

L 20427-66

ACC NR: AT:6006230

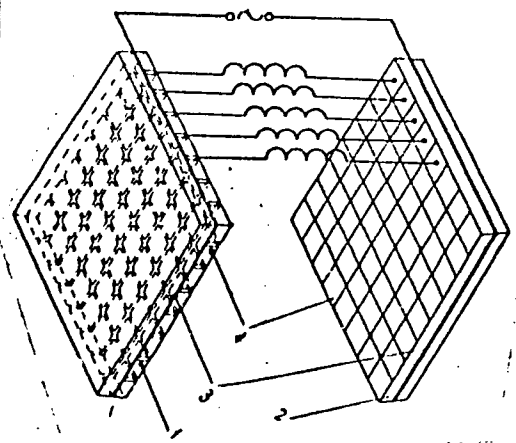


Fig. 1. Resonance circuit isothermal contour registering device: 1 - sensing screen; 2 - registering screen; 3 - outer conductive coating; 4 - inner conductive coating.

The sensing screen is divided into ferroelectric cells the dielectric constant of which is a function of the temperature. These ferroelectric temperature-dependent capacitances are connected through inductive lines with luminophor screen capacitances. The author develops

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a theory for the setup and works out illustrative calculations for some of the pertinent parameters. The use of the pyroelectric effect allows the determination of isothermal lines of transparent temperature fields, i. e., of fields without radiations in the visible part of the spectrum. Low temperature fields can also be measured. Orig. art. has: 34 formulas and 3 figures. [08]

SUB CODE: 14/ *09/* SUBM DATE: 05Nov65/ ORIG REF: 006 ATD PRESS: 4222

Card 3/3 *ULR*

STROKOV, V.I.; KUZNECOV, A.M.

Position circuits of the automatic temperature regulation in
spinning heads with electric heating. Khim. volok. no.5:
63-64 '65. (MIRA 18:10)

1. VNIIMSV.

STROKOV, V.I.

Use of the AUS system regulating block for pressure measurement
in a narrow range. Khim. volok. no.6:64-65 '65.

(MIRA 18:12)

1. VNIIMSV. Submitted September 16, 1964.

SOV/106-59-2-3/11

Remote-control and Monitoring Equipment for Radio-relay Lines

contains only information on the station number at which the change occurs; the nature of the change is not encoded.
3) Transmission from any of the remotely-controlled stations when requested, of information concerning the condition of each of the 64 tele-signalling transducers, previously mentioned.

Telecontrol Apparatus:

Transmitter - Each command is transmitted in the form of a coded group of three successive ringing tones. Each ringing tone can have one of four frequencies, thereby giving 64 possible code combinations. The code-forming apparatus consists of three semi-conductor oscillators and three thyratrons. The code combination is selected by depression of a knob on the command panel. The circuit is described and the diagram given in Figure 2.

Receiver - The received command is decoded at the remotely-controlled station by a "pyramid" connection of three tiers of thyratrons interconnected in such a manner that ignition of a thyatron in lower tier prepares for firing four thyratrons in the following tier (Figure 2). The first

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(lowest) tier contains four thyratrons; the second, four sets of four and the third, 16 sets of four. The thyratrons are ignited by pulses formed from the ringing tones of the coded command by "signal" thyratrons connected via filters to the output of a two-stage semiconductor signal amplifier. To all the thyratrons of the same number in the sets of four is applied the pulse from the corresponding element of the code combination. The result is that, after a command has been received, a relay in the anode circuit of a particular final-tier thyatron is operated. A three-tier pyramid provides 59 final thyratrons for control and 5 for calling. A circuit for restoring the decoder pyramid to its waiting condition (Figure 3) is then described.

Tele-signalling apparatus - The tele-signalling apparatus consists of the tele-signalling equipment proper, common emergency equipment and the receipt signalling equipment. Each of the above has a receiving and transmitting section. The transmitting section consists of thyatron circuits connected in such a manner that ignition of each circuit, after a time delay of about 30 milliseconds, triggers the following thyatron. The simplified diagram is given in

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Figure 4. The first thyatron is triggered when the station is called. Tele-signalling transducers are connected in the cathodes of the thyratrons and, depending on the condition of the transducer, the thyatron anode pulse operates one or the other of two, different-frequency semiconductor oscillators. The result is that the order of the frequencies in the transmitted pulse train depends on the conditions of the transducers.

The receiver section contains two circuits of transistor amplifiers with filters and signal thyratrons. The circuit forms pulses from the received ringing tones when "Call Tele-signalling" button is pressed. The basic "repeat" of the receiver circuit is a double-circuit, each arm of which contains a pair of thyratrons (Figure 5). From the common cathode resistance of each pair is taken the bias for preparing the following pair. Triggering pulses for the lower thyratrons of each pair come from the signal thyatron of one frequency and for the upper, from the signal thyatron of the other frequency. Thus, the thyratrons ignited in the different pairs depend on the character of the received

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combination. The number of "repeats" of the basic circuit equals the number of signal impulses applied to the receiver.

Finally, the emergency and receipt signal circuits are described. The techniques used are similar to those used in the other parts of the equipment. The circuit of the common emergency signalling transmitter is given in Figure 6; for the emergency receiver, in Figure 7; for the receipt signalling apparatus, in Figure 8. There are 8 figures and 2 Soviet references.

SUBMITTED: May 29, 1958

Card 5/5

STROKOV, Vladimir Petrovich; ZAGORSKIY, G., red.; USTINOVA, S.,
tekh. red.

[Long life to technology] Tekhnika - dolguiu zhizn'. Moskva,
Mosk. rabochii, 1962. 28 p. (MIRA 15:10)

1. Glavnyy inzhener sovkhoza "Malino" Stupinskogo rayona (for
Strokov).

(Tractors--Maintenance and repair)

STROKOV, V.V., kand. biolog. nauk

Use of tar water for scaring off susliks from acorns in steppe
oak plantations. Okhr. prir. i ozel. no.3:113-115 '60.
(MIRA 16:12)

...
...
...
...

9. Monthly List of Russian Accessions, Library of Congress, November 1953, Uncl.
2

STROKOV, V.V.

Insects are the primary enemies of oak in Sochi and vicinity.
Ent.oboz. 32:69-75 '52. (MIRA 7:1)
(Sochi--Oak--Diseases and pests) (Diseases and pests--Oak--
Sochi)

STACHOV, V.V. --

"The Physiological Basis for the Adaptation of the Oak (*Quercus Sider L*)
and the Rapid Exploitation of Its Roots." Cand Biol Sci, Leningrad
Forestry Engineering Acad Imeni S.M. Kitova, Leningrad 1953. (RZhBiol, No 2,
Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

HEMP, V. V.

Hemp:

Use of hemp for protection against larvae of the June bug. *Les i step'* 5 No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

VLASOV, Aleksey Alekseyevich; VORONTSOV, Aleksey Ivanovich; PONOMAREVA, Yekaterina Nikolayevna; STROKOV, Vyacheslav Vsevolodovich; FLEROV, Sergey Konstantinovich; KHRAMTSOV, N.N., redaktor; IL'INSKIY, A.I., kandidat sel'skokhozyaystvennykh nauk; MALKOV, A.A.; KOLESNIKOVA, A.P., tekhnicheskii redaktor

[Forest protection] Lesozashchita. Izd. 2-oe, perer. Pod obshchei red. S.K. Plerova. Moskva, Goslesbumizdat, 1955. 438 p.

(MIRA 9:1)

1. Prepodavatel' Khrenovskogo lesnogo tekhnikuma (for Malkov)
(Forests and forestry) (Trees--Diseases and pests)

USSR / General and Special Zoology. Insects. Harmful P
Insects and Arachnids. Pests of Decorative and
Flower Plants.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64128.

Abstract: Lilac varieties slightly damaged by the moth
are noted. It is recommended to redig the soil
under the bushes so that the pupae be found at
a depth of 20 cm and also to apply a three -
fourfold dusting of the lilac bushes by DDT and
BHC dusts. -- L. I. Zinov'yeva.

#1615

Card 2/2

72
END

STROKOV, V.V., kandidat biologicheskikh nauk (Moskva); SHPET, G.I., kandidat biologicheskikh nauk; BRODSKIY, S.Ya., kandidat biologicheskikh nauk; LUBININ, V.B., professor.

Instances of cannibalism in animals. Priroda 45 no.7:97-99 J1 '56.
(MLRA 9:9)

1.Nauchno-issledovatel'skiy institut prudevogo i ezerno-rechnogo rybnogo khozyaystva, Kiyev (for Shpet, Brodskiy).2.Zoologicheskii institut Akademii nauk SSSR, Leningrad (for Dubinin).
(Cannibalism (Animals))

STROKOV, V., kandidat biologicheskikh nauk.

The watchful gulls. Un.nat. no.6:7-8 Je '57.
(Gulls)

(MLRA 10:7)

СПЕКУВ, В.В., кандидат биологических наук, (Москва)

Reproduction of the Caucasian shrew in winter. Izvestia 86 no.2:113-114
July 1987. (CMA 10:8)

(Caucasus--Shrews)

ST 11 11
RZHEVSKIY, Boris Moiseyevich; STROKOV, V.V., kand.biol.nauk, red.

[Beavers; conservation, keeping, feeding, and transportation]
Rechnye hobry; sokhranenie, sodержanie, kormlenie i transportirova-
nie. Pod red. V.V.Strokova. Moskva, Mosk.obl.otd-nie Vserossiiskogo
ob-va sodeistviia okhrane prirody i ozeleneniiu naseleennykh punktov,
1958. 74 p. (MIRA 11:5)
(Beavers)

STROKOV, V., kand.biol.nauk

Living laboratories. IUn.nat. no.1:13 Ja '58. (MIRA 10:12)
(Ural Mountain region--National parks and reserves)

STROKOV, V.

Feed boxes for birds. IUn.tekh. 3 no.12:54-55 D '58.
(MIRA 12:1)

1. Uchenyy sekretar' Vserossiyskogo obshchestva sodeystviya
okhrane prirody i ozeleneniyu naselennykh punktov.
(Birds--Food)

STROKOV, V.V.,kand.biol.nauk

Nature must be protected. ("The green patrol" by Iu. Dmitriev.
Reviewed by V.V. Stokov). Znan. sila 33 no.4:42 Ap '58.
(Natural resources) (Dmitriev, Iu.) (MIRA 11:5)

STROKOV, V.

Bullfinch. IUn. nat. no.12:12 D '59
(Finches)

(MIRA 13:3)

STROKOV, V.

Winners of the contest. IUn.nat. no.6:33 Je '60. (MIRA 13'8)
(Birds, Protection of)

STROKOV, V., kand.biologicheskikh nauk

Why are sparrows so sly? IUn. nat. no.9:28 S '61. (MIRA 14:8)
(Sparrows)

STROKOV, V.V.

Ecology of the linnet in the southwest of Moscow. Ornitologia
no.5:290-299 '62. (MIRA 16:2)
(Moscow—Linnet)

STROKOV, V.V.

Let's take care of useful plants and animals. Biol. v shkole no.3:
63-64 My-Je '63. (MIRA 16:10)

1. Tambovskiy pedagogicheskiy institut.

1. [unclear]

2. [unclear] in artificial nesting grounds. [unclear] no. 1/10
[unclear] [unclear]

STROKOV, Vyacheslav Vsevolodovich, kand. biol. nauk

[Animal: and birds in our forests] Zveri i ptitsy nashikh lesov. 2. izd. Moskva, Lesnaia promyshlennost', 1964. 43 p. (Bibliotechka lesnika i mastera lesa, no.9)
(MIRA 17:12)

STROKOV, V.V.

Congenital and conditioned reflexes in birds and their influence on
the choice of materials for building nests. Zool. zhur. 43 no.6:889-
897 '64. (MIRA 17:12)

1. Tombovskiy gosudarstvennyy pedagogicheskiy institut.

S/707/60/003/000/012/013
B108/B102

246700
AUTHOR:

Strokov, Yu. F.

TITLE:

Interpretation of high-energy particle stars ($E > 10^{11}$ ev)
by a modified "ray" theory

SOURCE:

Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki.
Trudy. v. 3, 1960. Vzaimodeystviye vysokoenergichnykh
chastits s atonymi yadrami, 150-156

TEXT: The portion of low-energy particles in a high-energy shower is explained by the phenomenological "ray" theory in which it is assumed that in the collision of a nucleon and a nucleus a pencil of mesons arises. This pencil, or "ray", diffuses in the nucleus. This theory is modified by assuming a diffusion coefficient of the form $D = \frac{\pi}{8} \alpha \rho E^{-1/2} \bar{\lambda}^2$ (s)

where E is the energy of the primary particles (Bev), ρ - nucleon density in the nucleus, $\alpha \sim 2$. This formula means that only part of the mesons diffuse. Their energy in the c.m.s. is $E' = E - M\gamma + \beta E^{1/2}$ where β is a coefficient of the order of unity. The slow particles are assumed to be

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Interpretation of high-energy ...

S/707/60/003/000/012/013
B108/B102

recoil nucleons and particles produced in nuclear excitation. The angular distribution of the slow particles can be rendered as $dn_b/d\Omega = a \sin^2 \theta r_0/r$, where r_0/r denotes the probability of particles leaving the nucleus, r - distance from the place of production, $r_0 = h/\mu c$. Under such assumptions it is possible to draw qualitative conclusions also on the multiplicity of the shower particles in high-energy showers. Professor Zh. S. Takibayev is thanked for help, L. A. San'ko, Ts. I. Shakhova, and Ts. Ya. Balats of supplying experimental data. There are 5 figures and 7 references: 3 Soviet and 4 non-Soviet. The two references to English-language publications read as follows: W. Heitler and Terreaux. Proc. Phys. Soc., A 66, 929, 1953; K. J. Le Couteur. Proc. Phys. Soc., A 63, 259, 1950.

Card 2/2

ACCESSION NR: AP4031160

S/0056/64/046/004/1379/1385

AUTHOR: Nemirovskiy, P. E.; Stokov, Yu. F.

TITLE: Optical model for antinucleon-nucleon collisions

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1379-1385

TOPIC TAGS: antinucleon, nucleon, optical model, potential spin, isospin, charge exchange

ABSTRACT: This is an elaboration of an earlier treatment (Yu. P. Yelagin and P. E. Nemirovskiy, ZhETF v. 44, 1099, 1963), in which account is taken of the influences of the tensor force, the spin orbit interaction, and the isotopic dependence of the potential on the total cross sections for the interaction between nonrelativistic antinucleons and nucleons. This interaction is effectively described by a complex potential which depends on the spin and on the isotopic spin, and also contains the tensor force. The angular distribution of the elastically scattered nucleons and the cross section for charge exchange in the $\bar{p}p \rightarrow \bar{n}n$ reaction is also calculated. The results for the total cross sections, angular distributions of elastic scattering, and the charge-exchange cross sections are in satisfactory agreement with experiment. "In conclusion, the authors are grateful to Yu. P. Yelagin for help with

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ACCESSION NR: AP4031160

the work." Orig. art. has: 10 figures and 14 formulas.

ASSOCIATION: None

SUBMITTED: 07Oct63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: NP

NR REF SOV: 001

OTHER: 004

Card 2/2

PROTON, YU. P.

Proton-antiproton interaction at nonrelativistic energies with allowance made for Coulomb forces and the neutron-proton mass difference. Izv. fiz. line. 71b-71d. Apr '65. (MIRA 18:6)

1. Institut teple i massobmena AN ESSR.

KOLYKHALOV, P.A.; SHCHEGOLEVA, R.I.; VASIL'YEVA, I.N.; GUDKOVA, T.K.;
MAKOVSKAYA, N.G.; TOLSTYKH, A.S.; KRAMCHENKOVA, L.V.; NEDZVETSKAYA,
G.V.; STROKOVA, A.Ya.; GERMANOVICH, N.N., red.; KARZHAVINA, Ye.,
tekhn.red.

[Economy of Lipetsk Province; a statistical manual] Narodnoe
khoziaistvo Lipetskoi oblasti; statisticheskii sbornik. Lipetsk,
Lipetskoe knizhnoe izd-vo, 1959. 182 p. (MIRA 13:6)

1. Lipetskaya oblast'. Statisticheskoye upravleniye. 2. Statisti-
cheskoye upravleniye Lipetskoy oblasti (for Kolykhalov, Shchegoleva,
Vasil'yeva, Gudkova, Makovskaya, Tolstykh, Kramchenkova, Nedzvetskaya,
Strokova). 3. Nachal'nik Statisticheskogo upravleniya Lipetskoy ob-
lasti (for Germanovich).
(Lipetsk Province--Statistics)

1971, 217, 171; 1972, 217, 171; 1973, 217, 171; 1974, 217, 171.

Fungitoxic action of phenol compounds: Fomes in potato tubers as a result of injury. Dokl. AN SSSR vol. no. 1: 90, 1967, p. 165.

(MIA 18:3)

U. Institut inzhimii im. A.I. Bukharin AN SSSR. Submitted June 30, 1971.

STROKOVA, G.S.

Evidence of uraninite in complex alkali rocks. Inform.sbor.
VSEGEI no.16:103-107 '59. (MIRA 15:3)
(Uraninite)

BUR'YAKOV, A. Z.; STROKOVA, G.S.; SHITOV, V.A.

"Merurellit," a new mineral. Zap. Vses. min. ob-va 94
no. 2, 437-443 '65. (MIRA 18:9)

STROKOVA, I.; VASIL'YEVA, T.; KAREV, M.; CHECHETKINA, S.

Improve the leadership of production meetings. Sov.profsoiuzy
7 no.15:33-36 Ag '59. (MIRA 12:12)
(Works councils)

STROKOVA, N.Z.

KICHIGINA, M.I.; STROKOVA, N.Z., glavnyy vrach; POKROVSKIY, V.A., professor,
zaveduyushchiy kafedroy.

Cancer of prolapsed cervix uteri. Akush. i gin. no.3:79-80 My-Je '53.
(MLRA 6:7)

1. Rodil'nyy dom No.4 (for Kichigina and Strokova). 2. Akushersko-gineko-
logicheskaya klinika Voronezhskogo meditsinskogo inatituta (for Kichigina
and Pokrovskiy). (Uterus--Cancer)

ROZHESTVENSKIY V.P.; STROKOVA, T.P.; VOLGINA, I.M.

Interaction between mixtures of a liquefied gas with water vapor and iron oxide. Zhur. prikl. khim. 36 no.9:1987-1993 D '63. (MIRA 17:1)

1. Saratovskiy nauchno-issledovatel'skiy institut po ispol'zovaniyu gaza v narodnom khozyaystve.

MAVRISHCHEV, V.S., kand. ekon. nauk; VISYULIN, F.P., kand. ekon. nauk; STROKOVA, V.I., kand. ekon. nauk; VYBORNOV, V.I., kand. ekon. nauk; LOPATIN, N.V., kand. ekon. nauk; SOSIN, L.M., kand. ekon. nauk; ZYATIKOV, Ya.M., kand. ekon. nauk; LYSOV, N.Ye., kand. ekon. nauk; NEVEL'SKAYA, K.I., kand. ekon. nauk; TRUBILKO, N.P., kand. ekon. nauk; OS'KIN, V.Ya., kand. ekon. nauk

[Chemicalization of industrial production in White Russia]
Khimizatsiia promyshlennogo proizvodstva Belorussii. Minsk,
Nauka i tekhnika, 1965. 128 p. (MIRA 18:5)

FERDINAND, Ya.M.; MEDYUKHA, G.A.; KUCHERENKO, R.A.; DUNCHENKO, Ye.P.
STROKOVA, Ye.I.; SHCHEGLOVA, L.A.; PYASETSKAYA, Ye.A.;
DEMENT'YEVA, A.I.; ZOLINA, L.T.

Epidemiological effectiveness of the systematic use of the typhoid
bacteriophage for chronic bacterial carriers. Sov. med. 24
no. 5:128-130 My '60. (MIRA 13:10)

1. Iz Rostovskogo-na-Donu instituta epidemiologii, mikrobiologii
i gigiyeny.
(TYPHOID FEVER) (BACTERIOPHAGE)

S/137/61/000/012/109/149
A006/A101

AUTHOR: Strokovskiy, L. I.

TITLE: Control of pipeline weld joints

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 66, abstract
12E410 (V sb. "Izgotovleniye i montazh truboprovodov", Moscow, 1960,
157-167)

TEXT: Information is given on operational control during the assembly of pipelines. The author enumerates the objects and extent of control, characteristics of gamma sources and containers; the system of container charge; gamma-raying methods; development of gammagraphs, evaluation of weld joints. The importance of xerography for control purposes is analyzed (production of electrographic images at gamma and X-ray emission on a semi-conducting Se or Zn oxide layer, applied onto a metal plate). Brief characteristics of the new equipment are given for various control methods. ✓

Ye. Terpugov

[Abstracter's note: Complete translation]

Card 1/i

STROKOWSKI, M.

Servo systems with potentiometers or selsyn transformers. p.485
(POMIARY, AUTOMATYKA, KONTROLA, Vol. 2, No. 12, Dec. 1956, Warsaw, Poland)

SO: Monthly List of East European Accessions (EFAL) LC, Vol. 6, No. 9, Sept. 1957, Uncl.

COUNTRY : Poland R-3
CATEGORY :
ABST. JOUR. : RZKhim., No. 16 1959, No. 57384
AUTHOR : Strokowski, M. and Stefanicki, R.
INST. : Not given
TITLE : Flow Control Systems Using a Transmitting
Rotameter
ORIG. PUB. : Pomiar, Automat, Kontrola, 4, No 2, 47-49 (1955)
ABSTRACT : The authors describe the design and operation of
an automatic electronic flow control system de-
veloped at the Silesian Polytechnic Institute
of the Polish Peoples Republic. The motions of
the Rotameter float are transmitted to the control
system by the inductance method using a special
transformer and transducer which can be used with
ordinary rotameters without requiring modifica-
tions to their housing.
Yu. Skoretzkiy

CARD: 1/1

STROLA, J.

STROLA, J. Active clays; on the opening of the factory in Kutina, first in Yugoslavia.

Vol. 6, No. 3 March 1955

MASINSKO-TEHNICKI GLASNIK

SO: Monthly list of East European Accessions, (EEAL) LC, Vol. 5 no. 3
March, 1956

STROLA, J.

Natural catalysts for cracking petroleum products; extended research on selected samples of clay. P. 10 MAFPA, Zagreb Vol. 7, No. 1, Jan. 1956

SOURCE: SEAL LC July 1956

STROM, A.D.

Biological purification of industrial waste waters containing low
molecular weight C - C fatty acids. Khim.i tekhn. topl.i masel 5
no.12:24-27 D '69. (MIRA 13:12)

1. Berdyanskiy opytnyy neftemaslozavod.
(Sewage—Purification) (Acids, Fatty)

STROM, A.D., inzh.

Biological post-purification of industrial waste waters. Masl.-
zhir.prom. 26 no.12;38-40 D '60. (MIRA 13:12)

1. Berdyanskiy opytnyy neftemaslozavod.
(Berdyansk--Sewage--Purification)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NM NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QP QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ

GENERAL INDEX

ASB-56A METALLURGICAL LITERATURE CLASSIFICATION

22

Vapor-phase treatment of cracked gasolines in the Vickers cracking unit. B. P. FRADKIN AND D. A. SIROM. *Nefyanoe Khimiyastro* 18, 445 (1939). Gasoline obtained in the Vickers cracking unit is evapd. again and passed in the vapor phase through fuller's earth filters. The yield of the final gasoline amounts to 91.1%, while 0.25% of fuller's earth is consumed, based on 11 regenerations. During this process the fuller's earth is continuously heated by flue gas, the temp. being kept at 230-5°. The untreated gasoline has a Stamm number of 1.2, gum 0.5%, no corrosive action, unsatisfactory doctor test, and a sp. gr. of 0.741. The treated gasoline has a color of 2 U. I., of gum, satisfactory corrosion and doctor tests, and a sp. gr. of 0.741. A. A. BLOKHIN, SOVIET.

LIST AND INDEX ORDERS PROCESSES AND PROPERTIES INDEX

22

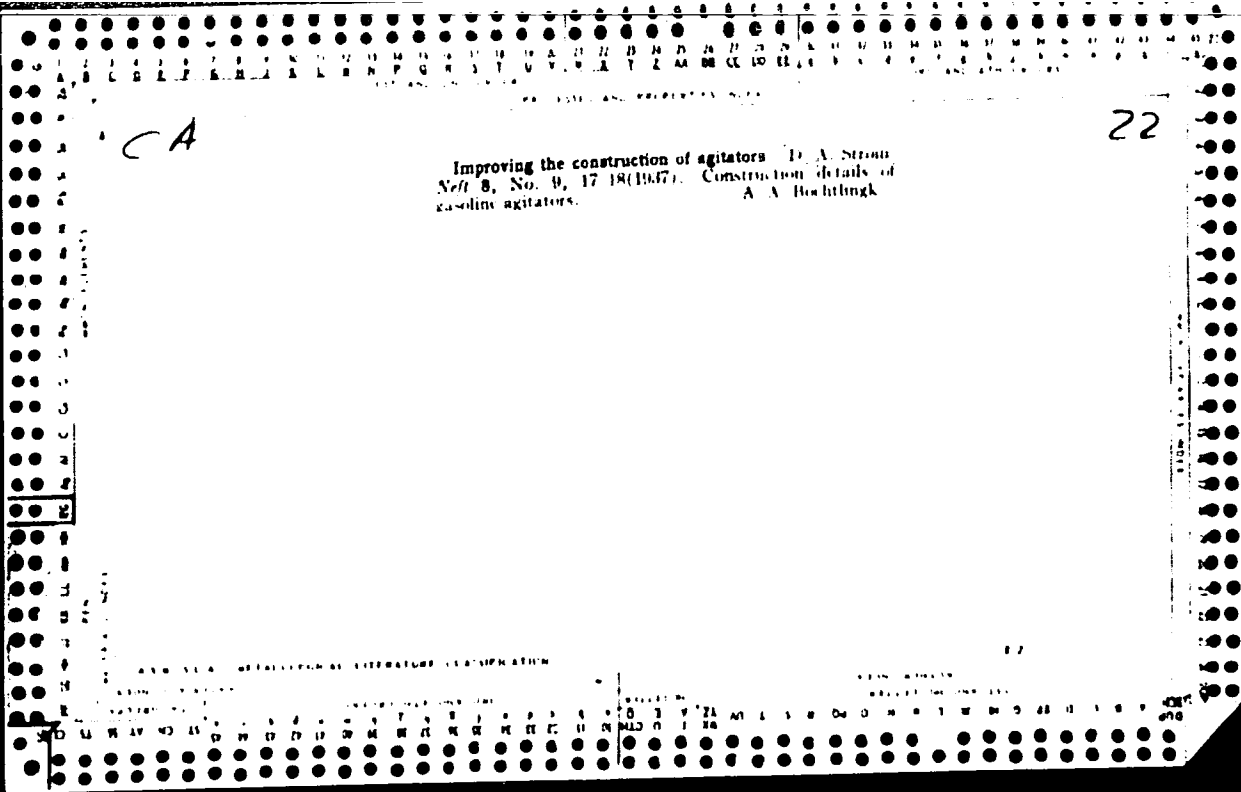
ca

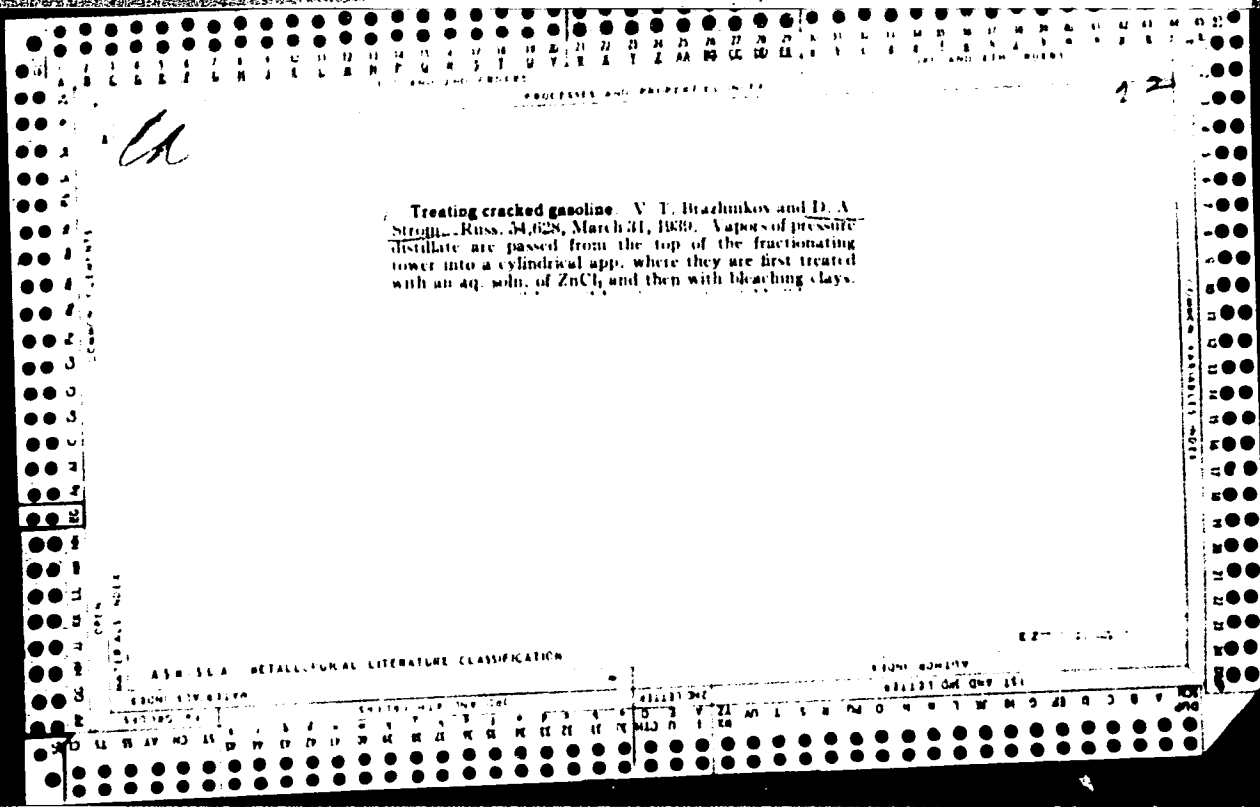
Atomizer for cracked residuo. D. A. Strom, F. I. Hulaventzev and Z. E. Matveev. Russ. 31,534, Oct. 31, 1933. The atomizer which is attached to the outlet of the pipe leading from the reaction chamber and terminates in the evaporator is constructed of a flange fastened to the pipe and a second flange held by bolts attached to the first flange at a certain distance from the latter. The second flange has the form of a solid disk.

AS 6-51.6 METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED #2 SERIALIZED #1 INDEXED #1 FILED #1

SEARCHED #2 SERIALIZED #1 INDEXED #1 FILED #1





CA

272

Removal of hydrogen sulfide from gasoline distillates by means of dolomite. D. A. Strou and N. M. Shestakova. *Neftynoe Khas.* 24, No. 3/4, 68-70(1940). -- The dolomite lumps were calcined in a gas flame at 800-900° and blown with air to obtain a chalklike mass which was crushed to 2-4-mm. particle size and then screened for removal of fines. The granules were then packed into the reaction tube, and the latter was immersed in water to effect hydration. The hydrated material retained some of its activity after 3 regenerations, but its internal structure deteriorated owing to the swelling action of the condensing steam during regeneration. It is suggested that dolomite filters be installed in stills to remove H₂S from the gasoline vapors before it oxidizes to elementary S. B. C. M.

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

STROM, D. A.

14 JAN 5

USSR/Petroleum - Analysis
Hydrogen Sulfide

Jan 50

"Determination of Hydrogen Sulfide in Petroleum
and Petroleum Products," D. A. Strom, L'vov Poly-
tech Inst, 1 p

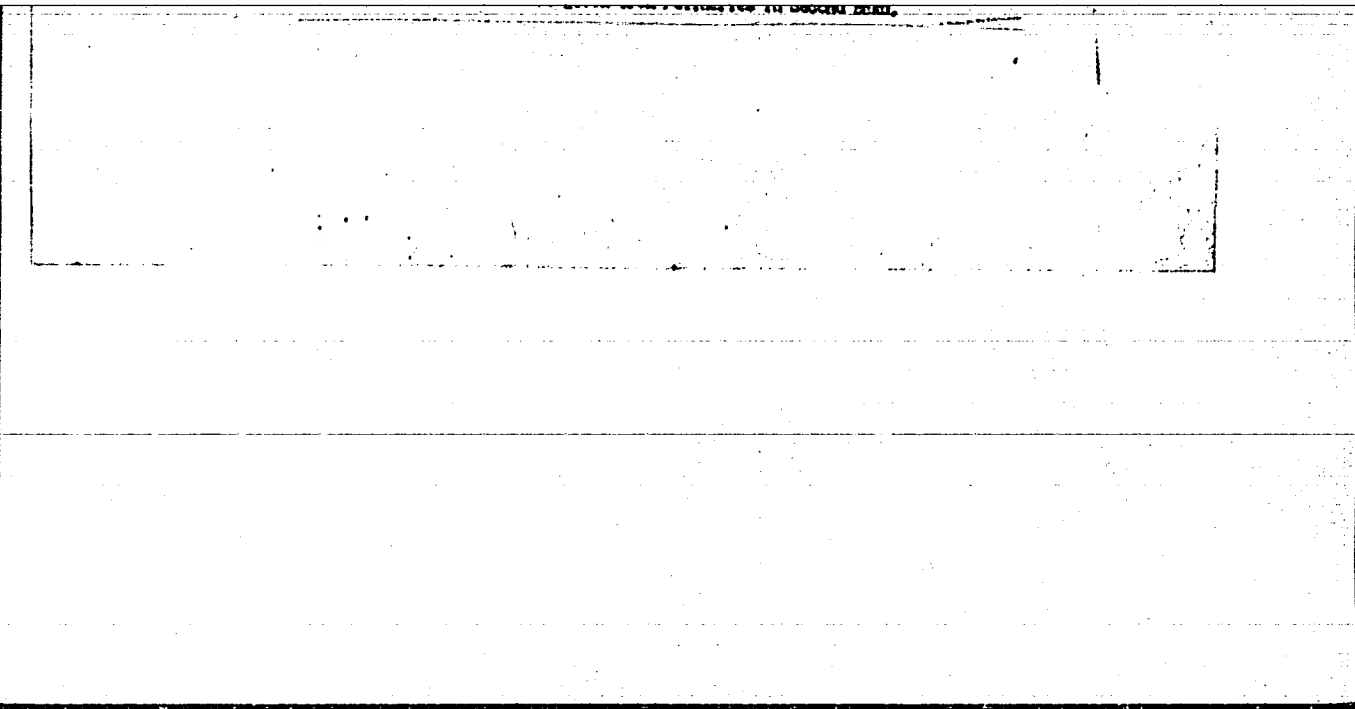
"Zavod Lab" Vol XVI, No 1

New method for determination of hydrogen sulfide
consists of its absorption by sodium carbonate
solution and iodometric titration of resultant
sodium hydrosulfide. Application of soda per-
mits separation of hydrogen sulfide without ex-
tracting mercaptans, which otherwise would cause
higher figures for hydrogen sulfide content.

159T75

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653610002-7



APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653610002-7"

STROM, D.

Young specialists are going eastward. Neftianik 1 no.10:34-35 0
'5 . (MLBA 9:11)

(Petroleum engineering)

SOV/81-59-7-24839

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 7, p 467 (USSR)

AUTHORS: Strom, D.A., Polisachuk, S.A.

TITLE: Deasphaltation of Ozocerite in Emulsion

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-ta, 1958, Nr 50, pp 139-142

ABSTRACT: A method was developed for the partial deresination (prior to sulfuric acid treatment) of ozocerite (O) to be purified by deasphaltation in emulsion (E). To obtain aqueous ozocerite E, a 2% aqueous solution of naphthenic soaps (alkali waste products of medium and heavy petroleum fractions) was taken, which supplement the action of solid emulsifiers contained in O and facilitate the process of formation of E and its separation. E was separated by settling or centrifuging; ceresin and oils contained in the precipitate can be regenerated by heating the latter with water. It was shown that deasphaltation in emulsion imparts to the various O an approximately equal residual resinousness, which simplifies the operation of the installation in case of processing heterogeneous

Card 1/2

Deasphaltation of Ozocerite in Emulsion

SOV/81-59-7-24839

raw material. The method permits the H_2SO_4 consumption to be reduced by ~ 50% with a decrease of the duration of the technological cycle. The sulfuric acid purification of concentrated O can be carried out at ~ 100°C with subsequent neutralization and contact purification, without decreasing the ceresin yield in comparison with the industrial method.

From the summary

Card 2/2

STROM, D.A. ; inzh. KOFTUN, T.I., inzh.

Improving the production process of synthetic fats. Naftianik 5
no.6:12-13 Je '60. (MIRA 13:7)

1. Berdyanskiy neftemaslozavod.
(Oils and fats)

3/092/60/000/006/001/001
A051/A026

AUTHORS: Strom, D.A., Koftun, T.I.; Engineers
TITLE: Perfecting the Production of Synthetic Fat
PERIODICAL: Neftyanik, 1960, No. 6, pp. 14 - 15

TEXT: The authors refer to the production method for synthetic fat, using zinc oxide as catalyst, which was described in Neftyanik No. 6, 1959, and submitted by D.A. Strom. He stressed the lengthy duration of the process (8 - 15 h) to be the disadvantage of the method. The experimental department of the Berdyansk Refinery conducted tests in order to shorten the cycle, involving the replacement of the zinc oxide with a more effective catalyst. It was established as a result that by using sulfuric acid, phosphorous anhydride or zinc chloride, the duration of the process could be shortened considerably, and a higher degree in converting fatty acids to synthetic fat could be accomplished. The production process of synthetic fat in industrial reactor-mixers, using sulfuric acid as catalyst, is described as being carried out under strict maintenance of temperature, measuring out the components and observing the sequence of their introduction. Synthetic fatty acids were taken as initial raw material. They are fed from the tank to the

Card 1/6

S/092/60/000/006/001/001
A051/A026

Perfecting the Production of Synthetic Fat

reactor by a pump (1) (see Figure) with the mixer (3) switched on, and are dehydrated there till the residual water content is not more than 0.5% by weight. The heat-carrier is fed to the tank (2) of the reactor-mixer and the temperature of the material is raised to 130 - 135°C. The catalyst in the form of a fine stream is fed to the dry material - a 90% sulfuric acid from the measuring container (5). The supply of the acid is accomplished in two stages to avoid violent boiling of the fatty acids in the reactor-mixer. After introducing the first batch of the sulfuric acid comprising 2/3 of the required estimated quantity, ethylene glycol, in the form of a small continuous stream, is fed to the reactor from the measuring container (4) in the amount of 6.5%. If heavy foam is forming, the supply of the ethylene glycol is stopped and, if this does not help, the mixing in the reactor is stopped till the foam is reduced; then the supply of the ethylene glycol is resumed and the mixing starts again. After the whole amount of the ethylene glycol has been introduced, the remainder of the sulfuric acid is added (1/3 of the estimated amount) and the temperature is raised to 150 - 160°C during this process. The laboratory check of the process is carried out according to the acid number of the reacting mass. The acid number drops as the reaction (of the esterification) becomes more complete and when 25 mg of KOH/g is reached, the fat is considered ready for pouring. Comparative characteristics of initial raw material and syn-

Card 2/6

Perfecting the Production of Synthetic Fat

S/092/60/000/006/001/001
A051/A026

thetic fat obtained under the old technological procedure in industry, using zinc oxide as catalyst and under that of the new one using sulfuric acid as catalyst, are shown in Table 1. The quality of the synthetic fat obtained by the sulfuric acid-catalyst method satisfies the main indices of technical standards. The iodine number is brought to zero, the acid number is not higher than 25 mg KOH/g and the saponification number not less than 160 mg KOH/g. A check of the change in quality of the synthetic fat during storage showed that, when sulfuric acid was used as catalyst, the product was more stable, which was not the case for the zinc oxide-catalyst product (Table 2). The author states that by using the new catalyst, the Berdyansk Oil Refinery was able to exceed its 1959 production plan for synthetic fat, to reduce the overhead cost and improve the quality. Besides, the need for zinc oxide, an expensive material, was eliminated at the refinery. The latter is needed for the production of zinc whites. There are 1 figure and 2 tables. ✓

ASSOCIATION: Berdyanskiy Neftemaslozavod (Berdyansk Petroleum - Oil Refinery)

Card 3/6

STROM, D.A., inzh.; CHOLOKOV, L.D.

People with daring ideas. Neftianik 6 no.5:18 My '61.

(MIRA 14:5)

1. Inzhener po ratsionalizatsii i izobretatel'stvu Berdyanskogo opytnogo
neftemaslozavoda.

(Lubrication and lubricants)

STROM, D.A., kand.tekhn.nauk; ISHCHUK, Yu.L., inzh.; STROM, L.D., inzh.

Production of synthetic fat. Masl.-zhir. prom. 27 no.11:34-37
N '61. (MIRA 15:1)

1. Berdyanskiy neftemaslozavod (for D.A. Strom, Ishchuk).
2. Moskovskiy neftepererabatyvayushchiy zavod (for L.D. Strom).
(Oils and fats)

STEPANYANTS, S.A.; MORDASHOV, V.I.; ISHCHUK, Yu.L.; STROM, D.A.;
YENA, B.P.; NOVAKOV, G.Kh.

Continuous process of paraffin oxidation in the liquid-foam
state aimed at the production of synthetic fatty acids. Trudy
BONMZ no.1:20-25 '63. (MIRA 16:6)

(Paraffins) (Oxidation) (Acids, Fatty)

STEPANYANTS, S. A., inzh.; MORDASHOV, V.N., inzh.; ISHCHUK, Yu.L.,
inzh.; STROM, D.A., inzh.; YENA, B.P., inzh.; NOVAKOV, G.Kh.,
inzh.

Continuous process for paraffin oxidation in a liquid foamed
state. Masl.-zhir. prom. 29 no.3:21-23 Mr '63.
(MIRA 16:4)

1. Berdyanskiy opytnyy neftemaslozavod.
(Paraffins) (Oxidation)

STROM, D.A.; ISHCHUK, Yu.L.; STROM, L.D.; KOFTUN, T.I.

Improving the technology of the manufacture of synthetic
leather fat. Trudy BONMZ no.1:38-50 '63. (MIRA 16:6)

(Oils and fats)

STROM, D.A.

Producing acetylene from natural gas. Kniz. 1 tekhn. topl. 1 masel
9 no.12:65-66 D '64. (MIRA 18:2)

... [Zeluzny, A.M.]; ... FROM, ...

Thermal decomposition of diluted acetylene. Doc. ... IPI 5 no. 7/81
1977 163. (MIRA 17:6)

SOV/92-58-10-17/30

11(0)

AUTHOR: Strom, L.D., Engineer

TITLE: Drop Point or Melting Point (Temperatura kaplepadeniya
iii plavleniya)

PERIODICAL: Neftyanik, 1958, Nr 10, pp 23-24 (USSR)

ABSTRACT: Since synthetic fat can be used instead of the animal fat currently employed in large quantities in manufacturing grease, some tube oil plants have decided to build industrial units which could produce synthetic fat. Synthetic fat is a complex ether resulting from the synthesis of ethylene glycol and synthetic aliphatic acid. Synthetic fat produced by the Osipenkovskiy plant has characteristics corresponding to GOST provisions indicated by the author. To determine the melting point of a petroleum product with a crystalline network an apparatus developed by Zhukov is used as provided by GOST 4255-48. Fig. 1 shows curves indicating the melting point of paraffin,

Card 1/2

Drop Point or Melting Point

SOV/92-58-10-17/30

determined by using the Zhukov apparatus. Fig. 2 shows curves indicating the melting point of synthetic fat. The latter fail to give indications characterizing the crystalline substance. Therefore Zhukov's method cannot be applied to determine the melting point of an amorphous substance like synthetic fat, and as a result the synthetic fat properties have to be determined on the basis of the drop point as provided by GOST 6793-53. The table given in the article indicates the drop point of various samples of synthetic fat. Since the drop point method can be successfully used for determining synthetic fat characteristics, the GOST 4255-48 provision should be revised. It has been established that the synthetic fat drop point is the temperature not below 33° C. There are 2 figures and 1 table.

ASSOCIATION: Osipenkovskiy neftemaslozavod (The Osipenkovskiy Lubricating Oil Plant)

Card 2/2

STROM, D.A., kand.tekhn.nauk; ISHCHUK, Yu.L., inzh.; STROM, L.D., inzh.

Production of synthetic fat. Masl.-zhir. prom. 27 no.11:34-37
N '61. (MIRA 15:1)

1. Berdyanskiy neftemaslozavod (for D.A. Strom, Ishchuk).
2. Moskovskiy neftepererabatyvayushchiy zavod (for L.D. Strom).
(Oils and fats)

STROM, L.D.

Biochemical purification of industrial waste waters containing
fatty acids. Trudy BONMZ no.1:61-67 '63. (MIRA 16:6)

(Berdiansk--Water--Biological treatment)
(Acids, Fatty)

STROM, D.A.; ISHCHUK, Yu.L.; STROM, L.D.; KOFTUN, T.I.

Improving the technology of the manufacture of synthetic
leather fat. Trudy BONMZ no.1:38-50 '63. (MIRA 16:6)

(Oils and fats)

83649

S/092/60/000/001/001/002
A051/A026

26.2123
AUTHOR::

Strom, S.D., Head of the Electrical Shop

TITLE:

Instrument for Controlling the Lubrication of Bearings

PERIODICAL:

Neftyanik, 1960, No. 1, p. 23

TEXT:

An instrument has been designed (Fig. 1) at the Moscow Oil Refinery, which makes it possible to check the lubrication of bearings while pumps and electric motors are in operation. Figure 2 is the circuit diagram of the instrument, containing the following parts: 1) microammeter type No. 592, with a measuring range of $0 \pm 50 \mu\text{amp}$; 2) resistance 1,000 ohm; 3) galvanic cell - 1.5 v. The hold pick ups ⁴ consist of a copper needle with an insulated handle. The instrument is of small weight and is convenient to handle. The instrument must join one needle to the body of the pump or electric motor, and the other to a rotating axle. When the bearing has normal lubrication the oil film between the friction surfaces does not conduct the electric current and the dial of the instrument is at zero or close to it. Upon insufficient oil in the bearing, the oil film tears on the surface of the friction parts and the current passes freely through the bearing, and the dial of the instrument deviates. This set-up enables

Card 1/2

88649

Instrument for Controlling the Lubrication of Bearings S/092/60/000/001/001/002
A051/A026

one to detect poor lubrication in the bearing in good time during daily routine checks of the equipment. There are 2 figures.

ASSOCIATION: Moskovskiy NPZ (The Moscow Oil Refinery)

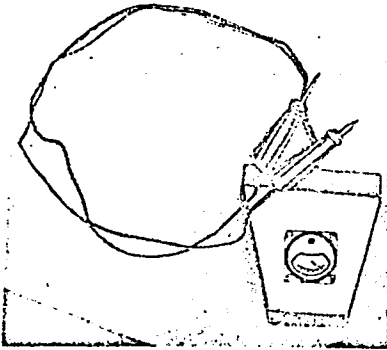


Figure 1: Full view of control instrument

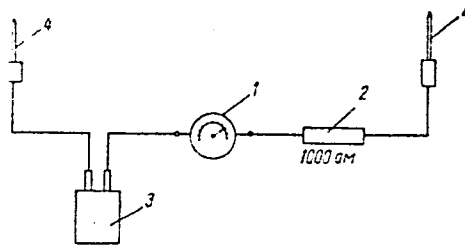


Figure 2: Wiring diagram

Card 2/2

STROM, S.D.

Painting shielded steel conduit in the winter. Neftianik
5 no.3:22 Mr '60. (MIRA 14:9)

1. Nachal'nik tsekha Moskovskogo neftepererabatyvayushchego
zavoda.
(Electric networks) (Steel--Corrosion)

STROM, S.D.

Remote ignition control of the emergency gas torch. Neftianik
5 no.6:24 Je '60. (MIRA 13:7)

1. Nachal'nik tsekha Moskovsko neftepererabatyvayushchego zavoda.
(Petroleum refineries--Equipment and supplies)

STROM, S.D.

Controller of the lubrication of bearings in electric motors
and oil pumps. Prom.energ. 16 no.9:36 S '61. (MIRA 14:8)
(Lubrication and lubricants)

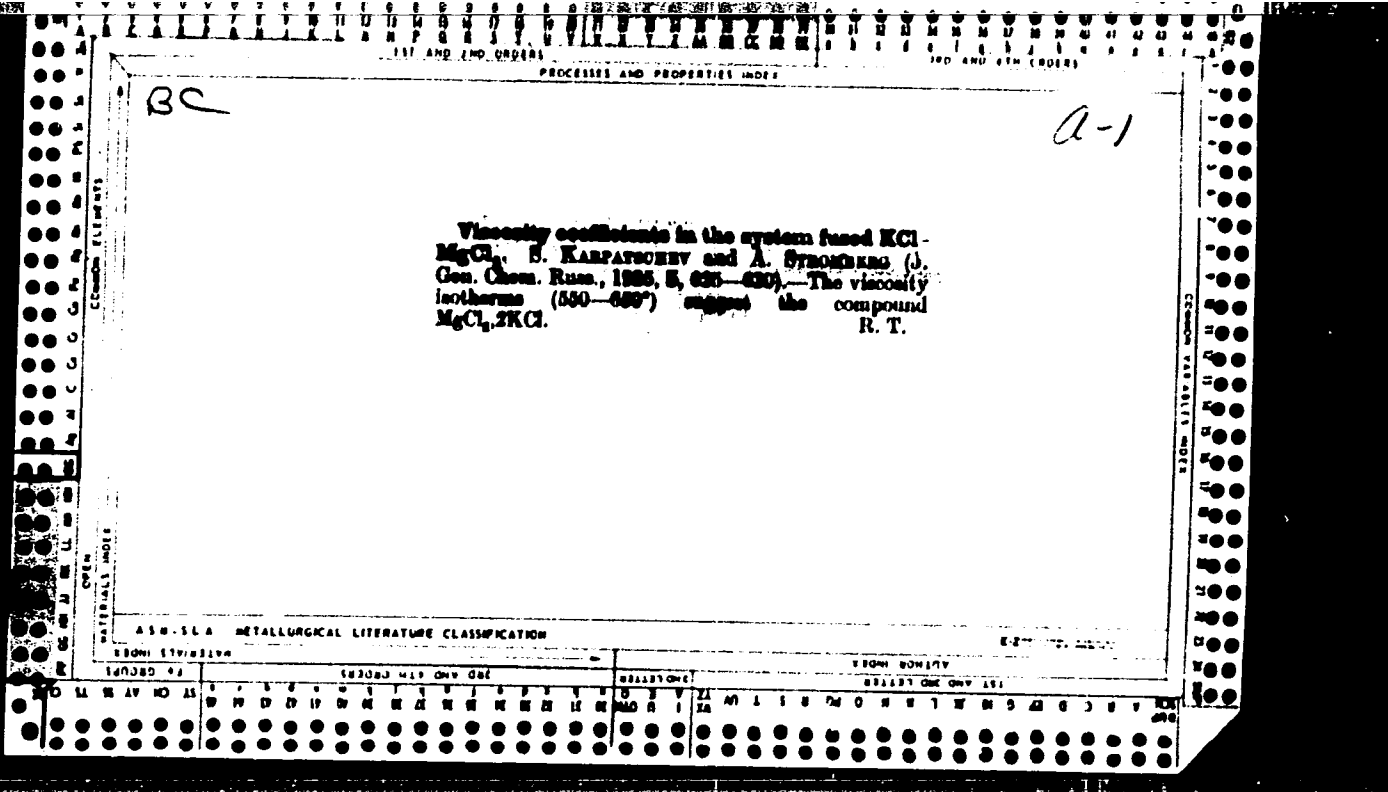
BC

A-1

Relation between electrical conductivity and the coefficient of internal friction in melted salts.
 N. KAPRANOV and A. STROGOMI (J. Phys. Chem. U.S.S.R., 1964, 6, 1290-1291).—A theoretical relationship between the conductivity, internal friction, mol. wt., and d is derived. Experimental vals. for the alkali and Ag halides and nitrates are 1.4—2.2 times too large. (U. S.S.R. (c))

ASTM 31A METALLURGICAL LITERATURE CLASSIFICATION

111 AND 112 CHECKS		PROCESSING AND PROPERTIES INDEX		110 AND 114 CHECKS	
BC				A-1	
<p>... and ... in the S. ... A. (...) the</p>					
COMMON ELEMENTS		COMMON VALUABLES INDEX			
MATERIALS INDEX					
ASB-55A METALLURGICAL LITERATURE CLASSIFICATION					
FROM STATION			FROM SOURCE		
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z					



3

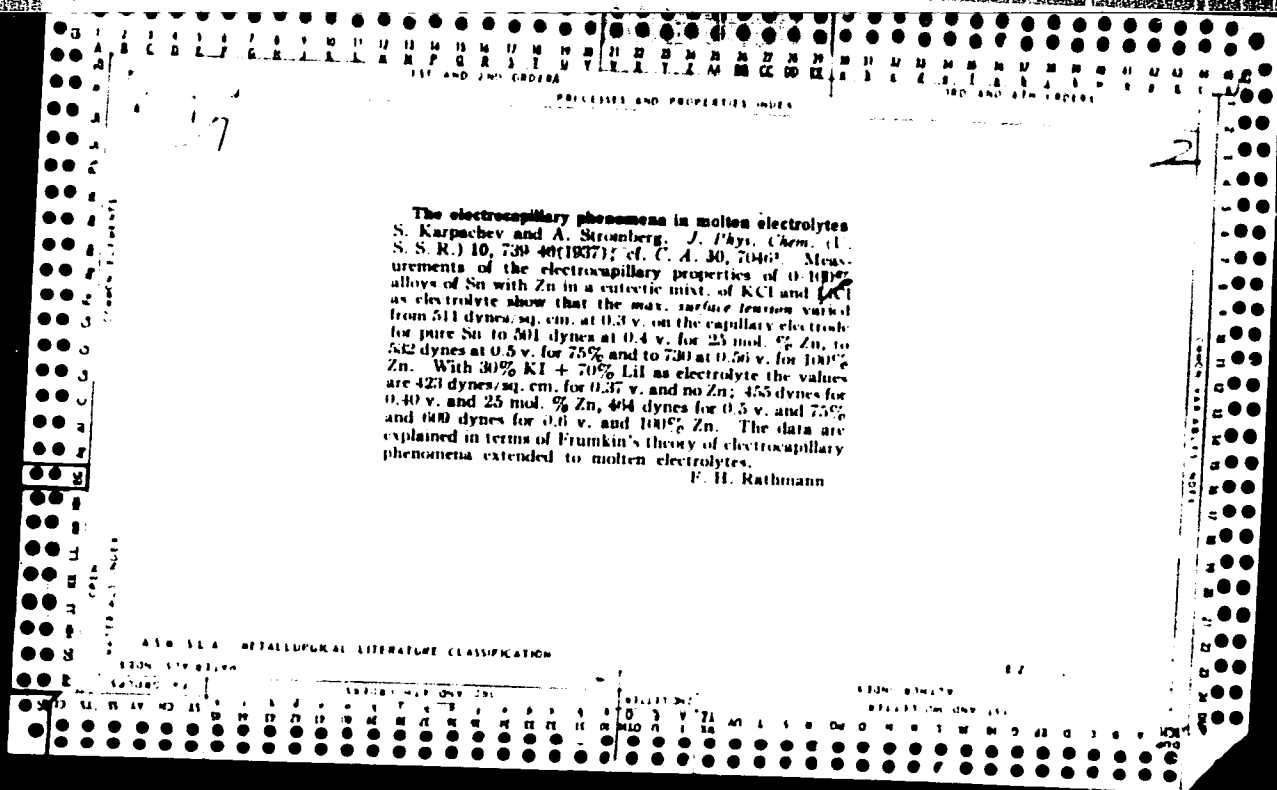
INTERNAL FRICTION AND ELECTRICAL CONDUCTIVITY
IN THE KCl-LiCl SYSTEM OF FUSED SALTS. S. V.

Karpachev, A. G. Stromberg, and V. N. Podchainova.

Translated from Zhur. Obshchei Khim. 6, 1517-27(1935).

18p. (AEC-tr-1923)

In the interval of temperatures from 400 to 900°, the electrical conductivity and internal friction coefficient for the system of fused salts KCl-LiCl was investigated. On the basis of the results obtained it is shown that direct application of Stokes law for describing the movement of separate ions within the fused salt is inadmissible. (auth)



100 AND 10000000
PROCESSES AND PROPERTIES INDEX

The electroconductivity and the inner friction of fused salts. M. Karpachev and A. Bromberg. *J. Phys. Chem.* (U. S. S. R.) 11, 853-7(1938); cf. *C. A.* 32, 5689. The authors detd. at room temp. (10°) the coeff. of inner friction of water by the method developed by Dantuma (*C. A.* 28, 557) to verify their calcd. numerical data obtained for the consts. in the equation for inner friction of Verschaellert (Verschaellert and Nicaise, *Comm. Phys. Lab. Univ. Leiden* 1919, No. 153; cf. *C. A.* 10, 2311)

$$(2 + \rho)\eta + R\sqrt{(\nu/T)}\sqrt{\delta\eta} = 36K/4\pi R^2T, \quad \rho = (bR + 1)/[b^2R^2 + (bR + 1)^2], \quad b = \sqrt{\nu\delta/\eta T}$$

The value obtained, $\eta = 0.0110$, checks closely with the value 0.0111 given in chem. literature. The temp. dependence of the coeff. of inner friction was detd. for the fused salts: KBr, KI, NaI, LiBr, LiI, CuCl, CaCl₂, CdCl₂. All salts were repeatedly recrystd. before the expts. The temp. dependence of the δ of LiI was detd. It can be satisfactorily given by $\delta = 2.892 - 0.00057 T$. In all investigated cases the equation $\lambda\eta = \text{const.}$ was found to be true. 5 tables and 6 references are given.

W. R. Henn

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION DIVISION		SECTION										SECTION DIVISION	
100000	10000	1	2	3	4	5	6	7	8	9	10	11	12

BC

Solutions of metallic cadmium in molten chlorides. S. KARPATSCHEV and A. STROMBERG (J. Phys. Chem. Russ., 1939, 13, 397-405).—The potential of a C electrode in a solution of Cd in a molten mixture of CdCl₂, KCl, and NaCl at 700° is given by $E = \text{const.} - 2.3(RT/2F) \log [Cd]$, indicating that the Cd is dissolved as single atoms. The solubility of Cd in mixtures of the above chlorides has been deduced from e.m.f. measurements, the results being confirmed by direct determination. R. C.

Univ. Phys. Tech. Inst., Lab. Electrochem., Sverdlovsk

454 554 METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

CA

2

Internal friction in molten salts as a function of concentration. A. G. Bronberg. *J. Phys. Chem.* (U. S. R.) 13, 430-46(1909).—S. describes an app. more stable and simple than that of Harris (C. A. 28, 3042) and Hunter (C. A. 28, 4553) for detg. the rate of fall of a sphere in a volatile, colored, molten salt at high temps. From 270 to 450°, the coeff. of internal friction of 0.05 to 0.70 *N* solns. of AgI in HgI₂ is a linear function of the concn. The slopes or ratios η/η_0 for a 0.7 *N* soln. with respect to pure HgI₂ are 1.01 at 275°; 1.50, 300°; 1.32, 350°; 1.23, 400°; 1.20, 425°. For KCl in SbCl₅ soln. at 100°, η is linear from 0.009 to 0.5 *N*; the ratio (η_{rel}/η_0) is (0.0246/0.0171) = 1.44. Above 0.5 *N*, up to 1.91 *N*, η increases somewhat more rapidly. While the Falkenhagen electrostatic theory is applicable only up to KCl concns. of 1.6×10^{-3} *N* in SbCl₅ and 10^{-4} *N* in CH₃OH, the Einstein colloid soln. theory is applicable throughout most of the range of concns. studied. F. H. R.

Lab Electrochem of Molten Salts, Ural Physico-Tech. Inst, Sverdlovsk

A S B - S L A METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND CROSS

100 AND 5TH CROSS

9

M

Electrocapillary Curves of [Tin-Zinc and Mercury-Thallium] Alloys in Fused Salts. S. Karpatschoff and A. Strengberg (*Acta Physicochim. U.R.S.S.*, 1940, 12, 4), 523-530).—[In English.] Electrocapillary curves for series of tin-zinc and mercury-thallium alloys in fused electrolytes were determined. In the tin-zinc alloys, the curve showing interfacial tension as a function of composition has a minimum. The curves for mercury-thallium alloys are very similar to those obtained in aqueous solutions by Frumkin and Gornitskaya (*Z. physikal. Chem.*, 1928, 136, 451). The significance of this result in the theory of electrocapillarity is discussed.—N. B. V.

A.S.H.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CROSS

100 AND 5TH CROSS

1ST AND 2ND CROSS

100 AND 5TH CROSS

PROCESSES AND PROPERTIES INDEX

1

Investigation of Electrocapillary Phenomena on Various Liquid Metals. S. Karpatschhoff and A. Stromberg (Acta Physicochim, U.S.S.R. 1942, 16, (5/6), 331-335; C. Abs., 1943, 37, 3322).-Cf. K. and S., 4 ibid., 1940, 12, 523; Met. Abs., 1941, 8, 342. Electrocapillary curves for silver, antimony, bismuth, aluminium, gallium, and tellurium were obtained, using fused mixtures of KCl-LiCl of eutectic composition as the electrolyte. A table is given for the potentials of the maxima of the electrocapillary curves against the lead electrode for the metals studied. In a number of cases the p.d.s at the maxima of the electrocapillary curves for different metals coincide with the p.d. between these metals at their points of zero change in aqueous solutions. Such agreement is not found for silver.

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

ELECTROLYTES

ELECTROLYTES

37. 100

NE - 2 solutions, superheated, and
17. 100

Solutions of lead in its fused chloride. S. Karpatshev, A. Stromberg, and E. Jordan (*Compt. rend. Acad. Sci. U.R.S.S.*, 1942, **20**, 101-104).—From measurements of the potential of a C electrode in a solution of Pb in fused $PbCl_2$ at 700° as a function of the concn. of the metal, it is concluded that the Pb goes into solution as a univalent positive ion. The solubility of Pb in $PbCl_2$ at 700° is 0.0417%.
H. J. W.

h. 26.

A. Strosmberg

Contact potential difference between mercury and thallium amalgam. S. Karpatshev and A. Strosmberg *J. Phys. Chem. Russ.*, 1943, 17, 1--3).--The characteristics of two two-electrode thermionic valves are compared, the anode of one being a thin stream of Hg. and of the other a similar stream of 12% Tl amalgam. The voltage difference between the characteristics is 0.36--0.42 v. This agrees with the difference between the potentials of the electrocapillary max. of Hg and of Tl amalgam (cf. *A.*, 1941, I, 81).
J. J. B.

PROCESSES AND PROPERTIES

M

↑

*Studies on the Electrocapillary Phenomena of Various Liquid Metals
S. Karpachev and A. Stromberg (Zhur. Fiz. Khim., 1944, 18, (1-2), 47-52).--
[In Russian.] See *Mt. 382*, 1944, 11, 3.--N. B. V.

ASB 31A METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

OPEN

SEARCHED

SERIALIZED

INDEXED

FILED

MAY 1944

FBI - NEW YORK

PROCESSES AND PROPERTIES INDEX

Electrocapillary Phenomena in Molten Salts. The Effect of Iodine Ions on the Position of the Maximum in Electrocapillary Curves for Various Metals.
 A. Stromberg and T. Chukina (*Zhur. Fiz. Khim.*, 1944, 18, (5/6), 234-246).
 [In Russian.] A study has been made of the effect of adsorbed iodine ions on the surface tension between a fused eutectic mixture of potassium and lithium chlorides at 450° C., and pure tin, lead, cadmium, and zinc. For this purpose the Franklin apparatus (*Ergeb. exakt. Naturwiss.*, 1928, 7, 235) was used and special precautions were taken in degassing the metals and purifying the electrolytes before the experiments were made. It was shown that the presence of iodine ions lowers the surface tension at all polarization potentials studied, and that this decrease is approximately the same for all four metals. The position of the maximum in the electrocapillary curves is not altered by an increased iodine ion concentration in the fused salts.—V. K.

A S T M - I S I A METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

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Polarographic determination of cobalt in the presence of nickel. Catalytic evolution of hydrogen in the presence of cobalt complexes with dimethylglyoxime. A. G. Stranberg and A. I. Zelyanskaya (Chem. Inst. Acad. Sci. Sverdlovsk). *J. Gen. Chem. (U.S.S.R.)* 15, 303-18 (1943) (English summary). A new method for polarographic detn. of Co was developed based on the formation of the insol. complex of the interfering Ni with dimethylglyoxime, while the corresponding Co complex remains in soln. The increased wave height in the presence of dimethylglyoxime is probably due to the catalytic evolution

of H₂. It was shown that rapid sepn. of Fe without copper of Co is possible by the use of (NH₄)₂CO₃, while Cu can be removed by sepn. on an Fe plate. G. M. Kuzolapoff

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