., inzh.

Method for the automatic synchronization of synchronous machines. Izv. vys. uchab. zav.; energ. 7 no.10:84-87 O '64. (MIRA 17:12)

1. Chelyabinskiy politekhnicheskiy institut.

LIFANOV, Vladimir Aleksandrovich, kand. tekhn. nauk, dotsent;
NAZAR'YAN, Gayk Nazarovich, aspirant

Equivalent circuits and torque of electromagnetic sliding clutches. Izv. vys. ucheb. zav.; elektromekh. 8 no.1:42-47 '65. (MIRA 18:3)

1. Zaveduyushchiy kafedroy elektricheskikh mashin i apparatov Chelyabinskogo politekhnicheskogo instituta (for Lifanov).
2. Kafedra elektricheskikh mashin i apparatov Chelyabinskogo politekhnicheskogo instituta (for Nazar'yan).

L 48822-65 EWT(d)/EWT(1)/EPA(s)-2/EWP(v)/EWP(k)/EWP(h)/EWP(1) Pf-4

ACCESSION NR: AP5007536 S/0292/65/000/003/0042/0043

AUTHOR: Lifanov, V. A. (Candidate of technical sciences); Shemyakin, V. F. (Engineer)

TITLE: Device for experimental investigation of synchronous micromachines

SOURCE: Elektrotekhnika, no. 3, 1965, 42-43

TOPIC TAGS: micromachine, synchronous micromachine

ABSTRACT: A device is proposed for measuring the rpm of a higher-frequency synchronous micromotor in the course of its acceleration and for recording the rotor angle under synchronous conditions. A black-and-white-spot path is painted on the shaft or directly on the rotor, and a beam of light reflected from this path is focused on a photoresistor. As the rotor rotates, a square-pulse voltage is taken from the photoresistor whose frequency is proportional to the motor speed. The rotor angle is supplied by the same photosensor: the phase difference between

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L 48822-65
ACCESSION NR: AP5007536

the motor-supply voltage and the photosensor voltage is measured. The new device was tested with a G-32 hysteresis motor (16 w, 7500 rpm); oscillograms are presented which show the rotor angle and speed during the acceleration and falling-into-step period and also during the loading and unloading of the motor. Orig. art. has: 4 figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: EE, IE

NO REF SOV: 003 OTHER: 000

Card 2/2

L 01132-66

ACCESSION NR: AP5017467 UR/0144/65/000/006/0718/0720
621.313.33+621.3.047

AUTHOR: Lifanov, V. A. (Docent); Dorm, A. G. (Senior lecturer) 27 B

TITLE: Measuring and oscillographing the slip in induction machines

SOURCE: IVUZ. Elektromekhanika, 8 no. 6, 1965, 718-720

TOPIC TAGS: induction machine, slip

ABSTRACT: A method of measuring the slip of an induction machine by means of a commutator-type tachometer generator mechanically coupled to the machine is suggested. The tachogenerator stator has a distributed 3-phase winding whose number of poles equals to that of the main machine; both are connected to the same a-c supply. EMF across the tachogenerator brushes, directly proportional to the slip of the induction machine, can be easily measured by an oscillograph. Oscillograms of the slip of a 3.6-kw, 380-v, 2890-rpm induction motor when the rated load was suddenly thrown on (or varied) are presented. An auxiliary use of a Hall generator is also suggested. Orig. art. has: 6 figures and 6 formulas.

Card 1/2

L 01132-66
ACCESSION NR: AP5017467

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut (Chelyabinsk Polytechnic Institute)

SUBMITTED: 28Nov62 ENCL: 00 SUB CODE: EE

NO REF SOV: 001 OTHER: 00

Card 2/2 DP

LIFANOV, V.F.

Redesigning holding furnaces for small ingotes. Stal' 17 no.2:188-189 F '57. (MLRA 10:3)

1. Petrovsk-Zabaykal'skiy metallurgicheskiy zavod.
(Steel ingots) (Rolling (Metalwork)--Equipment and supplies)

ACC NR: AP6036113 SOURCE CODE: UR/0365/66/002/006/0686/0691

AUTHOR: Shalyafirner, A. M.; Degtyareva, R. A.; Pimenov, A. F.; Alysheva, Ye. I.; Yerakov, V. I.; Lifanov, V. F.; Anzin, G. N.

ORG: Moscow Institute for Steels and Alloys (Moscovskiy institut stali i splavov); Central Research Institute for Ferrous Metals (Tsentral'nyy nauchno-issledovatel'skiy institut chernykh metallov); Novolipetskiy Metallurgical Plant (Novolipetskiy metallurgicheskiy zavod)

TITLE: Internal oxidation of steel with 3% silicon

SOURCE: Zashchita metallov, v. 2, no. 6, 1966, 686-691

TOPIC TAGS: metal oxidation, silicon steel, hot rolling

ABSTRACT: The article reports a study of the oxidation and decarbonization of steel with 3% silicon and 0.05% carbon in the process of hot rolling in an industrial unit, and of decarbonizing annealing (in the presence of scale) in industrial electric furnaces. Steel strips were hot rolled to a thickness of 2.5 mm. In rolling, the initial oxidation temperature was maintained at $940 \pm 10^{\circ}$. The total length of the discharge table was 36 meters; in the last 30 meters the strip was cooled rapidly with water and was in an atmosphere of steam. After this, the strip was coiled and the air supply was cut sharply. The average cooling rate of the strip on the table, under

Card 1/2 UDC: 620.193.5

ACC NR: AP6036113

different rolling conditions, varied only slightly and was from 19-23 degrees/sec. The total oxidation time and the temperature of the strip before coiling were varied by changing the rolling rate. The temperatures of the strip before water cooling and before coiling were measured with an optical pyrometer and were recorded automatically. The coils were cooled in air over a period of 24 hours. Data on the values of the two abovementioned temperatures and on the time of the oxidation process are presented in a table. Based on the experimental data, a table shows the effect of hot rolling conditions on the formation of scale and on the rate of etching after annealing. In the production of steel, it is necessary to take certain measures which limit the process of internal oxidation: 1) the exit temperature of the strip should be lowered to 900° and the temperature of coiling up to 590-600°, because of the effect of the increase of the cooling rate under the influence of the blowing system; 2) the oxidation time of the metal on the discharge table should be shortened by increasing the rolling rate; 3) the heating rate and the temperature in decarbonization annealing should be increased; this leads to more favorable conditions for the oxidation of carbon, compared to the oxidation of silicon. Orig. art. has: 4 figures and 3 tables.

SUB CODE: 11/ SUBM DATE: 28Dec65/ ORIG REF: 007/ OTH REF: 004

Card 2/2

LIFANOV, V.L.

Anomaly in the development of the stapes and fenestra ovalis. Zhur.ush.,nos.i gorl.bol. 22 no.4:79-80 Jl-Ag '62.
(MIRA 16:2)

1. Iz kafedry otolaringologii (zav. - zasluzhennyy deyatel' nauki prof. A.I. Kolomiychenko) Kiyevskogo instituta usovershenstvovaniya vrachey.
(EAR--ABNORMITIES AND DEFORMITIES)

KONRADI, V.Ya.; LIFANOV, Ye.V.

Closed circle of the coal washing system. Ugol' Ukr. 5 no.5:22-23 My '61. (MIRA 14:5)

(Coal washing)

LIFANOV, Yu.N. [Lifanau, IU.N.]

Utilization of a rotor in loading crumb peat. Vestsi AN BSSR Ser. fiz.-tekh. nav. no.3:47-56 '58. (MIRA 11:10)
(Peat machinery)

LIFAROV, Yu. N., Cand Tech Sci -- (diss) "Research and basis for a type of working element of loader in loading turf crumbs as fertilizer." Minsk, 1960. 14 pp; (Ministry of Higher and Secondary Specialist and Professional Education Belorussian SSR, Belorussian Polytechnic Inst im I. V. Stalin); 200 copies; price not given; (KL, 24-60, 133)

IONOV, A.N.; SITNIKOV, K.I.; LIFANOVA, A.A.; Prinimali uchastiye: VORONIN, A.D.; SLAVINA, A.Yu.; GORDEYEV, M.I.; CHALYKH, Ye.G.; GORDEYEV, P.A., red.; KASIMOV, D.Ya., tekhn.red.

[Album of drawings for machinery, mechanized equipment, implements, attachments, and instruments for finishing large-panel apartment houses] Al'bom chertezhei mashin, mekhanizirovannykh ustanovok, inventaria, prisposoblenii i instrumentov dlia otdelki krupnopanel'nykh zhilykh domov. Moskva, Gostroiizdat. No.2. 1963. 210 p. (MIRA 17:2)

1. Gosudarstvennyy proyektnyy institut po organizatsii sel'skogo stroitel'stva i okazaniyu tekhnicheskoy pomoshchi.

S/137/62/000/002/012/144
A006/A101

AUTHORS: Belkov, G. M., Lifanova, A. V.

TITLE: The effect of some parameters of the open hearth process on the technological ductility of 9ХФ (9KhF) steel in 40 to 100-ton ingots

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 25-26, abstract 2V166 (V sb. "Stal'", Moscow, Metallurgizdat, 1961, 159-166)

TEXT: Technological documentation on melting, teeming and forging processes of 274 large-size ingots intended for backing rolls of rolling mills, was statistically investigated at the NKMZ. Two indices were taken as characteristics for the forging ability of steel, namely, the appearance or absence of cracks during preliminary reduction (billeting) and the magnitude of allowance "a" for machining the finished forged work. The corrections of applying these indices was confirmed by their correlation with factors whose effect on ductility is well known, e.g. a higher Ni content, improving ductility, reduced "a" correspondingly. For a detailed statistical analysis 12 factors were selected: C content after melting, duration of ore and pure bubbling; v_c during these periods; Fe-Cr grade; holding of the pool after Fe-Cr addition; metal temperature prior

Card 1/2

LIFANOVA, A.V., inzh.

Manufacture of rotors for heavy-duty turbines from basic vacuum treated steel. Mashinostroenie no.6:45-47 N-D '63. (MIRA 16:12)

LIFANOVA, K.V., inzh.

Production and testing of cast turbine forgings. Mashinostroenie no. 2:41-42 Mr- p '64. (MIRA 17:5)

L 34091-65 EWP(c)/EWP(k)/EWA(c)/EWT(d)/EWT(m)/EWP(b)/T/EWA(d)/EWP(l)/EWP(v)/EWP(t)
Pf-4 MJW/JD/HW

ACCESSION NR: AP4033654 S/0304/64/000/002/0041/0042

30
29
B

AUTHOR: Lifanova, A. V. (Engineer)

TITLE: Preparation and testing of cast turbine forgings

SOURCE: Mashinostroyeniye, no. 2, 1964, 41-42

TOPIC TAGS: turbine rotor, rotor forging, forging/ 34KhM steel, PVK 150 turbine

ABSTRACT: The technique of forging a rotor for turbine PVK-150 (see Fig. 1 on the Enclosure), made from ordinary Martin steel 34KhM and treated in vacuum, was developed and the quality of the forging was established at NKMZ. The steel was prepared in a Martin furnace by scrap-process smelting with high-calcareous slag and a batch consisting of high-carbon scrap and high quality cast iron. The metal was poured in 12 minutes at a pressure of 10 mm Hg (18 mm at the end) through a vacuum port. After 2 forgings had been pressed, they were isothermally annealed with two overcoolings to 300-320C (first from forging temperature and then from annealing temperature) and were held at 660C for 35 hours. After quenching from 850-870C in water (4 min) and oil (150 min), and temperaing at 630-640C, the mechanical properties of the rotors were measured on specimens cut tangentially from the center and outside of the rotors. The properties at 20C were σ_s = 59.8 kg/mm^2, σ_B =

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L 34091-65

ACCESSION NR: AP4033654

78.4 kg/mm^2; δ = 18.6%; ψ = 49.7%; a_k = 16.3-14.0 kgm/cm^2; HB = 228 for the periphery and 64.8, 83.7, 20.4, 61.8, 16.6-16.0, 241 respectively from center specimens. Microstructure analysis after deep etching and ultrasonic testing of the forgings showed a fully satisfactory grain structure and no defects or voids. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01 SUB CODE: IE, PR

NO REF SOV: 000 OTHER: 000

Card 2/3

L 0909-66 EWT(1)/EWA(j)/EWA(b)-2 JK

ACCESSION NR: AP5017018 UR/0016/65/000/007/0048/0052
615.372 : 576.851.49]-011/-012

AUTHOR: Stepanova, L. K.; Lifanova, I. I.

TITLE: Preparation of dry adsorbed paratyphoid B vaccine and its properties

SOURCE: Zhurnal mikrogiologii, epidemiologii i immunobiologii, no. 7, 1965, 48-52

TOPIC TAGS: antigen, vaccine, immunology

ABSTRACT: A complex surface (K) and somatic antigen made from paratyphoid B bacteria by Webster and Landy's salt extraction method contained a phosphorylated protein-lipid-polysaccharide complex containing 3% phosphorus, 8% nitrogen, and 23% reducing agents. It was found to have high antigenic and immunogenic activity together with a very rich antigenic spectrum. The antigen was made into a dry vaccine and tested in mice. Subcutaneous injection of the animals with a dose 10 times higher than the human failed to kill any of the mice. Other tests in the same animals showed the vaccine to be highly immunogenic and stable. The authors recommend that the complex antigen be incorporated into an adsorbed typhoid-paratyphoid B vaccine. Such vaccine could be used as a standard in evaluating the immunogenicity of a

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L 00909-66

ACCESSION NR: AP5017018

commercial series of chemical adsorbed vaccines. Orig. art. has: 1 figure, 3 tables.

ASSOCIATION: Institut epidemiologii i mikrobiologii im. Gamalei AMN SSSR (Institute of Epidemiology and Microbiology, AMN SSSR); Gosudarstvennyy kontrol'nyy institut im. Tarasevicha (State Control Institute)

SUBMITTED: 18Jun64 ENCL: 00 SUB CODE: LS

NO REF SOV: 003 OTHER: 004

Card 2/2

STEPANOVA, L.K.; LIFANOVA, I.I.

Production of a dry sorbed paratyphoid B vaccine and its properties. Zhur. mikrobiol., epid. i immun. 42 no.7:48-52 Jl '65.
(MIRA 18:11)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR i Gosudarstvennyy kontrol'nyy institut imeni Tarasevicha.

25(5)
S/080/60/033/012/015/024
D209/D305

5 3700

AUTHORS: Ponomarenko, G.V., Odabashyan, G.V., Lifanova, I.N., and Petrov, A.D.

TITLE: Synthesis of fluoro-organosilicon monomers by the additive reaction of silicon hydrides with unsaturated fluoro-compounds in the presence of platinum catalysts

PERIODICAL: Zhurnal prikladnoy khimii, v. 33, no. 12, 1960, 2751 - 2757

TEXT: Previous studies by the authors elucidated some general characteristics of the effects of structure of Si hydrides on the yield of addition compounds in the presence of platinized carbon showing these effects to be determined by inductive or steric effects of substituents. It is shown in tabulated form that, in the presence of $H_2P + Cl_2$, Si hydrides and unsaturated fluoro-esters undergo additive reactions with yields as high as those obtained with alkyl and dialkylchlorosilanes. With SiH_2Cl_2, the authors

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Synthesis of fluoro-organosilicon ...

previous conclusion on the possibility of preparing Si hydrides of the type $RSiHCl_2$ was verified. Reference is made also to an earlier work in which the order of addition of alkyl-Si hydrides in the presence of Pt/C and H_2PtCl_6 is discussed (Ref. 2: DAN SSSR, 106, 1, 78, 1956, Ref. 10: DAN SSSR. 121, 2, 1958; Ref. 14: Izv. AN SSSR, 9, 1610, 1960). The Farmer rule mostly applies though there are exceptions. This was shown by: 1) Addition of methyldichlorosilane and trichlorosilane to $CH_2=CHCH_2OCF_2CF_2H$ in the presence of 1% Pt/C

$$(CH_3)_n(Cl)_{3-n}SiH + CH_2=CHCH_2OCF_2CF_2H \rightarrow (CH_3)_n(Cl)_{3-n}SiCH_2CH_2CH_2OCF_2CF_2H; \quad (I)$$

where n = 0 or 1. 2) Methylation of the products obtained

$$(CH_3)_n(Cl)_{3-n}SiCH_2CH_2CH_2OCF_2CF_2H \xrightarrow{CH_3MgBr} (CH_3)_3SiCH_2CH_2CH_2OCF_2H. \quad (II)$$

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3) By comparison of spectra KRS (II) with those obtained by synthesis as follows:

$$(CH_3)_3SiCH_2CH_2CH_2OH + CF_2 = CF_2 \xrightarrow{Na} (CH_3)_3SiCH_2CH_2CH_2OCF_2CF_2H.$$

The spectra obtained by various methods were identical as were also other physical constants. It was found that α- and β-alcohols, as well as γ-alcohols could be readily added to $CF_2 = CF_2$ and $CF_2 = CFCl$ in the presence of Na alcoholate. A series of experiments is described in detail, e.g. in preparing [illegible] trifluor-2-chloroethane ester γ-hydroxy propyl [illegible] [illegible] g ([illegible] mole) [illegible] and [illegible] g CH_2 [illegible] CH_2OCF_2CFClH with 0.5 ml of 0.[illegible] N solution [illegible] propyl alcohol, were gradually heated in a [illegible] ml stainless steel autoclave for 50 [illegible] [illegible] [illegible] [illegible] yield [illegible] g. Distillation [illegible] 2[illegible] g ([illegible] %) of the [illegible] [illegible] n_D [illegible] Prop.

Card 3/[illegible]

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R00092983C

Synthesis of fluoro-organosilicon [illegible] [illegible]

ration of the following compounds [illegible] described: [illegible] tetra-fluoroethyl-ester [illegible] [illegible] and [illegible] tetrafluoroethyl ester [illegible] [illegible] [illegible] phenyldichlorosilane, [illegible] tetrafluoroethyl ester [illegible] [illegible] dichlorosilane, [illegible] [illegible] [illegible] [illegible] propyldichlorosilane, [illegible] tetrafluoroethyl ester [illegible] [illegible] propylmethylphenylchlorosilane. It was found that [illegible] [illegible] [illegible] [illegible] (CH_2HC [illegible])

under the effect of 1 % [illegible] [illegible] [illegible] addition products with fluoro[illegible] [illegible] [illegible] [illegible] [illegible] and the multiple-bond C atom of the [illegible] [illegible] with the homolytic character of this reaction. There are [illegible] tables and [illegible] references: [illegible] Soviet-bloc and [illegible] non-Soviet-bloc. The [illegible] most recent references to the English-language publications read as follows: G.H. Wagner, U.S. Patent, 2,632,013, [illegible]; L. Speier, [illegible] A. Webster, and G.H. Barnes, J. Amer. Chem. Soc. [illegible] [illegible] [illegible]; L. Goldman, R.M. Silverstein, and A. Bernitter [illegible] Amer. Chem. S. [illegible] [illegible], 195[illegible]; G.H. Wagner, U.S. Patent, [illegible] [illegible] 1957.

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25659
S/080/60/033/012/015/024
D209/D305

Synthesis of fluoro-organosilicon ...

ASSOCIATION: Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR (Institute of Organic Chemistry imeni N.D. Zelinskiy of the AS USSR)

SUBMITTED: March 24, 1960

X

Card 5/5

36629

S/062/62/000/004/009/013
B110/B101

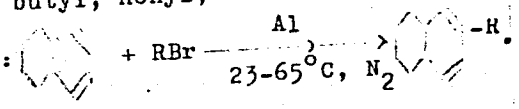
11.0137

AUTHORS: Shuykin, N. I., Pozdnyak, N. A., and Lifanova, I. N.

TITLE: Catalytic alkylation of tetralin. Communication 7. Alkylation of tetralin with alkyl halides in the presence of metallic aluminum

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 4, 1962, 695-697

TEXT: Tetralin was alkylated with propyl, butyl, nonyl, and decyl bromides in an N_2 atmosphere, in the presence of Al:



The yields at 65°C were 75.6, 92.5, 98.8, 77.3, and 53.5%, respectively. In air, no alkylation took place with butyl and heptyl bromides even after 6 hrs' stirring; only at 105°C, butyl tetralin formed in 34% yield. Partial isomerization of the primary alkyl radicals occurred at 65°C; alkyl tetralins

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S/062/62/000/001/009/013
B110/B101

Catalytic alkylation of ...

with an alkyl group of normal structure were formed at 23°C by alkylation with n-propyl and n-butyl bromides. Optimum conditions: 5 hrs' heating at 65°C in nonane medium and N_2 atmosphere. Under these conditions, the reaction occurred after stirring for 10 - 40 min. At 65°C, n-heptyl bromide reacts almost completely with tetralin. The yields depended on the chain length of the alkyl bromide: At 23°C, the reaction with n-propyl bromide in nonane solution started 10 min after mixing, with butyl bromide after 20 min, but with heptyl bromide it did not even after 4 hrs. Without a solvent, n-propyl and n-butyl bromide reacted immediately, heptyl bromide after 2 hrs, nonyl bromide after 4.5 hrs, and decyl bromide after 7 hrs. At 23°C, the reaction with n-propyl and n-butyl bromides was completed after 5 hrs, and with n-heptyl, n-nonyl, and n-decyl bromides after 125 hrs; this has been ascertained from the separation of hydrogen bromide. The yields of propyl, butyl, and heptyl tetralins were always higher than those of nonyl and decyl tetralins. The infrared spectra showed that normal and isomeric 6-mono- and 6,7-dialkyl tetralins were formed at 65 and 105°C, but only 6-alkyl tetralins with a normal alkyl

S/062/62/000/004/009/013
B110/B101

Catalytic alkylation of ...

group at 23°C with n-propyl and n-butyl bromides. There are 1 figure and 2 tables.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: October 28, 1961

Card 3/3

SHUYKIN, N.I.; POZDNYAK, N.A.; LIFANOVA, I.N.

Catalytic alkylation of tetralin. Report No.7: Alkylation of tetralin by alkyl halides in the presence of metallic aluminum. Izv.AN SSSR Otd.khim.nauk no.4:695-697 Ap '62. (MIRA 15:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR. (Nephthalene) (Alkyl halides)

SHUYKIN, N.I.; POZDNYAK, N.A.; LIFANOVA, I.N.

Catalytic alkylation of tetralin. Report No.11: Alkylation of tetralin in the presence of titanium tetrachloride. Izv. AN SSSR Ser. khim. no.1:119-123 '65. (MIRA 18:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

VOZDVIZHENSKIY, V.M.; LIFANOVA, L.I.; VOYEVODINA, S.S.

Determining the heterogenization of alloys from the relative difference in microhardness. Zav. lab. 31 no. 12:1473-1475 '65 (MIRA 19:1)

1. Rybinskiy vechernyy tekhnologicheskiy institut.

LIFANOVA, T.A.

Heat denaturation of gliadin. V. V. Ponomarev and T. A. Lifanova (All-Union Sci. Research Inst. Bread Baking Ind., Moscow). *Biokhimiya* 21, 557–60(1956).—Gliadin was obtained by the method of Osborne Abderhalden, *Handbuch biol. Arbeitsmethode*, 1, No. 8(1922).—Surface tension detns. were made of the solns. of native and denatured gliadin at temp. 40–50°. The results indicated that at such a temp. range intramolecular changes take place which are reflected in changes in surface tension. The specific surface tension break-point and the increase in the break-point in solns. of native gliadin sharply drop as the temp. goes up to 40–50°. In the case of denatured gliadin the surface tension break-point remains constant. The relation between heat denaturation of gliadin and the changes in activity in alc. soln. were studied. The constant of the rate of gliadin denaturation at 130° is of a lower value than at 70°. Raising the temp. to twice the original raises the rate of the denaturation approx. proportionally. The period had been established which is required to bring about the denaturation of ½ the protein. B. S. Levine

GORDON, V.G., inzh.; LIFANT'YEV, Ye. S., inzh.

Welding of steel with a propane-butane mixture. Svar.proizv. no.4:31-33 Ap '61. (MIRA 14:3)

1. Trest "Metallurgmontazh" Ministerstva stroitel'stva USSR.
(Gas welding and cutting)

BAKUSHINSKAYA, O.A.; DRUZHININ, G.N.; Prinimala uchastiye: LIFANT'YEVA, K.S.

Searching for methods of processing molasses of various quality with the addition of growth promoting agents. Trudy TSNIIKHP no.8:162-166 '60. (MIRA 15:8)
(Yeast)

GORKHOVA, N.V.; Prinimala uchastiye: LIFANT'YEVA, K.S.

Search for new effective substances for the disinfection of yeast apparatus. Trudy TSNIIKHP no.8:166-169 '60. (MIRA 15:8)
(Disinfection and disinfectants)
(Fermentation--Apparatus and supplies)

BONDAREVA, I.I., dots., prepodavatel'; GAMAYUNOV, M.V., dots., kand. nauk, prepodavatel'; GOL'DMAN, R.Ya., kand. nauk, prepodavatel'; ZHELUDKOV, A.P., kand. nauk, prepodavatel'; KALININA, V.N., kand. nauk, prepodavatel'; LIFAR', G.G., prepodavatel'; MART'YANOVA, L.P., kand. nauk, prepodavatel'; NEZNANOV, S.V., dots., kand. nauk, prepodavatel'; SALAY, I.G., dots., kand. nauk, prepodavatel'; SASKOVETS, Ye.L., dots., kand. nauk, prepodavatel'; ZENIN, V., red.; DANILINA, A., tekhn. red.

[The party is the organizer of the collective farm system] Partiia - organizator kolkhoznogo stroia. Moskva, Gos. izd-vo polit. lit-ry, 1958. 190 p. (MIRA 11:8)

1. Kafedra marksizma-leninizma Moskovskoy ordena Lenina sel'skokhozyaystvennoy akademii imeni K.A. Timiryazeva (for all except Zenin, Danilina).
(Collective farms)

[illegible]

USSR/Chemistry - Chlorine Feb 194?
Chlorine Industry

"Aims of the Chlorine Industry during the Fourth Five-Year Plan," Prof [illegible] A. Sass-Tisovskiy, [illegible] I. Lefatov, Senior Research Worker, 5½ pp

"Khimicheskaya Promyshlennost'" No 2

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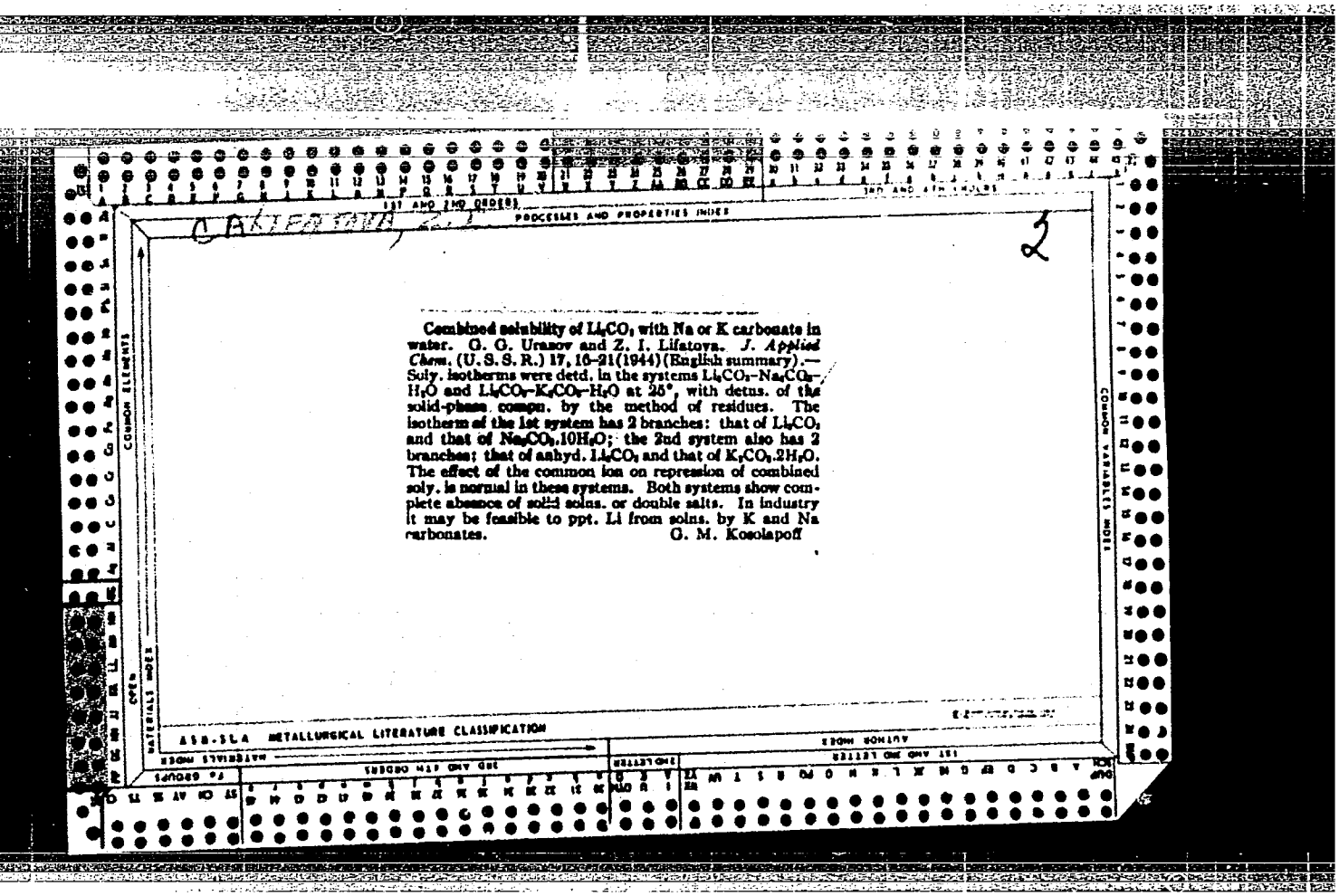
APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000929830(



Combined solubility of Li_2CO_3 with Na or K carbonate in water. G. G. Uranov and Z. I. Lifatova. *J. Applied Chem.* (U. S. S. R.) 17, 16–21(1944)(English summary).—Soly. isotherms were detd. in the systems Li_2CO_3–Na_2CO_3–H_2O and Li_2CO_3–K_2CO_3–H_2O at 25°, with detns. of the solid-phase compn. by the method of residues. The isotherm of the 1st system has 2 branches: that of Li_2CO_3 and that of $Na_2CO_3.10H_2O$; the 2nd system also has 2 branches: that of anhyd. Li_2CO_3 and that of $K_2CO_3.2H_2O$. The effect of the common ion on repression of combined soly. is normal in these systems. Both systems show complete absence of solid solns. or double salts. In industry it may be feasible to ppt. Li from solns. by K and Na carbonates.

G. M. Kosolapoff

SASS-TISOVSKIY,B.A., professor; LIFATOVA,Z.I., starshiy nauchnyy sotrudnik

Tasks of the chlorine industry in the fourth five-year plan. Khim. prom.no.2:33-38 F'47. (MIRA 8:12)
(Chlorine industry)

LIFENKO, P.L., inzh.

Designing propellers according to the vortex theory. Sudostroenie 24 no.8:5-8 Ag '58. (MIRA 11:10)
(Propellers)

LIFENKO, P.L.

Check calculations of a screw propeller. Trudy NTO sud.prom. 8 no.4:107-118 '59. (MIRA 13:5)
(Propellers)

LIFENKO, P. L., Engineer,

"Calculation of Noncavitating Screw Propellers."

Papers Presented at the Tenth Scientific-Technical Conference on Ship Theory (Sudostoryeniye, No 4, 1960)

LIFENTSEV, I.G., glavnyy inzh. tresta,red.; SHCHERBAKOVA, G.V.,red.; YAROV, E.M., tekhn. red.

[Mechanization of the enterprises of the Moscow Province Trust of the Main Administration of the Baking Industry of the R.S.F.S.R. Mekhanizatsiia predpriiatii Moskovskogo oblastnogo tresta Rosglavkhleba. Moskva, Pishchepromizdat, 1956. 57 p. (MIRA 11:12)

1. Russia (1923- U.S.S.R.) Ministerstvo promyshlennosti prodovol'stvennykh tovarov. Otdel tekhnicheskoy informatsii.
2. Moskovskiy oblastnoy trest Rosglavkhleba (for Lifentsev).
(Moscow Province--Bakers and bakeries--Equipment and supplies)

BORODKIN, V.F.; LIFENTSEV, O.M.

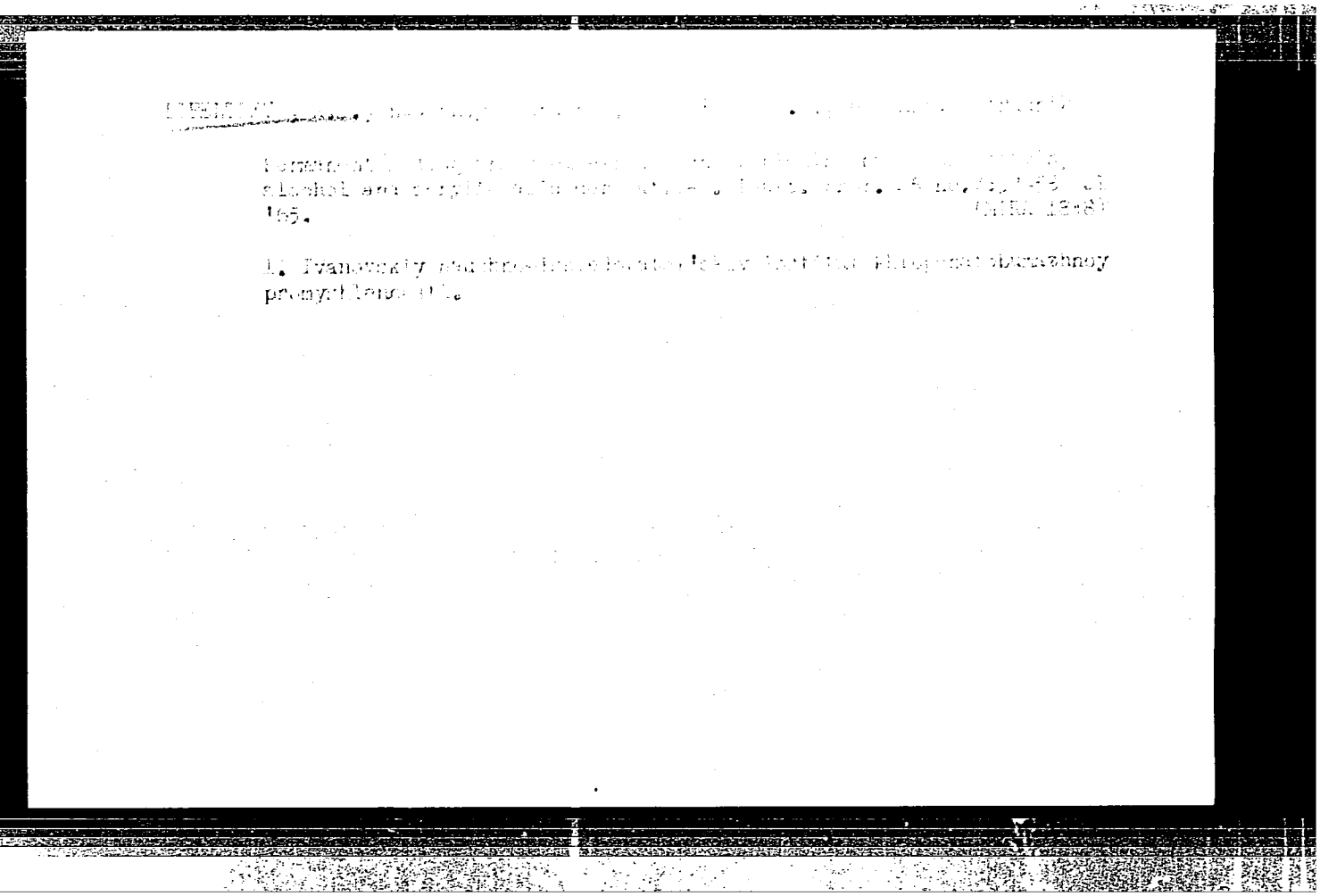
Interaction of 1,3-indandione with m-phenylenediamine and its substitution derivatives. Izv.vys.uchab.zav.;khim.i khim.tekh. 6 no.4:647-651 '63. (MIRA 17:2)

1. Ivanovskiy khimiko-tekhnologicheskiy institut. Kafedra tekhnologii krasiteley i promezhutochnykh produktov.

LIFENTSEVA, [illegible], starshiy nauchnyy sotrudnik, SOLOV'YEV, M.F.

Experimental use of fiber cross-linking in the production of bulk stretch yarn. Tekst. prom. 25 no.3:32-33 Mr '65.
(MIRA 18:3)

1. Ivanovskiy nauchno-issledovatel'skiy institut khlopchatobumazhnoy promyshlennosti (IvNITI) (for Lifentseva). 2. Rukovoditel' laboratorii Ivanovskogo nauchno-issledovatel'skogo instituta khlopchatobumazhnoy promyshlennosti (for Solov'yev).



LIFENTSEVA, T. S.

USSR.

Sound insulating elastic lining from waste of the asbestos-slate industry. A. G. Shatagun, B. M. Slutsfeumakher, and T. S. Lifentseva. *Sbornik Trudov VNIIStroidormash* (Russian Sci. Research Machine-Building Inst.) 1953, No. 5, 179-91; *Referat. Zhur., Khim.*, 1954, No. 41029.—The best compn. was found to be asbestos-slate waste 50-60 and waste paper 40-50%. This is bonded with a mixt. of paraffin emulsion 5 and $Al_2(SO_4)_3$ 10%. The asbestos-slate material was first mixed with water; to it was added the waste paper, and then water to a concn. of 4%. The whole was mixed for 8-10 min. and to the mass the bonding substances were added.

M. Hosch

BYKOVA, I.V., st. nauchn. sotr.; STEPANOV, A.S., st. nauchn. sotr.; SOLOV'YEV, A.P.; AFANAS'YEVA, A.A., st. nauchn. sotr.; BOGATYREVA, L.M.; LIFENTSOVA, A.S.; SHUBA, L.S., red.; TIMOFEYEVA, Ye.A., red.

[Food product substitutes in the textile industry] Zameniteli pishchevykh produktov v tekstil'noi promyshlennosti. Moskva, 1963. 67 p. (MIRA 17:12)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii legkoy promyshlennosti. 2. Rukovoditel' laboratorii spetsial'noy otdelki Ivanovskogo nauchno-issledovatel'skogo instituta khlopchato-bumazhnoy promyshlennosti (for Solov'yev). 3. Ivanovskiy nauchno-issledovatel'skiy institut khlopchato-bumazhnoy promyshlennosti (for all except Shuba, Timofeyeva).

L 16330-65 EWT(m)/EWA(d)/EWP(j)/T/EWP(t)/EWP(b) Pc-4 ASD(m)-3 RM/WJW/WB

ACCESSION NR: AP4049181 S/0314/64/000/005/0029/0031

AUTHOR: Liferenko, I. G. (Candidate of technical sciences), Istrian, A. F., Frolikova, Ye.

TITLE: Corrosion resistance of cast OKh21N6M2T steel during production of dimethylterephthalate

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 5, 1964, 29-31

TOPIC TAGS: chromium steel, steel corrosion, cast steel, pump manufacture, steel mechanical property, steel corrosion resistance, dimethylterephthalate production, steel OKh21N6M2T

ABSTRACT: The production of dimethylterephthalate, used for obtaining synthetic fibers and films, requires pumps made of Kh18N12M2T steel, which is quite expensive. A cheaper OKh21N6M2T steel has therefore been tested for corrosion resistance. The foundry laboratory of VIGM tested the castability, shrinkage, macrostructure and microstructure of the cheaper steel. The tests showed good casting and mechanical properties of the steel (ultimate strength 69.5-76.1 kg/mm^2, relative elongation 25.6-34.8%, impact toughness 6.6-11.9 kg-m/cm^2 and Brinell hardness 187). The chemical composition of the tested steel was 0.01-0.10% C, 0.38-0.80% Si, 0.53-1.38% Mn,

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ACCESSION NR: AP4049181

17.8-20.97 Cr, 5.75-12.10% Ni, 0.15-0.57% Ti, 2.08-2.91% Mo, 0-0.027% P, and 0.-0.0275% S). Intercrystalline corrosion was first tested according to GOST 6032-58. The performed tests, both in the laboratory and at the plants, showed that cast and welded samples of OKh21N6M2T steel had high corrosion resistance. Metallographic analysis showed an absence of intercrystalline and selective corrosion on the samples. No traces of corrosion were found on a pump impeller made of this steel. "Engineers O.F. Aksenov and A. I. Porshneva took part in studying the casting properties of the steels." Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

Card 2/2

ALEKIN, L.Ye., dotsent, kand.tekhn.nauk; GLADILIN, A.N., dotsent, kand. tekhn.nauk; KRASAVIN, V.S., starshiy prepodavatel'; LIFERENKO, N.N., dotsent, kand.tekhn.nauk; MAKAROVA, V.I., dotsent, kand. tekhn.nauk; KHRENOV, A.D., starshiy prepodavatel'. Prinimali uchastiye: LUNEV, F.A. [deceased]; RASTORGUYEV, I.S. [deceased]; BILINSKIY, M.Ya., red.; DORODNOVA, L.A., tekhn.red.

[General technology of metals] Obshchaia tekhnologiia metallov. Izd.3., perer. i dop. Moskva, Vses.uchebno-pedagog.izd-vo Proftekhizdat, 1960. 381 p. (MIRA 13:12)
(Metals) (Metalwork)

LIFEROV, A.P.

Consider students' abilities and interests. Politekh.obuch. no.3:90 Mr '59. (MIRA 12:4)

1. Knyaze-Volkonskaya srednyaya shkola Khabarovskogo kraya. (Teaching)