G-2

COUNTRY : Czechoslovakia
CATEGORY :

ABS. JOUR. : RZKhim., No. 16 1959, No. 57159

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : yield 83%, mp 141.2-141.7° (from butyl acetate). A mixture of 0.05 mol V and 0.2 mol 80% HCOOH is treated with 12 ml alcohol and left to stand 15 hrs at 4°; N-formyl-N'-cyanoacetylhydrazine is obtained, yield 68.5%, mp 153.2-153.8° (from alc). 0.1 mol IV is treated without cooling with 18 ml water and 0.125 mol $(CH_3CO)_2O$, the solution is evaporated at 90-95°/10 mm, and N-acetyl-N'-isonicotinylhydrazine (VI) is isolated, yield 91%, mp 162.2-162.5° (from butyl

CARD: 5/9

COUNTRY : Czechoslovakia G-2
CATEGORY :

ABS. JOUR. : RZKhim., No. 16, 1959, No. 57159

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : evaporated to dryness (90-95°/10 mm), the residue is extracted with pyridine in a Soxhlet apparatus, and the extract is cooled (4°, 15 hrs) to give IIIb, yield 26%, mp 150.5-151° (from alc). 0.03 mol VI is refluxed with 0.055 mol $POCl_3$ in 50 ml C_6H_6 for 105 min, the C_6H_6 is distilled off, and the residue is treated as in the preceding case; the pyridine extract, evaporated to 15-20 ml, is refluxed for 30 min with 50 ml alcohol (in the presence of charcoal) to

CARD: 7/9

KAL'FUS, M. K. Cand Chem Sci -- (diss) "Potentiometric Study of the Industrial Process of Acetylene Hydration According to Kucherov." Alma-Ata, 1957. 19 pp with diagrams, 22 cm. (Min of Higher Education USSR, Kazakh State Univ im S. M. Kirov, Tech Chem Chem Faculty, Chair of Catalysis and ~~Chemical Engineering~~, Min of Chem Industry USSR. Main Administration of Rubber Industry. Karaganda Plant of Synthetic Rubber. Central Sci Res Laboratory), 200 copies (KL, 25-57,109)

KAL'FUS, M. K.

67-5-5/12

AUTHORS: Vetrov, G. P., Kal'fus, M. K.

TITLE: The Practice of Remote Air Supply of an Oxygen Plant by Means of a Pipeline (Praktika zabora vozdukha kislorodnym tsekhom po truboprovodu na dal'nem rasstoyanii).

PERIODICAL: Kislorod, 1957, 10 Nr 5, pp. 24-25 (USSR)

ABSTRACT: In the factory area of the Plant for Synthetic Caoutchouc in Karaganda there are beside the technological halls two more great carbide halls as well as halls for the production of great quantities of acetylene, which serve also for its hydration to acetyldehyde. During production in these halls it is unavoidable that acetylene is constantly effused into the air. The air fractionating blocks are equipped with acetylene adsorbers. These could, however, not save the plants from an explosion in 1953. Of late, after the installation of the new pipeline, the adsorbers are not longer switched on. The remote air-supply, as a protection against air impurities, was introduced in 1949. From the working practice of the oxygen plant [illegible] sufficiently protects

The Practice of Remote Air Supply of an Oxygen Plant by Means of a Pipeline. 67-5-5/12

of the condensation-calorimetric method. In connection with the air-supply from the area of the oxygen plant the authors also investigated the wind directions and their influence on the accumulation of acetylene in the apparatus in the course of 13 days. On this occasion it turned out that the wind direction as well as the distance between the air fractionating hall and the source of impurity influence the accumulation of acetylene in the apparatus. When the pipeline for the air-supply is sufficiently distant from the production site of acetylene it can not completely avoid the entrance and the accumulation of acetylene but it can decrease its content in the apparatus. There is 1 table.

AVAILABLE: Library of Congress

1. Acetylene-Determination 2. Air-Purification

Card 2/2

KAL'FUS, M.K.

Effect of the components of the acid catalyst on the condenstaion of acetaldehyde. Trudy Inst.khim.nauk AN Kazakh. SSR 2:218-221 '58. (MIRA 12:2)

(Acetaldehyde) (Catalysts)

KALFUS, Maurycy

Testing the aging of caoutchouc by means of the hermetic viscometer. Polimery 7 no.4:136-139 Ap '62

1. Laboratorium Fizyko-Chamiczne, Zaklad Naukowo-Badawczy, Zaklady Chemiczne, Oswiecim

P/014/62/041/004/001/004
D204/D301

AUTHOR: Kalfus, Maurycy

TITLE: Accuracy and application of osmotic determinations of the molecular weights of polymers

PERIODICAL: Przemysł chemiczny, v. 41, no. 4, 1962, 173 - 176

TEXT: A review based almost exclusively on Western work. Osmometry is considered the simplest and theoretically most sound method of determining the mean molecular weight. A number of inherent errors is discussed and exemplified. 1) Errors in osmotic pressure measurement. It is thought that modern static osmometers possess sufficient accuracy. Greater difficulties may arise in connection with 2) osmotic membrane errors, due mainly to insufficient selectivity and lack of understanding of membrane action and structure. 3) Errors in extrapolating the osmotic pressure to zero concentration. The need is stressed for sufficient experimental results to indicate the method of extrapolation required. Despite the above osmometry is believed important in determining the number-average molecular weights in the range 30,000 - 500,000 and to be particularly

Card 1/2

useful in cases of well fractionated polymers. There are 2 figures and 20 references: 3 Soviet-bloc and 17 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: R.U. Bonnar, M. Dimbat, F.H. Stross, Number-Average Molecular Weights, London, 1958; P.W. Allen, Techniques of Polymer Characterization, London, 1959; F. Alvong, O. Samuelson, J. Polym., Sci, 24 353, 1957; L.H. Tung, J. Polym. Sci., 32, 477, 1958.

ASSOCIATION: Zakład naukowo-badawczy ZCh Oświęcim (Scientific Research Institute ZCh Oświęcim)

P/014/62/041/008/003/003
D204/D307

AUTHORS: Sachajdak, Jadwiga, and Kalfus, Maurycy

TITLE: A viscometer for the rapid determination of the time viscosity of 3-5 ml samples

PERIODICAL: Przemysł chemiczny, v. 41, no. 8, 1962, 464 - 466

TEXT: A description is given of a new variation of the Ubbelohde viscometer (Fig. 1). The important features are: a) The ability to dilute the polymer sample in the viscometer itself, to allow determinations at a series of concentrations, and b) the absence of taps which require laborious washing. The sample (3-5 ml from a thermostatted burette) is poured into (9), (8) is connected to (6), and the measurement is carried out. Vessel (9) is then taken off, the sample is diluted, and the measurement is repeated. 4-5 dilutions are possible. For the viscosity measurement itself, (2) is closed at the top and the test solution is squeezed out from (9), by means of a rubber bulb on (3), through (7) (int. dia. 2 mm) and through the bent measuring capillary (16 cm long, 0.47 - 0.75 mm int. dia.), up to above graduation mark in (4). Tubes (2) and (3) are then

Card 1/2

opened and the time of gall of the meniscus through the measuring capillary is measured. The determination is repeated 3-5 times. The results are in good agreement with those obtained with an Ostwald viscometer. There are 5 figures and 1 table.

ASSOCIATION: Zakład naukowo-badawczy zakładów chemicznych Oświęcim (Scientific Research Establishment, Chemical Works Oświęcim)

KALFUS, Maurycy

Single cell osmometer with a mercury seal. Przem chem 41 no.3:159-160 Mr '62.

1. Laboratorium Fizykochemiczne Zakladu Naukow- Badawczego ZCh Oswiecim.

KALFUS, Maurycy

Precision and application of the osmometric determination of the molecular weight of polymers. Przem chem 41 no.4:173-176 Ap '62.

1. Zaklad Naukowo-Badawczy Zakladow Chemicznych, Oswiecim.

SACHAJDAK, Jadwiga; KALFUS, Maurycy

A viscometer for speedy determination of the intrinsic viscosity in the 3-5 ml sample. Przem chem 41 no.8:464-466 Ag '62.

1. Zaklad Naukowo-Badawczy, Zaklady Chemiczne, Oswiecim.

KALFUS, Maurycy

New apparatus for physicochemical research in the Scientific Research Department of the Chemical Works in Oswiecim.
Przem chem 41 no.8:470 Ag '62.

KALFUS, Maurycy; KOPYTOWSKI, Jerzy; LESNIAK, Stanislaw; SKUPINSKA, Zofia

Determination of the molecular weight distribution of Ker S 3012 butadiene-styrene rubber. Polimery tworz wielk 9 no. 2: 54-57 F '64.

1. Chemical Works, Oswiecim.

KALFUS, Maurycy; SKUPINSKA, Zofia

Experiments in fractionating polymers in a preparative centrifuge. Polimery tworz wielk 9 no.11:475-476 N '64.

1. Scientific Research Laboratory of the Chemical Works, Oswiecim.

KOPYTOWSKI, Jerzy; KALFUS, Maurycy; SKUPINSKA, Zofia; LESNIAK, Stanislaw

Effect of the molecular weight distribution on certain properties of Ker S 3012 butadiene-styrene rubber and its vulcanizates. Polimery twor. wielk 10 no.2:55-59 F '65.

1. Chemical Works, Oswiecim. Submitted July 1, 1964.

KAL'FUS, M.; KOPYTOVSKI, Ye.; SKUPINSKA, Z.; LESNYAK, S.

Molecular weight distribution and physicomechanical properties of butadiene-styrene rubbers. Vysokom. soed. 7 no.9:1655-1659 S '65. (MIRA 18:10)

1. Osventsimskiy khimicheskiy kombinat, Pol'sha.

POLAND

KALFUS, M., Dr

Laboratory director, Dept. for Scientific Research, Oswiecim Chemical Laboratories (Kierownik pracowni Zakładu Naukowo-Badawczego Zakładów Chemicznych Oświęcim)

Wroclaw, Wiadomosci chemiczne, No 11, Nov 1965, pp 745-762

"Determination of molecular weights of polymers using the Archibald method."

L 06248-67 EWP(j) IJP(c) RM

ACC NR: AP6018459 (A) SOURCE CODE: GE/0004/66/000/001/0004/0008

AUTHOR: Kalfus, M. (Dr.); Graff, J. (Graduate Engineer); Strzelecka, Marta (Graduate Engineer)

ORG: Research and Development Department, Chemical Works, Ausschwitz, Poland (Forschungs und Entwicklungsabteilung der Chemischen Worke)

32 B

TITLE: Polymerization conditions and molecular weight distribution of polystyrene

SOURCE: Plaste und Kautschuk, no. 1, 1966, 4-8

TOPIC TAGS: dimerization, polymerization accelerator, polymerization inhibitor, polystyrene, molecular weight, peroxide, emulsion polymerization

ABSTRACT: The article reports on the results of an experimental investigation to obtain preliminary information on the problem of determining what deviation from standard polymerization parameters produces the variations in the parameters of the polystyrenes produced commercially. To this end every effort was made to fabricate a given and definite type of polystryrene under fixed and given polymerization conditions. The molecular weight distribution of polystyrene, prepared by peroxide initiated emulsion polymerization, was determined and it was found that of all the polymerization conditions, the only changes in the initial heating rate and the

Card 1/2

KALFUS,T.

Danger of heat damage to the lens during the Malbran-Scheie operation. Cesk. oftal. 21 no.2:85-89 Mr '65.

1. Oeni oddeleni Obvodniho ustavu narodniho zdravi v Liberci (vedouci: MUDr. T. Kalfus, CSc.).

KALFUS, T.; CECH, M.; TEMIN, K.

Leptospiral uveitis. Cas. lek. cesk. 104 no.25:687-690 25 Je'65.

1. Oeni oddeleni Obvodniho ustavu narodniho zdravi, (vedouci :MUDr. T. Kalfus, CSc); Infecni oddeleni Obvodniho ustavu narodniho zdravi (vedouci: MUDr. V. Hasek) a Mikrobiologicke oddeleni Obvodniho ustavu narodniho zdravi v Liberci (vedouci: MUDr. V. Zikmundova).

KALFUS, T.

Our experiences with Stallard's operation. Cesk. oftal. 20 no.4:311-313 Jl'64

1. Okresni oddeleni OUNZ v Liberci; vedoucis MUDr. T.Kalfus, CSc.

KNOBLOCH, Rudolf, MUDr.; KALFUS, Tomas, MUDr.

Prevention and some problems of industrial traumatology of the eye. Cesk. ofth. 12 no.1:12-20 Mar 56

1. Z ocni kliniky v Plzni, prednosta prof. MUDr R. Knobloch.
(EYE, wounds and injuries
in indust., prev.)
(WOUNDS AND INJURIES
eye, in indust., prev)
(INDUSTRIAL HYGIENE
prev. of eye inj.)

KAL'F-KALIF, S.M.; MARTYNOV, A.V.

Percentage bridge for testing resistance boxes and high-precision d.c. bridges. Izm. tekh. no.11:43-44 N '64. (MIRA 18:3)

KALGANOV, A. F., Eng.

KALGANOV, A. F., Eng.

Building

Forms of local planning of production-line construction. Biul. stroi. tekh. 9, No. 17, 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

KALGANOV, A.F.

VOROB'YEV, A.A., professor, doktor fiziko-matematicheskikh nauk; VOROB'YEV, N.I., dotsent, kandidat tekhnicheskikh nauk; TERSKINA, M.N., inzhener; VOROB'YEV, G.A., inzhener; KALYATSKIN, I.I., inzhener; TRUBITSYN, A.M., inzhener; DMITREVSKIY, V.S., inzhener; KALGANOV, A.F., inzhener; KUCHIN, V.D., inzhener.

"High voltage electrical engineering." Part I and II. A.A.Akopian and others. Reviewed by A.A.Vorob'ev and others. Elektrichestvo no.8: 91-92 Ag '54. (MLRA 7:8)

1. Kafedra tekhniki vysokikh napryazheniy i kafedra elektroizolyatsionnoy i kabel'noy tekhniki Tomskogo politekhnicheskogo instituta im. Kirova.
(Electric engineering) (Akopian, A.A.)

KALGANOV, A.F.

USSR/ Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 2/22

Authors : Vorobyev, A. A., and Kalganov, A. F.

Title : Connection between the electric strength of liquid dielectrics and their physico-chemical properties

Periodical : Zhur. fiz. khim. 29/11, 1942-1955, Nov 1955

Abstract : It was established that the electric strength of saturated liquid hydrocarbons of the homologous series decreases with the increase in the thermodynamic (isobaric) potential which characterizes the strength of the bond of a chemical compound. It was found that the electric strength of the very same hydrocarbons increases with the increase in the value characterizing the intermolecular bonds in liquids. The electric disruption observed in the liquids investigated was assumed as being connected with the prevalence of intermolecular forces. Eleven references: 9 USSR and 2 USA (1931-1955). Graph.

Institution : Polytechnic Institute, Tomsk

Submitted : January 18, 1955

KALGANOV, A. F.,
and
VOROB-YEV, G.A.

"On the Problem of Measurement of Breakdown Energy of Solid Dielectrics," pp 97-102, ill, 4 ref

Abst: For a clarification of the mechanism of breakdown of solid dielectrics, interest is devoted to determining the amount of energy which leads to a loss of dielectric strength as well as the amount of energy causing the mechanical breakdown of the dielectric due to the influence of a high-voltage field. In the article results are given of a measurement by the calorimetric method of the total energy absorbed in a pulse rupture of solid dielectrics.

SOURCE: Izvestiya Tomskogo Politekhn. In-ta im. S. M. Kirova (News of the Tomsk Polytechnic Institute imeni S. M. Kirov), Volume 91, Works of the Conference on Solid Dielectrics, Tomsk, September 1955, Tomsk, Publishing House of the Polytechnical Institute, 1956.

Sum 1854

SOV/112-58-2-1849

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1958, Nr 2, p 8 (USSR)

AUTHOR: Vorob'yev, A. A., and Kalganov, A. F.

TITLE: Association Between the Electric Strength of Gases and Liquids and Their Physical and Chemical Characteristics (O svyazi elektricheskoy prochnosti gazov i zhidkostey s ikh fiziko-khimicheskimi svoystvami)

PERIODICAL: Izv. Tomskogo politekhn. in-ta, 1956, Vol 91, pp 103-107

ABSTRACT: Electric strengths of six groups of gases (H_2, O_2, N_2, Cl_2, Br_2, I_2; HCl, HBr, HI; CH_3OH, C_2H_5OH; CH_3Cl, CH_3Br; CH_3I; C_2H_5Cl, C_2H_2Br, C_2H_5I, C_2H_{12}, C_6H_{14}) and limit normal liquid hydrocarbons are juxtaposed with their respective physical and chemical characteristics. It is shown that the electric strength of gases within one group increases with increase in intermolecular bonds which are characterized by density and polarizability of the gas and also that electric strength of gases decreases with increase in intramolecular forces. For liquid hydrocarbons, the electric strength grows with increase of intermolecular bonds that are characterized by the boiling point.

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SOV/112-58-2-1849

Association Between the Electric Strength of Gases and Liquids and Their . . . .

evaporation heat, surface tension and density. Breakdown of a liquid is a step-by-step process of destruction; first intermolecular bonds and then, as the energy grows in the discharge channel, intramolecular forces. Recommendations are given for selecting gases and liquids that have high electric strength. Bibliography: 13 items. Tomskiy politekhnich. in-t (Tomsk Polytechnic Institute), Tomsk.

Card 2/2

Kalganov, A. F.

VOROB'YEV, A.K.; KALGANOV, A.F.

Energy relations in the electrical spark-over of gases (with summary in English). Zhur.fiz.khim.31 no.7:1455-1458 Jl '57. (MIRA 10:12)

1. Politekhnicheskiy institut, Tomsk.
(Electric discharges through gases)

politekhnicheskogo instituta,

BOOK EXPLOITATION SOV/4809

69409
S/144/60/000/04/004/017
E194/E455

9,3260

AUTHOR: Kalganov, A.F., Aspirant

TITLE: A Small Self-Exciting Rotor-Type Electrostatic Generator

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1960, Nr 4, pp 20-26 (USSR)

ABSTRACT: Rotor-type electrostatic generators with rotating segments can develop voltages of hundreds of kilovolts and may be made self-exciting. Design formulae for such generators are generally inadequate and do not allow for stray capacitances. This article derives design formulae for the particular case of a cylindrical-type generator, allowing for stray capacitances. The article includes design calculations and test results on a generator rated at 75 kV and 100 microamps. An elementary schematic diagram of the generator is given in Fig 1. In the absence of stray capacitances, the characteristic equations of such a generator are given by Eq (1), (2) and (3). In practice, the output voltage is reduced by stray capacitance to earth, which may be represented by Eq (5). Then the output of the

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A Small Self-Exciting Rotor-Type Electrostatic Generator

generator is given by Eq (8). Its maximum output is given by Eq (11). The stray-capacitance factor for machines is approximately known from experience and it is shown that such strays may appreciably reduce the output, particularly at high output-voltages. In order to obtain high output-voltages, several pairs of rotor and stator plates may be used with a potentiometer arrangement to ensure the appropriate voltage distribution; the schematic diagram of a generator with three pairs of plates is shown in Fig 2. The optimum number of pairs of plates may be determined from Eq (14) and the characteristic equations of such a generator are represented by Eq (16) to (21). A numerical example of generator design is then given with a schematic cross-section in Fig 3 and a photograph of the finished generator in Fig 4. The construction is briefly described and some of the materials used are named. The generator was filled with carbon dioxide at a pressure of 22 atm. In order to determine the actual stray-capacitance factor, the generator was

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A Small Self-Exciting Rotor-Type Electrostatic Generator

tested with external excitation. The volt-ampere characteristics for various fixed values of excitation are plotted in Fig 5. The stray-capacitance factor is found from these curves to be about 0.4, which is about double the value used in the calculations. The electrical characteristics of the generator consequently differ somewhat from the calculated values. The corrected value for the maximum output is 5.8 W, compared with the actual output of 5 W at 54.5 kV and 91 microamps. It is concluded that the agreement between the designed and experimental values is satisfactory. In conclusion the author expresses his gratitude to Professor A.A.Vorob'yev, to Doctor Ye.K.Zavadovskiy and to Engineers V.P.Shcherbinin and P.P.Galinskiy. There are 5 figures and 24 references, 12 of which are Soviet, 4 German, 5 French, 2 Czech and 1 English.

ASSOCIATION: Tomskiy politekhnicheskiy institut (Tomsk Polytechnical Institute)
SUBMITTED: December 8, 1959
Card 3/3

KALGANOV, A.F., aspirant; POLOTOVSKIY, L.S., kand.tekhn.nauk, dotsent

New operating principle of a capacitative d.c. generator. Izv. vys. ucheb. zav.; elektromekh. 3 no.4:129-133 '60. (MIRA 13:9)

1. Tomskiy politekhnicheskiy institut (for Kalganov). 2. Leningradskaya Krasnoznamennaya voyenno-vozdushnaya inshenernaya akademiya.
(Electric generators)

20705

S/120/61/000/001/043/062
E194/E184

26.2351

AUTHORS: Kalganov, A.F., and Shcherbinin, V.P.

TITLE: A Self-Exciting Rotor Type Electrostatic Generator With Output Voltage of Given Polarity

PERIODICAL: Pribory i tekhnika eksperimenta, 1961,No.1,pp.142-144

TEXT: Small high-voltage sources with outputs of up to a few watts may be built as electrostatic generators with cylindrical transporter-conductors. The authors, assisted by the graduate of Tomskiy politekhnicheskiy institut (Tomsk Polytechnical Institute) P.P. Galinskiy, have designed, built and investigated a generator of this kind for 75 kV, 100 microamps. Fig.1 shows a section through the generator. The generator rotor is a solid of rotation, 14, with two systems of metallic plates, main and auxiliary each consisting of four plates. The rotor turns about the centre line 15 and is retained by bearings on the flanges 1 and 9 which are made of insulating material. The generator stator consists of four metal plates rigidly connected to the same flanges. The assembled generator is contained within a steel frame 3 and operates in an atmosphere of compressed gas.

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S/120/61/000/001/043/062
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A Self-Exciting Rotor Type Electrostatic Generator With Output Voltage of Given Polarity

The generator operates as follows. If an accidental charge appears, for example, on stator plate 4, a charge of opposite sign is induced on the transporter 6 of the auxiliary rotor. A charge of the same sign as the exciting charge is drawn to the earthed casing by the brush 8 through the commutator plate 7. After half a turn of the rotor the transporter 6 occupies the position of the transporter 11 and a charge passes through the brush 10 to a stator plate 12. This induces a charge of opposite sign on the transporter 13 of the main rotor which at this instant is connected through the brush 7 and the commutator 16 with the earthed frame. The charge induced on the transporter 13, the polarity of which is the same as that on plate 4 of the stator, is transferred to the brush 2 which is electrically connected to the plate 4. The charge on this latter plate is thus increased and this increases the charges induced on the additional plates of the rotor and transmitted by plate 12 of the stator which still further increases the charge on plate 4 of the stator and so on

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A Self-Exciting Rotor Type Electrostatic Generator With Output Voltage of Given Polarity

until an equilibrium condition is set up. In general, a generator with m-plates on the main rotor may be designed from the following formula (from the condition s of obtaining the maximum power):

$$P_m = m^2 nC(1/2\ Ed)^2(2 + \alpha m)^{-1},$$

$$I = 1/2\ mnCEd,$$

$$U_2 = 1/2\ Edm/(2 + \alpha m),$$

$$U_1 = Ed(1 + \alpha m)/(2 + \alpha m),$$

where P_m is the maximum power, I and U_2 are the output current and voltage, U_1 is the field voltage, E is the working field intensity in the gap between the stator and rotor, d is the gap length, n is the rotor speed, C is the maximum capacitance between the transporter of the main rotor and the main exciting plate, α is a stray capacitance coefficient equal to

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A Self-Exciting Rotor Type Electrostatic Generator With Output Voltage of Given Polarity

the ratio of the stray capacitance of the transporter to the maximum capacitance C. The optimum number of rotor plates is determined from the empirical formula

$$m = (0.15 - 0.2)\ D/d$$

where D is the rotor diameter. From the given values of current, voltage, stress and speed it is possible to determine the necessary maximum capacitance C and to design the transporters of the main rotor. The dimensions of the auxiliary rotor are selected experimentally to make up current leakage over the insulation of the main exciting plates of the stator. In the example built, the length of transporters of the main rotor was 9 cm. All the plates were made of duralumin. The gap between rotor and stator and plate thickness was 3.5 mm. All insulating parts were made of transparent plastic. Other constructional details are given. The rotor was driven by a motor type ДШС -2 (DShS-2), of variable speed up to 3000 rpm. The generator

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A Self-Exciting Rotor Type Electrostatic Generator With Output Voltage of Given Polarity

together with the motor are located in a steel cylindrical casing with an internal diameter of 99 mm and length of 0.5 metres. The cylinder was filled with carbon dioxide at a pressure of 22 atm. Tests of the generator with external excitation, with the additional rotor cutout, showed that the stray capacitance factor $\alpha = 0.4$. At a speed of 3000 rpm the generator operating with self-excitation develops a maximum output of 5 W at a voltage of 55 kV and a current of 92 microamperes. E = 278 kV/cm. Thus there was good agreement between the calculated and experimental results. The generator output pulsates at a frequency of 4 n. The main disadvantage of the self-exciting electrostatic generator with transporter conductors is that the polarity of the output voltage cannot be predetermined because the accidental charges may be of either polarity. A simple circuit based on diodes was used to overcome this defect (see Fig.4). Diodes were connected in the earthing circuits of the brushes as shown in Fig.4a when it was necessary to obtain a voltage of negative polarity. In this case,

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E194/E184

A Self-Exciting Rotor Type Electrostatic Generator With Output Voltage of Given Polarity

of charges induced on the rotor transporters only those of definite sign can be passed to earth. By use of the change-over switch shown in circuit Fig.46 the polarity of the output voltage can easily be changed. This circuit for obtaining a given polarity can be simplified by using a common diode connected in the brush circuit of the main rotor and both types of circuit have been tried.
There are 4 figures and 5 references: 1 Soviet and 4 non-Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernykh issledovaniy, elektroniki i avtomatiki TPI (Scientific Research Institute of Nuclear Research, Electronics and Automatics, TPI)

SUBMITTED: December 2, 1959

39822
S/057/62/032/008/011/015
B104/B102

26.2351

AUTHORS: Felici, N. J., and Kalganov, A. F.

TITLE: Measuring the short-circuit current of an electrostatic rotor generator with dielectric transporter operating in various gases and gas mixtures

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 8, 1962, 1001 - 1011

TEXT: The short-circuit currents of an electrostatic rotor generator with dielectric transporter were measured in various gases (O, N, CO_2, and mixtures of these) as functions of the exciting voltage, of the pressure, and of the gas mixture compositions. The short-circuit current I_{sh} in H_2 expressed as a function of U_1 (Fig. 1) rises steeply at first and flattens out at higher U_1 values. These experimental curves differ considerably from the theoretical. The short-circuit current in N_2 as a function of U_1 is entirely different from that in H_2. At medium pressures, up to 50 at,

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Measuring the short-circuit...

$I_{sh} = f(U_1)$ has two inflection points, between which it depends linearly on U_1. The amperage decreases as the nitrogen pressure increases. At pressures of less than 6 at the amperage in hydrogen is higher than in nitrogen whatever the exciting voltage. At higher pressures the amperage in nitrogen is higher if an increased exciting voltage is applied. In CO_2 the threshold voltage rises rapidly with increasing pressure, while the amperage decreases. Only at small pressures is the amperage in CO_2 higher than in H_2 or N_2. Mixtures of N_2 and CO_2 have better electric characteristics than the pure gases. In most cases the current in H_2-N_2 mixtures is higher than in pure H_2. The use of an H_2-N_2 mixture can reduce the threshold exciting voltage in an electrostatic generator, whereby the output voltage can be increased. There are 10 figures and 1 table.

ASSOCIATION: Laboratory of Electrostatics and Physics of Metals of the Scientific Research Institute imeni Fourier of the Grenoble University, France

KALGANOV, Aleksandr Fedorovich; PATSEVICH, Vasiliy Viktorovich, aspirant

Maximum power rating of electrostatic generators. Izv. vys. ucheb. zav.; elektromekh. 6 no.8:917-921 '63. (MIRA 16:9)

1. Starshiy inzhener Nauchno-issledovatel'skogo instituta pri Tomskom politekhnicheskom institute (for Kalganov). 2. Kafedra teoreticheskikh osnov elektrotekhniki Tomskogo politekhnicheskogo instituta (for Patsevich).

ACC NR: AT7003986 SOURCE CODE: UR/0000/66/000/000/0005/0010

AUTHOR: Vorob'yev, A. A.; Kalganov, A. F.; Lukutin, V. A.; Patsevich, V. V.

ORG: Tomsk Polytechnic Institute (Tomskiy politekhnicheskiy institut)

TITLE: Theory and technology of electrostatic machines

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 5-10

TOPIC TAGS: electrostatic generator, particle acceleration, electronic test equipment

ABSTRACT: The phenomena transpiring in the electrostatic generator and their analogy to the phenomena in the electromagnetic generator are briefly reviewed (e.g., D. Gignoux, "Electrostatic generators for space application", 102-ème Colloque du SNRC, Grenoble, 1960). Formulas for maximum power of disk-type and cascaded-conveyer generators show that the maximum specific power (per unit volume or weight) is inversely proportional to the stator-rotor gap; the load voltage and current are independent of the gap. Small gaps are preferable because they mean smaller spurious capacitance, and the available power becomes closer to its theoretical value. The latter statement was proved theoretically and experimentally, on a single-disk generator, at the NII of Nuclear Physics, Tomsk Polytechnic Institute. An electrostatic generator with parallel-connected poles and vacuum insulation seems to be most promising. Orig. art. has: 8 formulas.

Card 1/1 SUB CODE: 09 / SUBM DATE: 06Mar66 / ORIG REF: 003 / OTH REF: 003

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000620020020-9"

ACC NR: AT7003989 SOURCE CODE: UR/0000/66/000/000/0022/0026

AUTHOR: Kalganov, A. F.; Patsevich, V. V.; Sivkov, Yu. N.

ORG: Scientific Research Institute of Nuclear Physics, Electronics, and Automation, Tomsk Polytechnic Institute (NII yadernoy fiziki, elektroniki i avtomatiki pri Tomskom politekhnicheskom institute)

TITLE: Effect of conveyer capacitance to ground on the operation of bar-type electrostatic generators

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 22-26

TOPIC TAGS: electrostatic generator, particle acceleration, electronic test equipment

ABSTRACT: In a companion report (see Abstract AT7003988), only two direct capacitances were taken into account. However, in small-size bar-type electrostatic generators, direct capacitances of charge conveyers to ground (shaft, housing) may become considerable; they are denoted by C_4 in the inner-rotor (left) and outer-rotor (right) generator designs (see figure below). By applying the same electrostatic-equation method to two numerical examples (number of conveyers, $2m = 14$ and $2m = 22$), these conclusions are reached: (1) The inter-conveyer capacitance C_3 is responsible for a natural charge polarity reversal which augments the load current; (2) The

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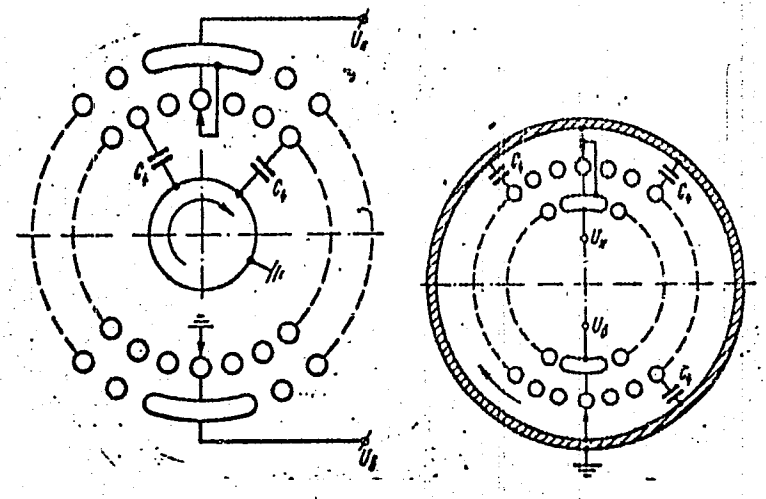
ACC NR:

conveyer capacitance to ground abruptly reduces generator voltage and current; the effect of this capacitance on generator voltage is by one order of magnitude stronger than the opposite effect of inter-conveyer capacitance; (3) Introduction of a second stator, which shields the rotor from all grounded parts, is particularly efficient in improving the generator operation. Orig. art. has: 4 figures and 9 formulas.



SUB CODE: 09 / SUBM DATE: 06Mar66 / ORIG REF: 002

Card 2/2

BIBIN, Leonid Pavlovich; VARFOLOMEYEV, F.G.; KALGANOV, D.I.; OSTANOVSKIY, T.S.; PUSHKIN, V.S.; TRAKHTENBERG, G.L.; MAKSIMOVICH, A.G., red.; SUDAK, D.M., tekhn.red.

[School and office supplies, musical instruments, photographic supplies, radio equipment, athletic goods, hunting and fishing equipment, toys] Tovary shkol'no-pis'mennye, kantseliarskie, muzykal'nye, foto, radio, sportivnye, okhotnich'i, rybolovnye, igrushki. Moskva, Gos. izd-vo torg. lit-ry, 1958. 328 p. (MIRA 11:4)
(Manufactures)

ZHILKIN, V.B.; Prinimali uchastiye: ITEL'SON, G.M.; KALGANOV, D.K.; KADOBNOV, V.D.; OLEYNIKOV, I.S.; SMIRNOV, V.I.; BLYUMENFEL'D, M.K.; KONYASHIN, Ye.I.; LASKIN, R.L.

Experimental use of titanium in hydrometallurgy. Titan i ego splavy no.8:273-278 '62. (MIRA 16:1)
(Hydrometallurgy--Equipment and supplies)
(Titanium--Corrosion)

KALGANOV, G.N., inzh., red.; UVAROVA, A.F., tekhn. red.

[Clockworks; theory, design, and materials] Chasovye mekhanizmy; teoriia, raschety i materialy. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 129 p. (MIRA 11:12)

1. Nauchno-issledovatel'skiy institut chasovoy promyshlennosti.
(Clockmaking and watchmaking)

KLEYN, A.L.; PASTUKHOV, A.I.; LEKONTSEV, A.N.; KALGANOV, G.S.; KHARITONOV, Yu.A.

Improved technology for the conversion of Kachkanar vanadium pig iron. Stal' 20 no. 12:1081-1086 D '60. (MIRA 13:12)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov i Chusovskoy metallurgicheskiy zavod.
(Kachkanar--Cast iron--Metallurgy)

BOGOMOLOV, G.V., prof.; KALGANOV, M.I.

Geological and hydrogeological elements in prospecting for iron ore in White Russia. Dokl. AN BSSR 3 no.1:20-25 Ja '59. (MIRA 12:3)
(White Russia--Iron ores) (Prospecting)

KALGANOV, M.I.

BOLDYREV, G.P.; VOGMAN, D.A.; NOVOKHATSKIY, I.P.; VERK, D.L.; DYUGAYEV, I.V.; KAVUN, V.M.; KURENKO, A.A.; UZHKOV, M.R.; ARSEN'YEV, S.Ya.; YEGORKIN, A.N.; KORSAKOV, P.F.; KUZ'MIN, V.N.; STRELETS, B.A.; PATKOVSKIY, A.B.; BOLESLAVSKAYA, B.M.; INDENBOM, D.B.; FINKEL'SHTEYN, A.S.; SHAPIRO, I.S.; LAPIN, L.Yu.. Prinimali uchastiye: NEVSKAYA, G.I.; FEDOSEYEV, V.A.; KASPILOVSKIY, Ya.B., ZERNOVA, K.V.. BARDIN, I.P., akademik, otv.red.; SATPAYEV, K.I., akademik, nauchnyy red.; STRUMILIN, akademik, nauchnyy red.; ANTIPOV, M.I., nauchnyy red.; BELYANCHIKOV, K.P., nauchnyy red.; YEROFEYEV, B.N., nauchnyy red.; KALGANOV, M.I., nauchnyy red.; SAMARIN, A.M., nauchnyy red.; SLADZYUK, P.Ye., nauchnyy red.; KHLEBNIKOV, V.B., nauchnyy red.; STREYS, N.A., nauchnyy red.; BANKVITSER, A.L., red.izd-va; POLYAKOVA, T.V., tekhn.red.

[Iron ore deposits in central Kazakhstan and ways for their utilization] Zhelezorudnye mestorozhdeniia TSentral'nogo Kazakhstana i puti ikh ispol'zovaniia. Otvetstvennyi red. I.P.Bardin. Moskva, 1960. 556 p. (MIRA 13:4)

1. Akademiya nauk SSSR. Mezhduvedomstvennaya postoyannaya komissiya po zhelezu. 2. Gosudarstvennyy institut po proyektirovaniyu gornykh predpriyatiy zhelezorudnoy i margantsevoy promyshlennosti i promyshlennosti nemetallicheskikh iskopayemykh (Giproruda) (for Boldyrev, Vogman, Arsen'yev, Yegorkin, Korsakov, Kuz'min, Strelets,

(Continued on next card)

BOLDYREV, G.P.--(continued). Card 2.

3. Institut geologicheskikh nauk AN Kazakhskoy SSR (for Novokhatskiy). 4. TSentral'no-Kazakhstanskoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr SSSR (for Verk, Dyugayev, Kavun, Kurenko, Uzbekov). 5. Nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki poleznykh iskopayemykh (Mikhanobr) (for Patkovskiy). 6. Gosudarstvennyy institut proyektirovaniya metallurg.zavodov (Gipromez) (for Boleslavskaya, Indenbom, Finkel'shteyn, Nevskaya, Fedoseyev, Karpilovskiy). 7. Mezhduvedomstvennaya postoyannaya komissiya po zhelezu AN SSSR (for Shapiro, Zernova, Kalganov). 8. Gosplan SSSR (for Lapin).
(Kazakhstan--Iron ores)

KALGANOV, M.I., otv.red.; TERPOGOSOV, Z.A., otv.red.; SHLEPOV, V.K., red.izd-va; KASHINA, P.S., tekhn.red.

[Studies of the geological station of the Kursk Magnetic Anomaly] Raboty gornogeologicheskoi stantsii na Kurskoi magnitnoi anomalii. Moskva, 1960. 282 p. (MIRA 13:7)

1. Akademiya nauk SSSR. Institut gornogo dela.
(Kursk Magnetic Anomaly--Iron ores)

KALGANOV, Mikhail Ivanovich, geolog, laureat Leninskoy premii; KOSSOVSKIY, Moisey Abramovich, zhurnalist; LYUBIMOV, I.M., red.; KONOVALYUK, I.K., mladshiy red.; VILENSKAYA, E.N., tekhn.red.

[Kursk Magnetic Anomaly] Kurskaia magnitnaia anomaliia. Moskva, Gos.izd-vo geogr.lit-ry, 1960. 70 p. (MIRA 13:7)
(Kursk Magnetic Anomaly)

SURIN, Vladimir Konstantinovich, inzh.-geolog; KALGANOV, M.I., Laureat Leninskoy i Stalinskoy premiy, kand. geologo-mineralog. nauk, red.; SOLDATOV, I., otv. za vypusk; NEMYTOV, V., tekhn. red.

[Geology andminerals of Orel Province] Geologicheskoe stroenie i poleznye iskopaemye Orlovskoi oblasti. Pod red. M.I.Kalganova. Orel, Orlovskoe knizhnoe izd-vo, 1960. 162 p. (MIRA 14:12)
(Orel Province--Geology, Economic)

RAKHMANOV, Vitaliy Pavlovich; KALGANOV, M.I., kand.geol.-min.nauk, otv.red.; POPOVA, T.S., red.izd-va; TIKHOMIROVA, S.G., tekhn. red.; DOROKHINA, I.N., tekhn. red.

[Rich iron ores of the weathering surface in the Kursk Magnetic Anomaly as revealed by the studies of the Mikhaylovka] Bogatye zheleznye rudy kory vyvetrivaniia Kurskoi magnitnoi anomalii; na primere Mikhailovskogo mestorozhdeniia. Moskva, Izd-vo Akad.nauk, 1962. 151 p. (MIRA 15:7)

(Kursk Magnetic Anomaly--Iron ores)
(Kursk Magnetic Anomaly--Weathering)

YANITSKIY, Aleksandr, Leonidovich, starshiy nauchnyy sotrudnik; KALGANOV, M.I., otv.red.; KASHINA, P.S., tekhn.red.

[Cligocene oolite iron ores in northern Turgay and their genesis] Oligotsenovye oolitovye zheleznye rudy Severnogo Turgaia i ikh genezis. Moskva, Izd-vo Akad. nauk SSSR, 1960. 218 p. (Akademiia nauk SSSR. Institut geologii rudnykh mestorozhdenii, petrografii, mineralogii i geokhimii. Trudy, no.37) (MIRA 15:10)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR (for Yanitskiy).
(Turgay Gates--Iron ores) (Turgay Gates--Oolite)

ANTON'YEV, Aleksandr Vasil'yevich; KULGANOV, M.I., kand. geol.-min. nauk, otv. red.

[Engineering geology study of the natural plastic and rupture deformation of rocks] Inzhenerno-geologicheskoe izuchenie estestvennykh plasticheskikh i razryvnykh deformatsii gornykh porod. Moskva, Nauka, 1964. 149 p. (MIRA 17:10)

ARTEM'YEV, Aleksandr Vasil'yevich; KALGANOV, M.I., kand.geol.-min. nauk, otv. red.

[Engineering geological study of the natural plastic and rupture deformations of rocks] Inzhenerno-geologicheskoe izuchenie estestvennykh plasticheskikh i razryvnykh deformatsii gornykh porod. Moskva, Nauka, 1964. 149 p. (MIRA 17:11)

ISAYENKO, Mariya Prokof'yevna; KALGANOV, M.I., nauchn. red.

[Key to the texture and structure of ores] Opredelitel' tekstur i struktur rud. Moskva, Nedra, 1964. 154 p. (MIRA 18:1)

YUDIN, V.I.; TARTAKOVSKAYA, R.Z.; KRUSHCHANSKAYA, D.Z.; FEDORISHCHEV, T.I.; RYABININ, N.A.; KALGANOV, M.N.; Prinimala uchastiye BEREZINA, S.S.

Production of pine tar for the needs of the rubber industry based on the utilization of waste resins from the Verkhnyaya Siniachikha Wood Chemical Combine. Kauch.i rez. 21 no.8:49-51 Ag '62. (MIRA 16:5)

1. Sverdlovskiy zavod rezino-tekhnicheskikh izdeliy i Sverdlovskiy nauchno-issledovatel'skiy institut pererabotki drevesiny (for all except Berezina).

(Verkhnyaya Seniachikha--Wood-using industries--By-products)
(Wood tar)

FEDORISHCHEV, T.I.; RYABININ, N.A.; KALGANOV, M.N.

Tar softener for rubber. Gidroliz. i lesokhim.prom. 16 no.1:15-16 '63. (MIRA 16:2)

1. Sverdlovskiy nauchno-issledovatel'skiy institut pererabotki drevesiny.

(Wood tar) (Rubber)

KHAMANDIKOV, Ye.; POLONSKIY, G.; MISHNEV, G.; KALGANOV, P.

Regulate the accounting and control operations of financing and issuing long-term credit. Den.i kred. 18 no.6:51-59 Je '60. (MIRA 13:6)

1. Kreditnyy inspektor Kalininskoy oblastnoy kontory Gosbanka (for Khamandikov). 2. Glavnyy bukhgalter Kabardino-Balkarskoy respublikanskoy kontory Gosbanka (for Mishnev). 3. Revizor Smolenskoy oblastnoy kontory Gosbanka (for Kalganov).
(Credit)

KALGANOV, S.A., inzh.

Using calcium chloride in controlling dust and consolidating road pavements. Avt.dor. 23 no.6:24 Je '60. (MIRA 13:6)

(Roads, Gravel)

MARKOV, A.; KALGANOV, V.; PROTSENKO, N.; STRONGIN, V.L., red.; SOKOLOVA, N.I., tekhn.red.

[Storage of fruits and vegetables in natural waters] Khranenie plodov i ovoshchei v vodoemakh. Moskva, Gos. izd-vo torgovoi lit-ry, 1957. 39 p. (MIRA 11:4)
(Vegetables--Storage) (Fruit--Storage)

KALG[illegible] (Alma-Ata)

Propeller torque and travel controllability. Gramd. av. 22 no.8:79 Ag '65. (MIRA 18:8)

AUTHOR: Kalganov, V.A. 6-58-5-10/17

TITLE: On the Question of the Organization of Grinding Work in Cartographical Plants (K voprosu ob organizatsii shlifoval'nykh rabot na kartograficheskikh fabrikakh)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 5, pp. 54-56 (USSR)

ABSTRACT: In the grinding shops of the departments for the preparation of printing blocks in cartographical institutes and in the editor's office for the composition of geographical maps photo-measurements of time were carried out in 1957 during the grinding of aluminum plates for the production of printing blocks. Photo-measurements of time offer the possibility of studying the technological side of the grinding process at various cartographical institutes with great accuracy, to find the most economical method of operation, and to pass on experience gained. In the case of the mode of operation described, from three to four machine tools can be operated by one man. Only if it becomes necessary to operate five and more machines, a second man is necessary. If work is properly arranged, one machine tool after another is prepared and put into operation at the beginning of a shift. In some cases, as e.g. at

Card 1/2

On the Question of the Organization of Grinding Work in Cartographical Plants

6-58-5-10/17

Minsk, all machines are first prepared and then put into operation. This method causes waiting intervals. In other cases (Tbilisi) pumice stone is still being used instead of porcelain balls. At many institutes instructions concerning grinding are not followed, and the working places of grinders are not properly supplied

1. Grinders--Operation 2. Photography—Applications
3. Industrial plants—Organization 4. Mapping

Card 2/2

KALGANOV, V.A.

Establishing labor norms for offset brigades. Geod. i kart. no.7:49-55 Jl '60. (MIRA 13:9)
(Map printing--Production standards)

KAIGANOV, V.A.

Economic efficiency of the engraving method. Geod.i kart. no.7:54-61 Jl '62. (MIRA 15:8)
(Map printing)

L 28500-66 EWT(m)/EWP(e) WH/WW

ACC NR: AP6007341 SOURCE CODE: UR/0292/66/000/002/0045/0047

AUTHOR: Golubkov, G. Ye. (Candidate of technical sciences); Kalganova, V. A. (Engineer) 52 B

ORG: none

TITLE: Mica and mica-base materials at high temperatures

SOURCE: Elektrotekhnika, no. 2, 1966, 45-47

TOPIC TAGS: mica, mica product, high temperature material, thermal stress

ABSTRACT: Experimental values of the electric strength of mica and mica products are compared with the values obtained from calculations based on the elementary theory of thermal breakdown. Commercial 0.08—0.1-mm thick specimens of mica, micanite, mica mat, mica-glass cloth, and micaplast were tested for breakdown at 50 cps. It was found that, up to 300C, the breakdown voltage of all above materials practically does not depend on temperature; beyond 300C, the breakdown voltage falls off rapidly. Experimental and theoretical curves $\lg U_{br} = f(1/T)$ are presented which show that, within a 500—600C temperature range, a purely thermal breakdown takes place. Orig. art. has: 4 figures and 1 formula.

SUB CODE: 09, 11 / SUBM DATE: none / ORIG REF: 003

Card 1/1 CC UDC: 621.317.333.6

ZHINKIN, G.N. (Leningrad); KOGAN, S.A. (Leningrad); KALGANOV, V.F. (Leningrad); BOLDYREV, V.N. (Leningrad)

Practices in the electrosilicatization of soils in Leningrad. Osn.,fund. i mekh.grun. 7 no.1:5-6 '65.

(MIRA 18:4)

SIDELEV, N.P., inzh.; KALGANOV, V.I.

Economic efficiency of metal deposition processes. Sbor. st. NIITIAZHMASHa Uralmashzavoda no. 3:92-98 '64. (MIRA 17:7)

KALGANOVA, I. I.

USSR/ Chemistry Reaction processes

Card : 1/1 Pub. 151 - 20/33

Authors : Kostsova, A. G., Shvetsova, L. S., and Kalganova, I. I.

Title : Investigation of alkane-sulfo acids. Part 12.- Reaction of beta-chloroethanesulfo chloride with aromatic amines

Periodical : Zhur. ob. khim. 24/8, 1397 - 1402, August 1954

Abstract : The reaction between beta-chloroethanesulfo chloride and some aromatic amines (aniline,p-toluidine,p-anisidine, p-phenetidine,p-nitroaniline and alpha-aminopyridine), was investigated. A new method for the derivation of beta-chloroethanesulfo chloride from dichloroethane, is described. The reaction products obtained are listed. The effect of temperature on the yields of the reaction products, is explained. Nine references: 5 USA and 4 USSR (1845 - 1953). Table.

Institution : State University, Voronezh

Submitted : February 12, 1954

GOL'DGAMMER, K.K., doktor med. nauk (Moskva, 1-ya Cheremushkinskaya ul., d.24/25, kv.100); KALGANOVA, I.N.

Thrombosis and embolism of the mesenteric vessels. Vest. khir. 89 no.10:15-18 O '62. (MIRA 17:10)

1. Iz 6-y Moskovskoy gorodskoy klinicheskoy bol'nitsy (glavnyy vrach - N.S. Shevyakov).

KALGANOVA, K.

Adviser, teacher and friend. Sov. profsoiuzy 16 no.18:35-37 S '60.

1. Zaveduyushchiy kul'turno-massovym otdelom Moskovskogo oblastnogo soveta profsoyuzov.

(Factory libraries)

TAUBKIN, S., kand. tekhn. nauk; KALOYANOVA, M., inzh.

The SK-L fireproof paint made of silicates. Poch. delo 4 no. 7:11 Jl '58. (MIRA 11:8)

(Paint, Fireproof)

KALGANOVA, O. P.

USSR/Chemistry - Metallurgy, Refining of Metals 11 Jan 53

"The Effect of Temperature on the Regularity of Joint Separation of Ions During Electrolytic Refining of Metals," A. L. Rotinyan, V. L. Kheyfets, Ye. S. Kozin, O. P. Kalganova

DAN SSSR, Vol 88, No 2, pp 301-304

The effect of temp on the contamination of Ni cathodes with admixts of Cu, Zn, Pb, Co, and Mn was studied under various conditions. In the first and second cases the rate of sepn of admixt on the cathode is limited by diffusion, and the rate of sepn of the base metal, by diffusion or delayed discharge. In the third case, the rate of sepn of the admixt and the base metal is detd by delayed discharge. In the fourth case, the rate of sepn of admixt is limited by delayed discahrge, and that of the base metal, by diffusion. Presented by Acad A. N. Frumkin 11 Nov 52.

PA 255T19

S/136/60/000/010/010/010
E073/E535

AUTHOR: Kalganova, O.P.

TITLE: Purification of Nickel Solutions from Copper in a Fluidized Nickel Powder Bed

PERIODICAL: Tsvetnyye metally, 1960, No.10, pp.84-86

TEXT: Experiments were carried out in 1957 at the Severonikel' Combine of purifying nickel solutions from copper in a fluidized nickel powder bed. The nickel powder is fluidized by means of an ascending flow of the solution which is fed in from the bottom. In the experiments powder was used which was obtained by reducing nickel protoxide with small coke having an activity of 55%. The powder contained 84.1% Ni and 4.43% Cu and the bulk of the powder had grain sizes between 0.5 and 0.074 mm. The required speed of the solution to obtain fluidizing was measured in a glass column of 30 mm diameter fitted with a porous bottom of an area corresponding to 5.6% of the cross-section of the column. The critical speed of the solution to obtain fluidization was found to have a linear dependence on the average particle size. In the experiments a speed of 4 to 6 times the critical one was used. Experiments have shown that an equal mixing intensity of the powder with a

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S/136/60/000/010/010/010
E073/E535

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nonuniform grain size can be achieved by using apparatus with a cross-section varying along the vertical. In the semi-industrial plant, which had four chambers of differing cross-section, the solution was circulated at a minimum rate of 4 m^3/hour and a maximum rate of 6.5 m^3/hour. A nickel solution containing 400 to 600 mg/litre of copper, pH = 2.3 to 2.7, was subjected to purification; the fluidized layer was 4 to 5 m high and consisted of nickel powder. The solution was purified down to 1-4 mg/litre Cu with a double consumption of nickel powder of an activity of 55%. The utilization of the nickel during the cementation process was 60 to 65% per stage. A better utilization of the nickel powder can be achieved by using a counter flow process in two cementators. In the first one the solution with a high copper concentration is driven and also the cement copper from the second cementator in which the final purification of the electrolyte is effected by fresh nickel powder. Following these tests, an experimental industrial set-up was built (Fig.2). It consists of a metallic

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E073/E535

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welded housing which is lined with acid resisting brick and has a removable cone (Fig.3). The inside of the cone is lined with rubber and two tangentially placed pipes are fitted to enable tangential feeding of the solution into the cementator. The cementator contains three holes with rubberized bushings into which valves are fitted enabling periodic removal of cement copper from the various strata of the fluidized layer. It is proposed to develop pneumatic control of the equipment. The installation was tested with a solution containing 59 to 62 g/litre Ni, 0.02 to 0.04 g/litre Fe and 0.40 to 0.56 g/litre Cu and pH = 2.5 to 3. To create this fluidized layer during starting up the powder was fed in for two days at a rate of 120 to 160 kg/hour, whereby the speed was lower by a factor of 1.5 than the normal speed. After producing a fluidized layer, at a feeding speed of 200 kg/hour, and a circulation of the solution at the average rate of 160 m^3/hour, 1.2 to 4.0 mg/litre Cu remained. About 20 to 25% of fine cemented copper was carried away from the cementator by the cementator solution. It

Card 3/4

S/136/60/000/010/010/010
E073/E535

Purification of Nickel Solutions from Copper in a Fluidized Nickel Powder Bed

was found that two cementators with an approximate volume of 25 m^3 can substitute 5 to 6 mixers of a total volume of 80 to 60 m^3 each or 16 to 17 percolators applied to percolation purifying in nickel works. This cementation process in a fluidized layer is also applicable for purifying zinc electrolyte from copper and cadmium, for the precipitation of gold from cyanide solutions and for other processes. There are 4 figures.

ASSOCIATION: Severonickel' Combine

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S/149/61/000/005/002/008
A006/A101

AUTHORS: Lipin, B. V., Kalganova, O. P.

TITLE: Investigating the process of anode dissolving of raw nickel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, no.5 1961, 81-89)

TEXT: At the "Severonikel'" Combine the authors studied the effect of the composition, the structure and the preparation method of raw nickel anodes on indices of anodic dissolving. They employed the method of the statistical processing of over 200 laboratory tests made with anodes of various composition, which had been prepared under different casting and cooling conditions. The samples were produced in the refining shop, melted in laboratory furnaces, and obtained by electrolysis. The electrolytical conditions were: $t = 60^{\circ}C$, $D_a = 200$ amp/m^2; the electrolyte composition was 54.6 g/l Ni; 40 g/l Na_2SO_4; 25 g/l Cl^-; 25 g/l H_3BO_3; pH of the inflowing solution was 4.4; circulation 15 l/hour per 1 m^2 of the cathode. These electrolytic conditions were the same for all the experiments. The results obtained, which are illustrated by a series of graphs, reveal that the optimum composition of the anodes is assured

by the following content of admixtures: not over 4 - 4.5% copper: 0.5 - 0.8% sulfur; 0.2% carbon; 0.1% silicon, 0.1 - 0.15% oxygen. The cooling of anodes should be rapid and conducted under the following conditions: after the metal has been cast into the mold it should be slowly cooled during five minutes, and then sprayed with water. The metal refining conditions should ensure the production of slightly oxidized metal with a minimum carbon content, without using deoxidizers. The described melting and refining conditions and the recommended composition of the metal ensure the production of porous anodes, thus improving all the indices of electrochemical dissolving. The article was recommended for publication by the Department of Metallurgy of Heavy Non-ferrous Metals at the North-Caucasian Institute of Mining and Metallurgy. There are 7 figures and 6 Soviet-bloc references.

ASSOCIATIONS: Severokavkazskiy gornometallurgicheskiy institut (North-Caucasian Institute of Mining and Metallurgy); Kombinat "Severonikel'" (Severonickel Combine)

SUBMITTED: May 30, 1961

Card 2/2

KHEYFETS, V.L.; ROTINYAN, A.L.; KALGANOVA, O.P.; LEVENFISH, P.G.

Rules of a simultaneous electrochemical discharge of a basic metal and admixtures, the depolarization effect taken into account. Zhur. prikl.khim. 34 no.7:1519-1528 Jl '61. (MIRA 14:7)
(Electroplating) (Polarization (Electricity))

KALGANOVA, O.P.

Investigating membranes of ion-exchange materials in the elektrolytic refining of nickel. TSvet. met. 38 no. 12:40-44 D '65 (MIRA 19:1)

KALGANOVA, R. I. Cand. Med. Sci.

Dissertation: "Conditions of Certain Regulatory-Protective Systems of the Female Organism (Reticuloendothelium and Vegetative Nervous Systems) During the Second Half of Pregnancy, Delivery and the Early Postnatal Period." Inst of Obstetrics and Gynecology, Acad. Med. Sci, USSR, 4 Dec 47.

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

KALGANOVA, R.I., kandidat meditsinskikh nauk; STEPANOV, L.G., direktor.

Clinical considerations on the narrow pelvis. Akush. i gin. no.3:33-37 My-Je '53. (MLRA 6:7)

1. Institut akusherstva i ginekologii Ministerstva zdravookhraneniya SSSR.
(Pelvis--Abnormities and deformities)

KALGANOVA, R.I.; GRASHCHENKOVA, Z.P.

Conduct of the placental stage. Akush. i gin. no.5:35-41 S-O '54.
(MLRA 7:12)

1. Iz Instituta akusherstva i ginekologii (dir. L.G.Stepanov, nauchnyy rukovoditel' prof. P.A.Beloshapko) Ministerstva zdravookhraneniya SSSR.

(LABOR,
third stage, conduction)

KALGANOVA, R.A., kandidat meditsinskikh nauk

Effect of psychoprophylaxis of pain in labor as related to various methods of preparation. Akush. i gin. no.6:31-36 N-D '54. (MIRA 8:2)

1. Iz Instituta akusherstva i ginekologii (dir. L.G.Stepanov) nauchnyy rukovoditel' - prof. P.A.Beloshapko) Ministerstva zdravookhraneniya.

(LABOR
painless, psychoprophylactic methods, evaluation)

KALGANOVA, R.I., starshiy nauchnyy sotrudnik

High upright position of the head [with summary in English]. Akush. i gin. 34 no.3:8-10 My-Je '58. (MIRA 11:6)

1. Iz rodil'nogo otdeleniya (zav. - starshiy nauchnyy sotrudnik R.I.Kalganova) Instituta akusherstva i ginekologii (dir. - dotsent L.G.Stepanov) Ministerstva zdravookhraneniya RSFSR.
(LABOR, PRESENTATION
breech, with high upright position of head (Rus))

KALGANOVA, R. I., Doc Med Sci (diss) -- "A clinically narrow pelvis". Moscow, 1960. 27 pp (First Moscow Order of Lenin Med Inst im I. M. Sechenov), 250 copies (KL, No 14, 1960, 136)

KALGANOVA, R.I. [Kalhanova, R.L.], starshiy nauchnyy sotrudnik

Concerning Vasten's sign. Ped., akush. i gin. 22 no.3:58-60 '60. (MIRA 14:4)

1. Nauchno-issledovatel'skiy institut akusherstva i ginekologii Ministerstva okhrany zdorov'ya RSFSR (direktor - doktor med.nauk O.V.Makeyeva) [O.V.Makieieva]).
(OBSTETRICS)

KALGANOVA, R.I.

Labor in a clinically narrow pelvis. Vop.okh.mat.i det. 5 no.4: 72-76 Jl-Ag '60. (MIRA 13:7)

1. Iz Nauchno-issledovatel'skogo instituta akushertstva i ginekologii Ministerstva zdravookhraneniya RSFSR (dir. - prof. O.B. Makeyeva).

(LABOR, COMPLICATED)

KALGANOVA, R.I.

Transversely contracted pelvis. Sov.med. 24 no.3:81-84 Mr '60.
(MIRA 14:3)

1. Iz Nauchno-issledovatel'skogo instituta akusherstva i ginekologii Ministerstva zdravookhraneniya RSFSR (dir. - dotsent L.G.Stepanov).
(PELVIS--ABNORMITIES AND DEFORMITIES)