DOMBROVSKAYA, T.N.; DUBININA, Ye.M.; SPIVAK, G.V.

Electron optical method for the study of local emissions of oxide cathodes. Vest.Mosk.un. 9 no.10:25-32 O '54. (MLRA 8:2)

1. Kafedra elektronnoy optiki.
(Cathode ray tubes) (Electron optics)

SOV/109-3-8-15/18

AUTHORS: Spivak, G.V., Dubinina, Ye.M., Sbitnikova, I.S., Pryamkova, I.A. and Vinogradov, D.P.

TITLE: Development of the Methods of Electron Microscopy for the Observation of the Microgeometry and the Emission Centres of Thermionic Cathodes (Razvitiye metodov elektronnoy mikroskopii dlya nablyudeniya mikrogeometrii i tsentrov emissii termokatodov)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 8, pp 1077 - 1083 + 1 plate (USSR)

ABSTRACT: The article reports the results of the observations of the electron-microscopy pictures of the distribution of the emission in a number of thermionic cathodes such as an oxide cathode, an L-cathode or an impregnated cathode. The observations were carried out at magnifications ranging from 150 - 4 000. During the investigations, it was found that the space charge has a significant effect on the formation of electron-microscopic images, in particular, when employing the secondary-electron emission technique. The space charge produces a decelerating field whose effect can be interpreted by means of two space-charge lenses. The first type of lens is a macro-

Card1/4 lens and is produced by the charge in that part of the

cathode from which the emission current is not conducted away. The second lens is a micro-lens and its effect becomes significant in the individual emission centres. The effect of the space charge is illustrated by the photographs of Figure 1. Photograph 1a was obtained at a current density (at the screen) of 4×10^{-8} A/cm^2 while Photograph 1b was taken at a density of 1.4×10^{-7} A/cm^2; in both cases, the anode voltage was 10 kV. Photograph 1c was done at the current density of 1.4×10^{-7} A/cm^2 but the cathode was removed from the focusing electrode by a distance of 75 μ. From these pictures, it follows that the space charge results in a change of the focus length of the system. It was also found during the investigations that the contrast in the photographs is dependent on the microgeometry of the investigated surfaces. The contrast is further dependent on the difference in the secondary emission coefficients of various parts of the cathode and on the

Development of the Methods of Electron Microscopy for the Observation of the Microgeometry and the Emission Centres of Thermionic Cathodes

local electric fields at the cathode surface. The investigation of the relationship between the microgeomtry of a cathode and its emission pattern (see picture) was effected by means of the EEM75-type microscope which was fitted with a special adaptor unit. The pictures obtained by this means are shown in the photographs of Figures 2, 3 and 4. The photographs of Figure 2 give the patterns of an oxide cathode having comparatively large non-uniformities at the surface; Photograph 2a refers to a cold cathode, while 2b is for a heated, activated cathode. Figure 3a shows the secondary-emission pattern of an L-cathode, while Figure 3b gives the thermal-emission pattern of the same cathode. Figure 4a shows the pattern of a pressed cathode, taken by means of the secondary emission. Figure 4c shows the same cathode but at an increased temperature, while 4b corresponds tothe temperature at which the thermal emission commences. Figure 4d represents the thermal-emission pattern of the pressed cathode. All the investigations were carried out at a pressure of 10^{-5} mmHg. For the purpose of obtaining magnifications of the order of 2 000

Development of the Methods of Electron Microscopy for the Observation of the Microgeometry and the Emission Centres of Thermionic Cathodes

up to 4 000, a stroboscopic, electrostatic electron microscope (type ESM-50) was used. By means of this instrument, the pulse emission picture of an L-cathode was obtained. The resulting photograph is shown in Figure 5. The authors express their gratitude to M.A. Bruk for valuable advice. There are 5 figures and 8 references, 7 of which are Soviet and 1 French.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova (Physics Department, Moscow State University imeni M.V. Lomonosov)

SUBMITTED: January 29, 1958

Card 4/4

1. Electron microscopy 2. Cathodes (Electron tubes)--Physical properties 3. Thermionic emission--Analysis 4. Electron microscopes--Performance

SOV/120-58-5-20/32

AUTHORS: Sbitnikova, I.S., Dubinina, Ye.M., Spivak, G.V., Fetisov, D.V.

TITLE: An Attachment to the EEM-75 Emission Electron Microscope for the Visualisation of Surfaces, Using Secondary Electron Emission (Pristavka k emissionnomu elektronnomu mikroskopu EEM-75 dlya vizualizatsii poverkhnostey pri pomoshchi vtorichnoy elektronnoy emissii)

PERIODICAL: Pribory i tekhnika eksperimenta, 1958, Nr 5, pp 78-82 and 2 plates (USSR)

ABSTRACT: A description is given of an attachment to the EEM-75 microscope. Using secondary and thermionic emission, both the micro-geometry and the emission pattern of thermal cathodes may be visualised. This means that it is possible to compare the distribution of centres of electron emission with micro-geometry of active thermal cathodes. The surface of thermal cathodes is irradiated by an electron beam from an electron gun which directs the beam at an angle to the surface. The angle between the optical axes of the electron gun and the microscope may be varied between 85 and 45°. This

Card 1/3

An Attachment to the EEM-75 Emission Electron Microscope for the Visualisation of Surfaces, Using Secondary Electron Emission

adjustment may be used to choose the best conditions of irradiation corresponding to the best contrast of the image for different depths within the surface microstructure. A sectional drawing through the entire instrument is shown in Fig.1, in which 1 is the electron gun, 2 is a mechanism for adjusting the angle of the irradiation by the primary beam, 3, 4, are centering devices for the beam, 5 is a table for illuminating diaphragms, 6, 7 are observation windows, 8 is a bellows, 9 is a mechanism for adjusting the angle, 10 is the base, 11 is the cathode, 12 is the focussing electrode, 13 is the anode, 14 is the anode cap, and 15 is a ceramic insulator. The results obtained with this attachment are shown in Figs.3-7. Fig.3 shows the image of an oxide cathode with secondary (a) and thermionic (b) emission. A similar pair of images of an L-cathode is shown in Fig.4 while Fig.5 shows an image of

An Attachment to the EEM-75 Emission Electron Microscope for the Visualisation of Surfaces, Using Secondary Electron Emission

this cathode with the secondary and thermionic emission images combined. There are 7 figures and 13 references; 9 of the references are Soviet, 1 French and 3 German.

ASSOCIATION: Fizicheskiy fakul'tet MGU (Dept. of Physics, Moscow State University)

SUBMITTED: October 10, 1957.

Card 3/3

AUTHORS: Dubinina, Ye. M., Spivak, G. V., Pryamkova, I. A. 307/48-23-6-23/28

TITLE: The Obtaining of Images in the Pulse Principle in the Emission Microscope With High Resolving Power (O poluchenii izobrazheniy v impul'snom rezhime v emissionnom mikroskope vysokogo razresheniya)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 6, pp 762-764 (USSR)

ABSTRACT: In the introduction to this paper it is shown that by investigating pulsed emission in an emission microscope, it is possible to investigate the conditions on active cathodes in pulsed operation. Images of the emitting cathode in normal operation are compared with those in pulsed operation. The impulse increase exercises considerable influence upon resolving power. The work described was carried out by means of the industrial electrostatic microscope ESM-50, which has an immersion object with 150-fold enlargement. The block scheme of the current supply of the instrument is shown (Fig 1) and discussed. As examples, two pictures (Fig 2) of the cathode in steady and in pulsed operation are shown; the pictures were

Card 1/2

not found to differ. A further investigation carried out on an L-cathode also showed no essential differences. Finally, the possibility of using pulsed operation when investigating the domain structure in ferromagnetics and ferroelectrics is shown and a stroboscopic arrangement is described by means of which images of the domain structure with higher resolving power were attained. There are 3 figures and 3 Soviet references.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gos. universitet im. M. V. Lomonosova (Physics Department of Moscow State University imeni M. V. Lomonosov)

DUBININA, YE. M.

PHASE I BOOK EXPLOITATION SOV/4705

Radiofizicheskaya elektronika (Radiophysical Electronics)[Moscow]Izd-vo Mosk. univ., 1960. 561 p. Errata slip inserted. 15,000 copies printed.

Ed.: N. A. Kaptsov, Professor; Tech. Ed.: M. S. Yermakov.

PURPOSE: This book has been approved by the Ministry of Higher and Secondary Special Education, USSR, as a textbook for schools of higher education. It can be also used by scientific personnel working in the fields of radio engineering and electronics.

COVERAGE: The book presents problems of vacuum, cathode, semiconductor, and gas electronics, on which is based the operation of vacuum-tube and gas-filled devices, including microwave devices and also apparatus and instruments used in electron optics. It is assumed that the readers of this book havea preliminary preparation in the fundamentals of nuclear physics, quantum mechanics, statistical physics and electrodynamics. The book was written by a group of lecturers of the Physics Division of Moscow State University.

Card 1/10

Chapters I, II, and III were written by Professor N. A. Kaptsov; Ch. IV. by Professor S. D. Gvozdover and Docent V. M. Lopukhin; Ch. V. by Professor G. V. Spivak and Assistant Ye. M. Dubinina; Ch. VII. by Docent A. A. Zaytsev and Professor N. A. Kaptsov; Ch. VIII. by Professor N. A. Kaptsov and Assistant G. S. Solntsev. The authors thank Professor S. Yu. Luk'yanov and Docent M.D. Karasev , who reviewed the book. There are 76 references: 68 Soviet (including 14 translations), 6 English, and 2 German.

TABLE OF CONTENTS:

26,2312
9,3120 (1003,1137,1140)

S/109/60/005/008/010/024
E140/E355

AUTHORS: Dubinina, Ye.M. and Pyt'yeva, M.B.

TITLE: Certain Properties of Hollow-cathode Electron Emission

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol. 5, No. 8, pp. 1261 - 1266

TEXT: The work constitutes a study of the hollow cathode first described by Babcock et al (Ref. 1) in 1953. At cathode temperatures above 800 °C the current density in the opening reaches 100 A/cm^2. Certain anomalies are observed in the functioning of the cathode: at potentials of several volts the current increases more rapidly than follows from the 3/2 law; at higher potentials the current continues to increase instead of tending to saturation; at any potential the current depends strongly on temperature; the beam obtained from a hollow cathode has a peculiar current density distribution over the section. The behaviour of the volt-ampere characteristics of the cathode is explained as follows: the anode current from a hollow cathode consists of two components of

Card 1/ 1

S/109/60/005/008/010/024
E140/E355

Certain Properties of Hollow-cathode Electron Emission

differing origins, one of which increases rapidly with voltage and is saturated at 5 - 10 V, while the other increases slowly in this range but does not show saturation and continues to increase with potential. The source of the first component is an active layer located at the edge of the opening and arising during cathode operation. The field intensity at this point is much greater than elsewhere and increases rapidly with anode potential up to saturation. The second component is due to electrons drawn from the cavity by the electric field. With increase of potential the field penetrates further and further into the cavity beyond the opening. The hollow-cathode configuration is such that for arbitrarily large anode potentials a potential minimum, due to space charge, exists in the cavity and therefore the second component does not saturate.

The experiments confirm Poole's hypothesis (Ref. 6) that the film about the opening is deposited by condensation of material due to a temperature drop towards the opening The cathode used

Card 2/

S/109/60/005/008/010/024
E140/E355

Certain Properties of Hollow-cathode Electron Emission

(Fig. 4) gave a temperature drop towards the opening of 70 - 100 °C, which could be varied by shifting the heater (2, Fig. 4). In addition, the first component depended substantially on the character of the side-wall and end-face coatings of the cathode, which had to be fairly porous. After 100 hrs activation the cathode characteristics were stabilized. The activated cathode was not sensitive to ion bombardment. Effective trans-conductances of 2×10^{-5} $A/V^{3/2}$ were obtained at current densities of 12 A/cm^2. There are 6 figures and 6 non-Soviet references.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova, Kafedra elektroniki (Physic Division of Moscow State University imeni M.V. Lomonosov, Department of Electronics)

S/109/60/005/008/010/024
E140/E355

Certain Properties of Hollow-cathode Electron Emission

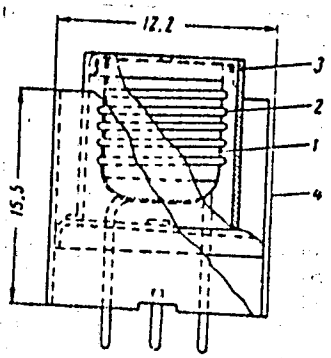


Рис. 4

SUBMITTED: December 21, 1959
Card 4/4

PYT'YEVA, M.B.; DUBININA, Ye.M.

Thermionic emission from a hollow cathode. Izv.AN SSSR. Ser. fiz. 26 no.11:1343-1348 N '62. (MIRA 15:12)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.
(Thermionic emission) (Cathodes)

PYT'YEVA, M.B.; DUBININA, Ye.M.; KUZ'MINA, M.P.

Distribution of potential along the axis of a hollow oxide-coated cathode and its current control. Radiotekh. i elektron. 8 no.10: 1787-1790 O '63. (MIRA 16:10)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova, kafedra elektroniki.

PYT'YEVA, M.B.; SPIVAK, G.V.; DUBININA, Ye.M.

High-vacuum ion source. Zhur. tekh. fiz. 39 no.1:142-145 Ja '64.
(MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, fizicheskiy fakul'tet.

L 3826-66 EWT(m)/ETC/EWG(m)/T DS

ACCESSION NR: AP5017665 UR/0109/65/010/007/1295/1299

621.385.735.01

AUTHOR: Shishkin, B. B.; Dubinina, Ye. M.; Michurina, K. A.

TITLE: Electron-optical investigation of oxide-coated cathodes

SOURCE: Radiotekhnika i elektronika, v. 10, no. 7, 1965, 1295-1299

TOPIC TAGS: oxide coated cathode

ABSTRACT: The results are described of an investigation of oxide-coated receiving-amplifier tubes by means of a 10^{-6} -torr, 30-kv, 170 x-enlargement electron emission microscope. Three groups of 10000-hr-in-service tubes were tested: (1) those with totally lost emission; (2) those whose emission current dropped by 30—50% after 5000 hrs; (3) those which withstood the life test. It was found that the cathodes have specific emission patterns with lighter stripes 5—25-micron wide and up to several-hundred-micron long. These stripes correspond to cracks or crazes on the cathode surface. The latter, as a rule,

Card 1/2

L 3826-66

ACCESSION NR: AP5017665

4

arose at early tube-treatment stages (after exhaustion). The cracks emit as well as or better than the brightest spots on the cathode. Good integral emission is associated with either (a) a network of cracks on the cathode or (b) fine-emission structure crazes. The latter ensure a longer tube life. "In conclusion, the authors wish to thank workers of the Moscow Electric-Lamp Factory L. M. Lipkovskiy and Yu. F. Zarutskiy for lending the tubes and for useful discussions." Orig. art. has: 4 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 20Apr64 ENCL: 00 SUB CODE: EC

NO REF SOV: 007 OTHER: 008

Card 2/2

L 38200-66 EWT(1)
ACC NR: AP6029724 SOURCE CODE: UR/0109/66/011/005/0966/0967

AUTHOR: Zernov, D. V.; Timofeyev, P. V.; Fursov, V. S.; Migulin, V. V.; Spivak, G. V.; Spasskiy, B. I.; Nilender, R. A.; Grozdover, S. D.; Shemayev, A. M.; Solntsev, G. S.; Kuzovnikov, A. A.; Zaytsev, A. A.; Vasil'yeva, M. Ya.; Mitsuk, V. Ye.; Dubinina, Ye. M.; Zheludeva, G. A.

ORG: none

TITLE: Nikolay Aleksandrovich Kaptsov

SOURCE: Radiotekhnika i elektronika, v. 11, no. 5, 1966, 966-967

TOPIC TAGS: electric engineering personnel, magnetron, klystron, corona discharge, gas conduction, gas discharge plasma

ABSTRACT: N. A. Kaptsov passed away 10 February 1966. He was a student of the famous P. N. Lebedev, and performed many fundamental investigations in the development of modern electronics. He was the creator and leader of the chair of electronics of Moscow State University. He developed the concept of phase grouping of electrons. His ideas are the basis for the development of the magnetron and klystron. He developed the concept explaining the phenomenon of corona discharge. He also developed ideas connected with formation of gas conduction and phenomena in a gaseous-discharge plasma. Kaptsov served for years as the head of the physical laboratory and consultant to the Moscow Electron Tube Plant. He was the author of numerous books, including "Physical Phenomena in Vacuum and in Gases, which was translated into foreign languages; he also created and taught numerous electronics courses. [JPRS: 36,501]

SUB CODE: 05, 09 / SUBM DATE: none

L 36344-66 EWT(m)/T/EWP(e)/EWP(t)/ETI IJP(c) AT/DS/JD/JG/WH

ACC NR: AP6015789 (A,N) SOURCE CODE: UR/0048/66/030/005/0873/0876

AUTHOR: Shishkin, B. B.; Dubinina, Ye. M.; Michurina, K. A.

ORG: Physics Department, Moscow State University im. M.V.Lomonosov (Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta)

TITLE: Electron-optical investigation of oxide-coated cathodes. Part 2. /Report, Twelfth All-Union Conference on the Physical Bases of Cathode Electronics held in Leningrad 22-26 October 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 5, 1966, 873-876 and inserts facing p. 873.

TOPIC TAGS: thermionic emission, electron tube cathode, alkaline earth oxide, electron emission microscope/ EEM-75 electron emission microscope

ABSTRACT: The oxide-coated cathodes of 6S receiving pentodes that had been subjected to a 10 000 hour life test were examined with an EEM-75 electron emission microscope. The cathodes were exposed to the atmosphere during transfer to the microscope. In the microscope the cathodes were outgassed for 15-20 minutes at 10^{-6} mm Hg and were activated for 10 minutes at 1200° K. The cathodes fell into three groups. The cathodes of the first group had many emitting centers on their surfaces and practically no cracks. These cathodes performed well in the life test. The surfaces of the cathodes of the second group were covered with networks of wide (up to 30 microns) cracks which emitted well. These cathodes performed poorly in the life test. The cathodes of the third

Card 1/2

group exhibited spots from 50 to 100 microns in diameter in which the emission was one or two orders of magnitude below normal. The tubes containing these cathodes with poisoned areas did not survive the life test owing to reduced mutual conductance. The authors (Radiotekhnika i elektronika, 10, 1295 (1965)) have previously found that cracks in oxide-coated cathodes can be formed in the early processing during manufacture, and in particular 1) by fastening the cathode tightly to the mica, and 2) by heating the cathode above 1500° K. Reasons for the formation of cracks as well as the possibility of their appearance during normal operation of the cathode are discussed. It is concluded that cathodes intended for long-life or low-noise applications should be free of cracks and that sample control with the electron emission microscope after each stage of the manufacturing process should be instituted. The authors thank L.M.Lipkovskiy and Yu.F.Zarutskiy for providing the investigated cathodes. Orig. art. has: 4 figures.

SUB CODE: 20, 09/ SUBM DATE: 00/ ORIG REF: 004/ OTH REF: 001

DUBININA, Ye.V.

Mites of the genus Histiophorus (Listrophoridae), the parasites of beavers. Paraz. sbor. 22:111-152 '64.

(MIRA 18:2)

1. Kafedra zoologii bespozvonochnykh Leningradskogo gosudarstvennogo universiteta i Zoologicheskiy institut AN SSSR.

DUBININA, Ye.V.

Life cycle of mites of the genus Histophorus (Sacroptiformes; Listorophoridae). Zool. zhur. 43 no.4:534-548 '64
(MIRA 17:8)

1. Zoological Institute, Academy of Sciences of U.S.S.R., Leningrad and Chair of Invertebrate Zoology, Leningrad State University.

DUBININA, Ye.Ye.

Activity of hexokinase in the tissues of rabbits in various stages of fever. Vop. med. khim. 11 no.6:61-63 N-D '65.
(MIRA 18:12)

1. Kafedra biokhimii I Leningradskogo meditsinskogo instituta imeni I.P. Pavlova. Submitted July 28, 1964.

MEDVEDEV, I.; DUBININA, Yu.

Evaluation of steel workers' production and wages. Sots.trud. 4 no.6:117-119 Je '59. (MIRA 12:8)

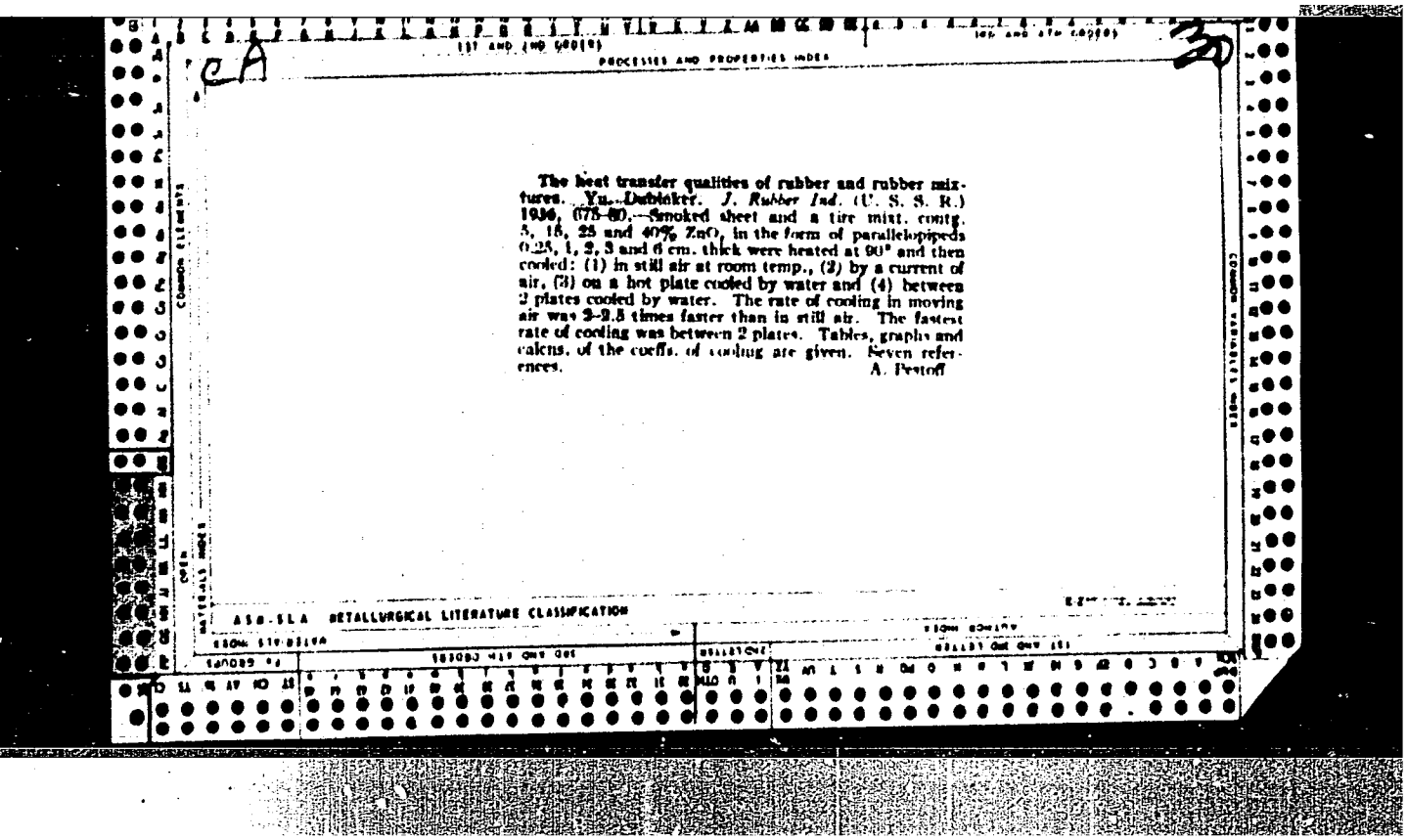
1. Zaveduyushchiy kafedroy organizatsii i planirovaniya proizvodstva. Dnepropetrovskogo metallurgicheskogo instituta (for Medvedev).
2. Sekretar' partorganizatsii martenovskogo tsekha zavoda im. Dzerzhinskogo (for Dubina).
(Dneprodzerzhinsk--Productivity accounting)

PROCESSES AND PROPERTIES INDEX

Investigation of the thermal conductivity of rubber. L. Frumkin and Yu. Dubinker. *J. Rubber Ind.* (U. S. S. R.) 1936, 122-40, 333. A special app. similar in general features to that of Barnett (cf. C. A. 20, 1300) is described, with photograph and drawings. The thermal cond. of a rubber mixt. increased with increase in the proportion of fillers, and this relation gave a curve, instead of the straight line obtained by B. In agreement with B., the thermal cond. of a vulcanizate did not change with the state of cure. The thermal cond. of synthetic rubber was higher than that of natural rubber. Six references.

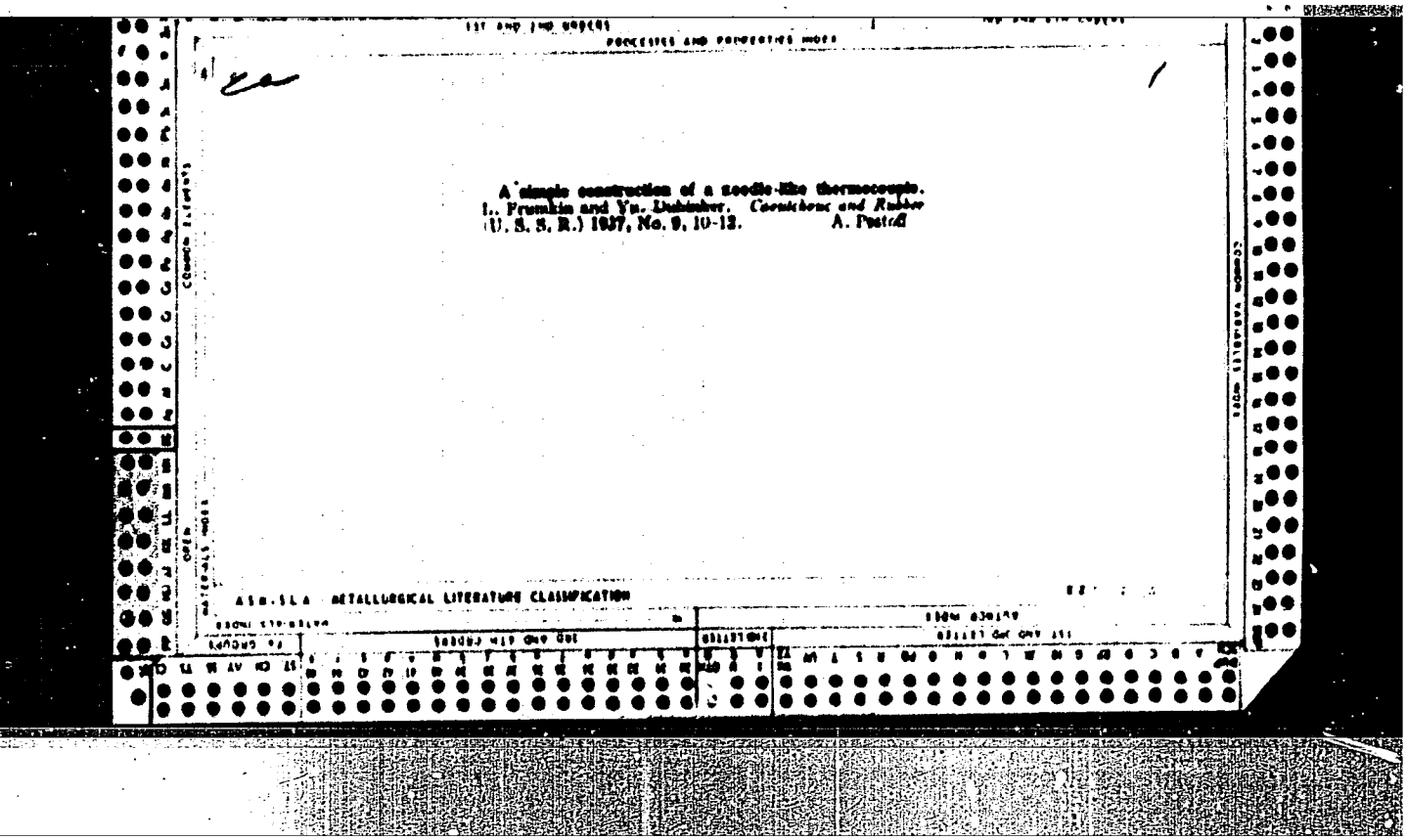
A. Pestoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

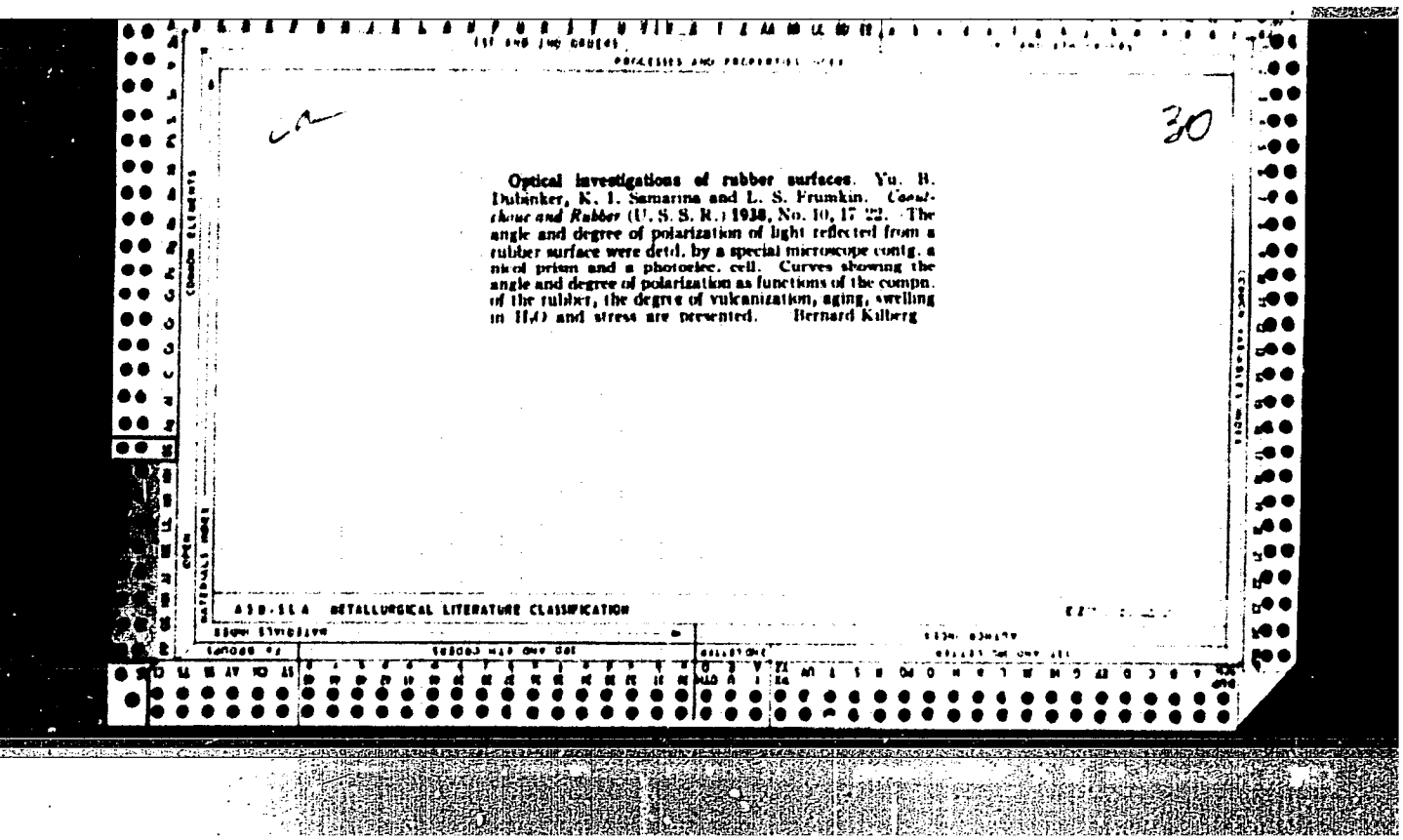


The heat transfer qualities of rubber and rubber mixtures. Yu. Dubinker. *J. Rubber Ind.* (U. S. S. R.) 1936, (75–80).—Smoked sheet and a tire mixt. contg. 5, 15, 25 and 40% ZnO, in the form of parallelopipeds 0.25, 1, 2, 3 and 6 cm. thick were heated at 90° and then cooled: (1) in still air at room temp., (2) by a current of air, (3) on a hot plate cooled by water and (4) between 2 plates cooled by water. The rate of cooling in moving air was 2–2.5 times faster than in still air. The fastest rate of cooling was between 2 plates. Tables, graphs and calcns. of the coeffs. of cooling are given. Seven references.

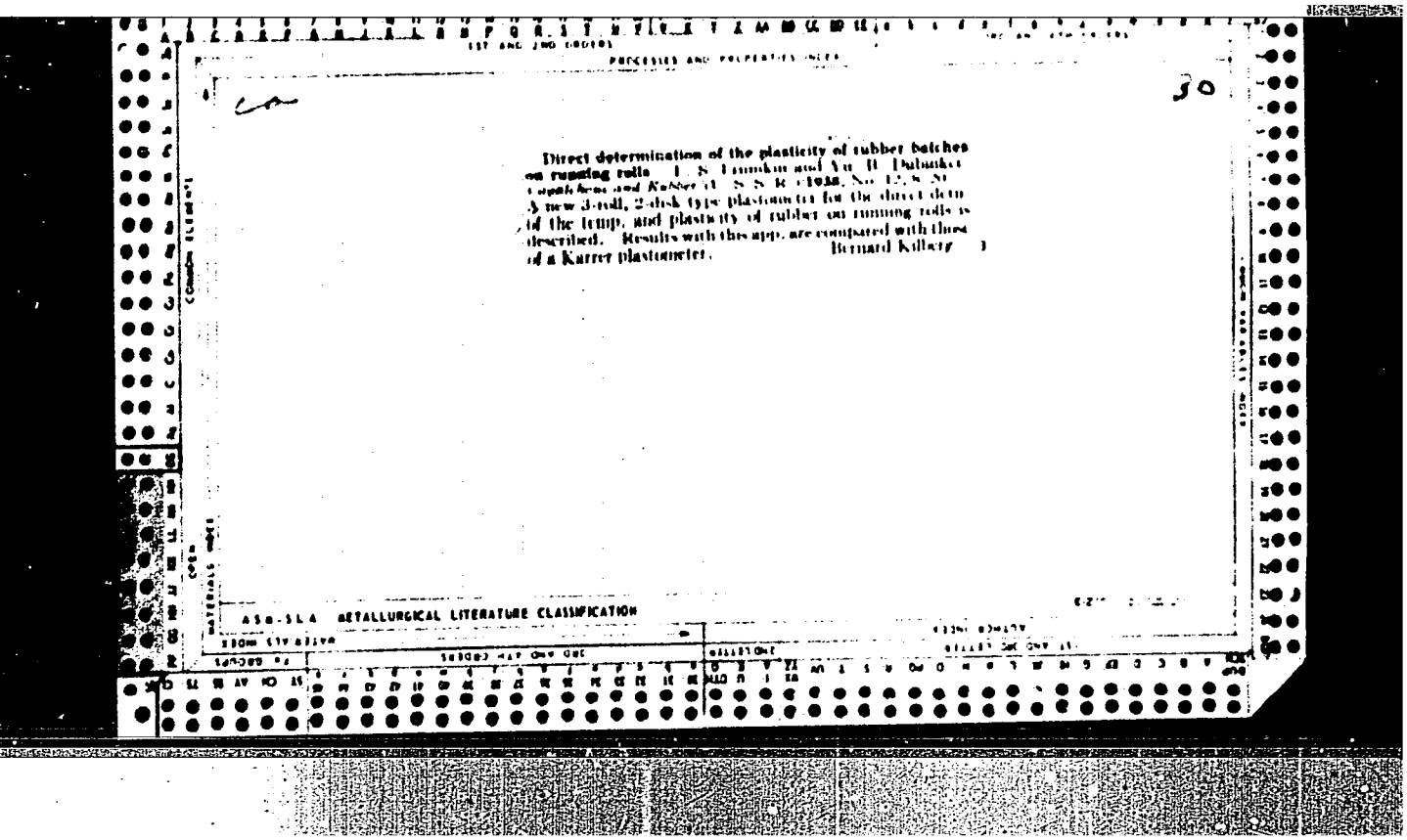
A. Pestoff



A simple construction of a needle-like thermocouple.
I. Frumkin and Yu. Dubinsher. *Caoutchouc and Rubber* (U. S. S. R.) 1937, No. 9, 10-12. A. Postrid



Optical investigations of rubber surfaces. Yu. B. Dubinker, K. I. Samarina and L. S. Frumkin. *Caoutchouc and Rubber* (U. S. S. R.) **1938**, No. 10, 17–22. The angle and degree of polarization of light reflected from a rubber surface were detd. by a special microscope contg. a nicol prism and a photoelec. cell. Curves showing the angle and degree of polarization as functions of the compn. of the rubber, the degree of vulcanization, aging, swelling in H_2O and stress are presented. Bernard Kilberg



Direct determination of the plasticity of rubber batches on running rolls

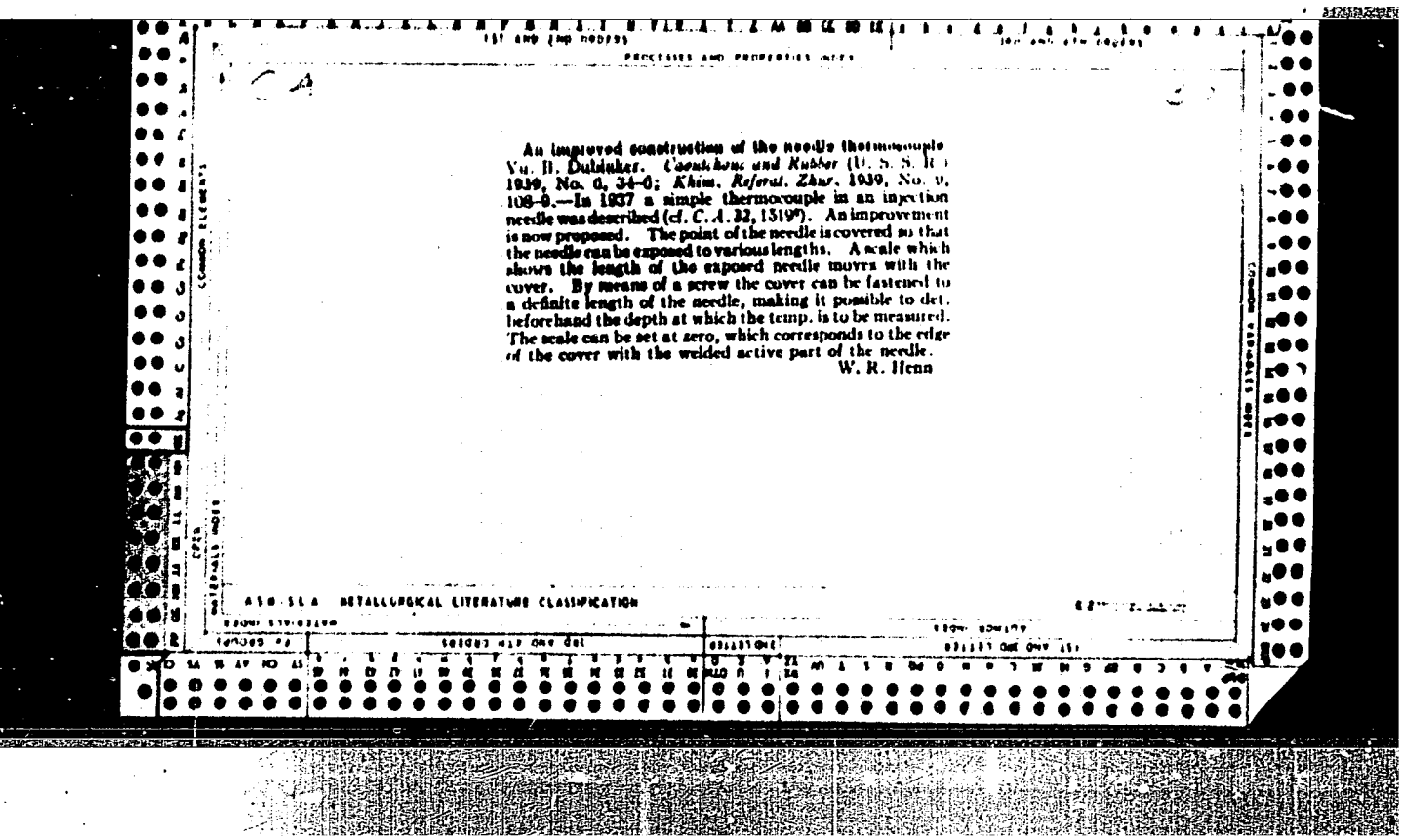
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

BC

B-2-10

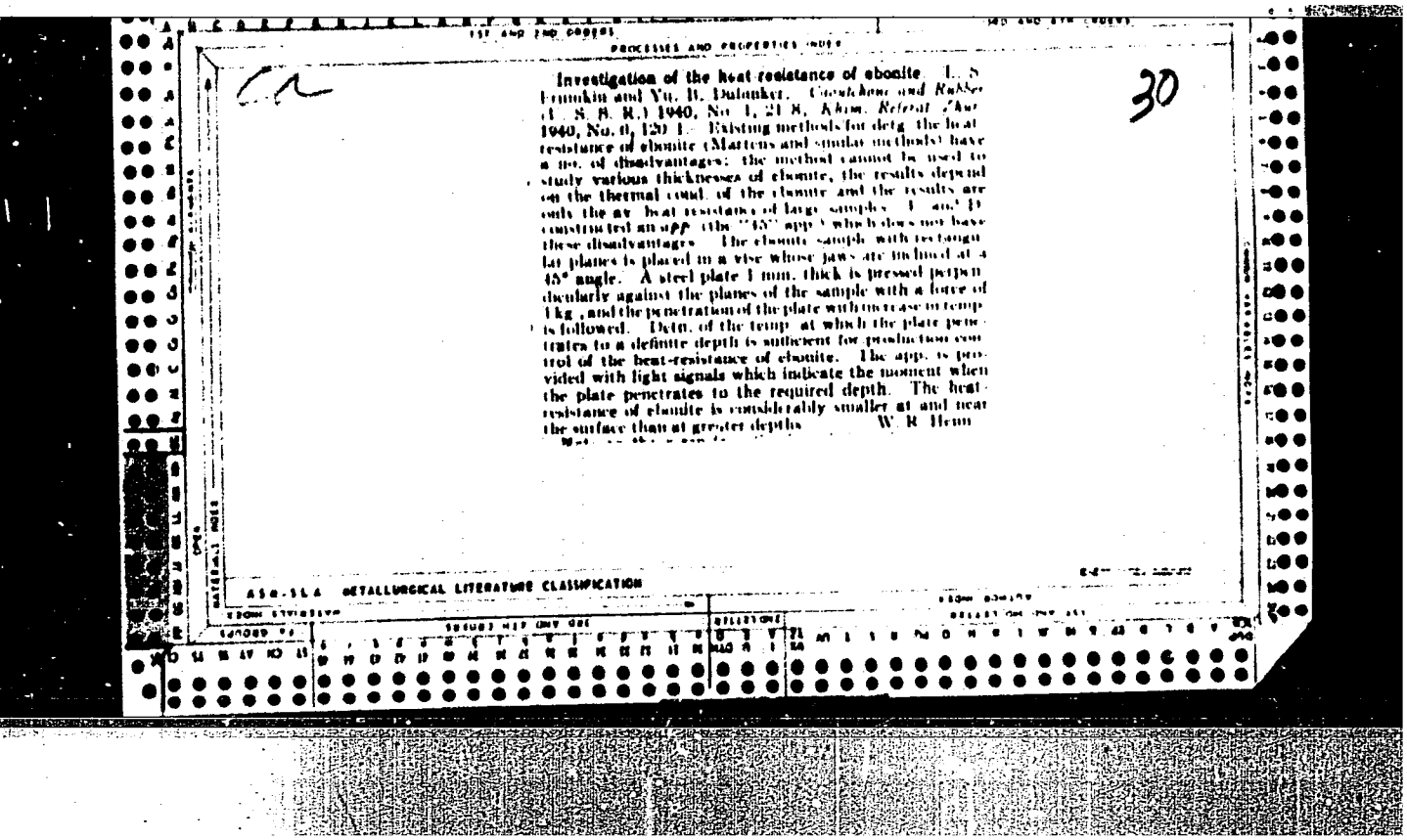
Heat-conductivity of rubber. L. S. Frumkin and J. B. Dymshits (Caoutchouc and Rubber, [U.S.S.R.], [illegible], June, [illegible]; Rubber Chem. and Tech., 1940, 13, [illegible]).—A method based on the theory of cooling of simple bodies is described for evaluation of the thermal conductivity (T) from the course of cooling (from [illegible]) at the centre of spheres of vulcanised rubber (both natural and synthetic) of diameter 60 mm., as recorded by means of a thermo-couple. The T of all types of rubber mixtures increased with the temp. Small % of ZnO decrease T and higher % increase it, but in presence of C black the direction of these changes is reversed. C black up to 25% (by wt.) increases T, but greater proportions cause a decrease. Various forms of C black influence T differently and lampblacks have a greater effect than gas blacks. D. F. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



An improved construction of the needle thermocouple
Yu. B. Dulskiker. *Caoutchouc and Rubber* (U. S. S. R.) 1939, No. 6, 34-6; *Khim. Referat. Zhur.*, 1939, No. 9, 108-9.—In 1937 a simple thermocouple in an injection needle was described (cf. *C. A.* 32, 1519⁹). An improvement is now proposed. The point of the needle is covered so that the needle can be exposed to various lengths. A scale which shows the length of the exposed needle moves with the cover. By means of a screw the cover can be fastened to a definite length of the needle, making it possible to det. beforehand the depth at which the temp. is to be measured. The scale can be set at zero, which corresponds to the edge of the cover with the welded active part of the needle.
W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

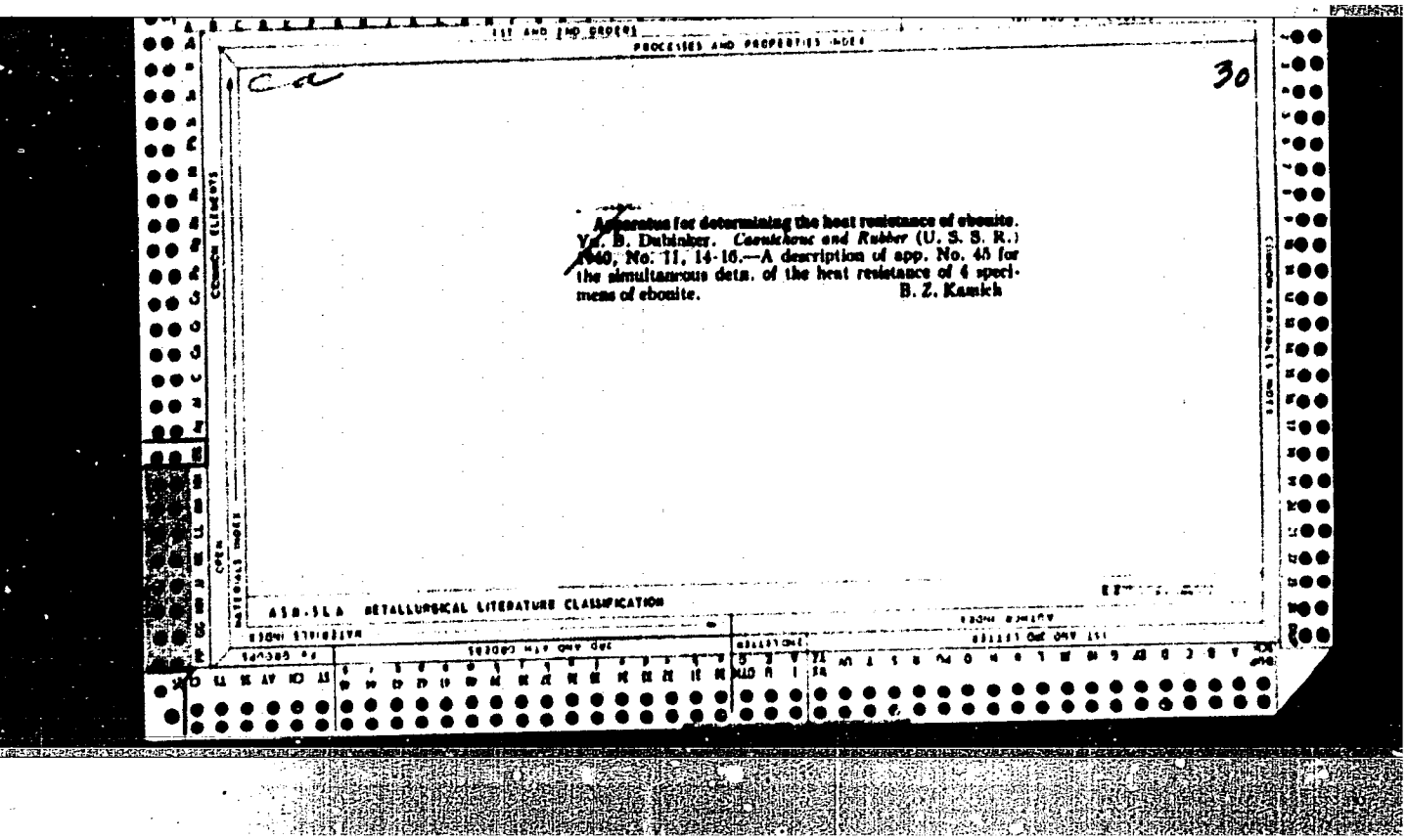


PROCESSES AND PROPERTIES INDEX

30

Investigation of the heat resistance of ebonite. L. S. Frumkin and Yu. B. Dalunker. *Caoutchouc and Rubber* (U. S. S. R.) 1940, No. 1, 21-8; *Khim. Referat. Zhur.* 1940, No. 6, 120-1. Existing methods for detg. the heat resistance of ebonite (Martens and similar methods) have a no. of disadvantages; the method cannot be used to study various thicknesses of ebonite, the results depend on the thermal cond. of the ebonite and the results are only the av. heat resistance of large samples. F. and D. constructed an app. (the "45°" app.) which does not have these disadvantages. The ebonite sample with rectangular planes is placed in a vise whose jaws are inclined at a 45° angle. A steel plate 1 mm. thick is pressed perpendicularly against the planes of the sample with a force of 1 kg., and the penetration of the plate with increase in temp. is followed. Detn. of the temp. at which the plate penetrates to a definite depth is sufficient for production control of the heat-resistance of ebonite. The app. is provided with light signals which indicate the moment when the plate penetrates to the required depth. The heat-resistance of ebonite is considerably smaller at and near the surface than at greater depths. W. R. Henn

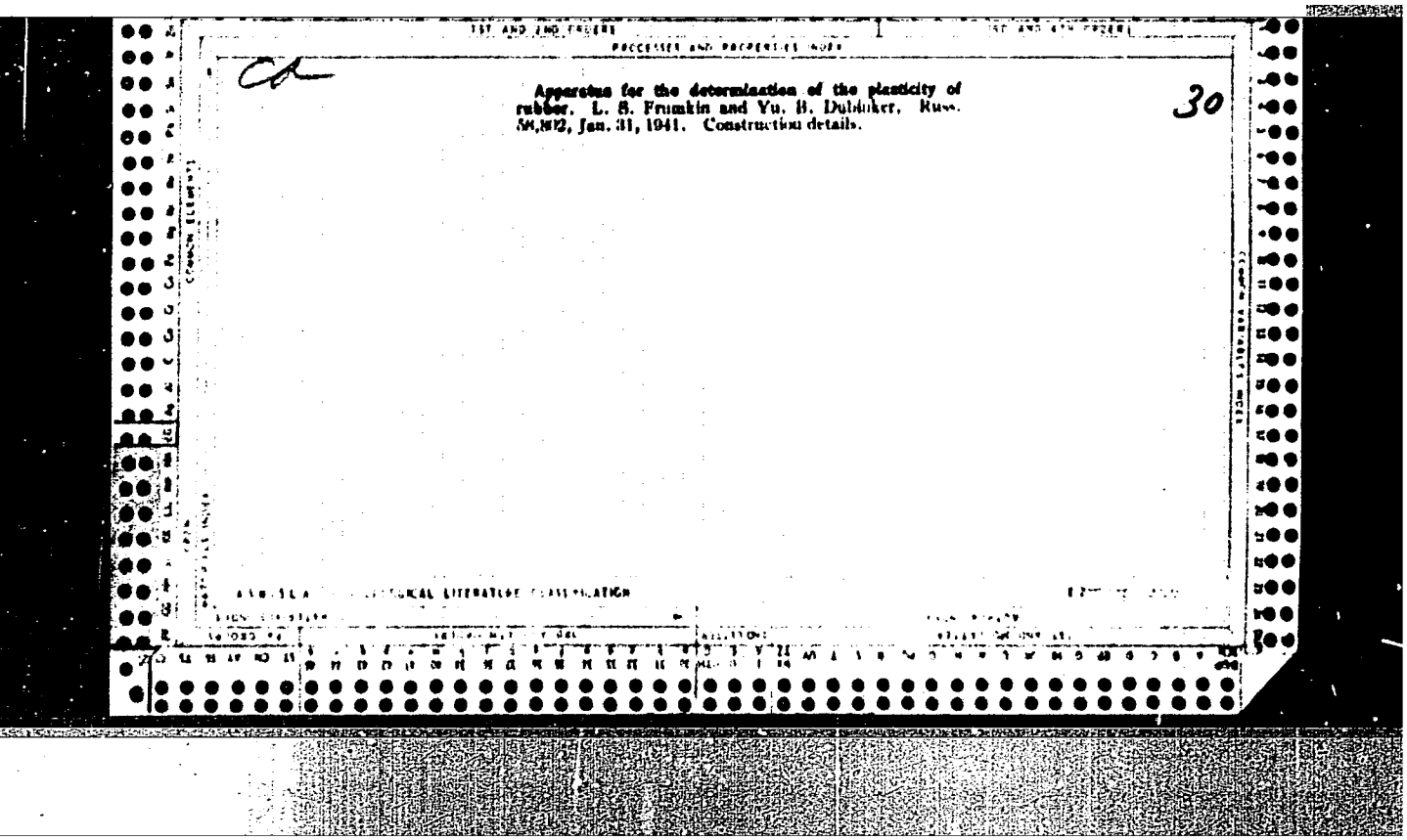
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Apparatus for determining the heat resistance of ebonite.
Ya. B. Dubinker. *Caoutchouc and Rubber* (U. S. S. R.) 1940, No. 11, 14-16.—A description of app. No. 45 for the simultaneous detn. of the heat resistance of 4 specimens of ebonite. B. Z. Kanich

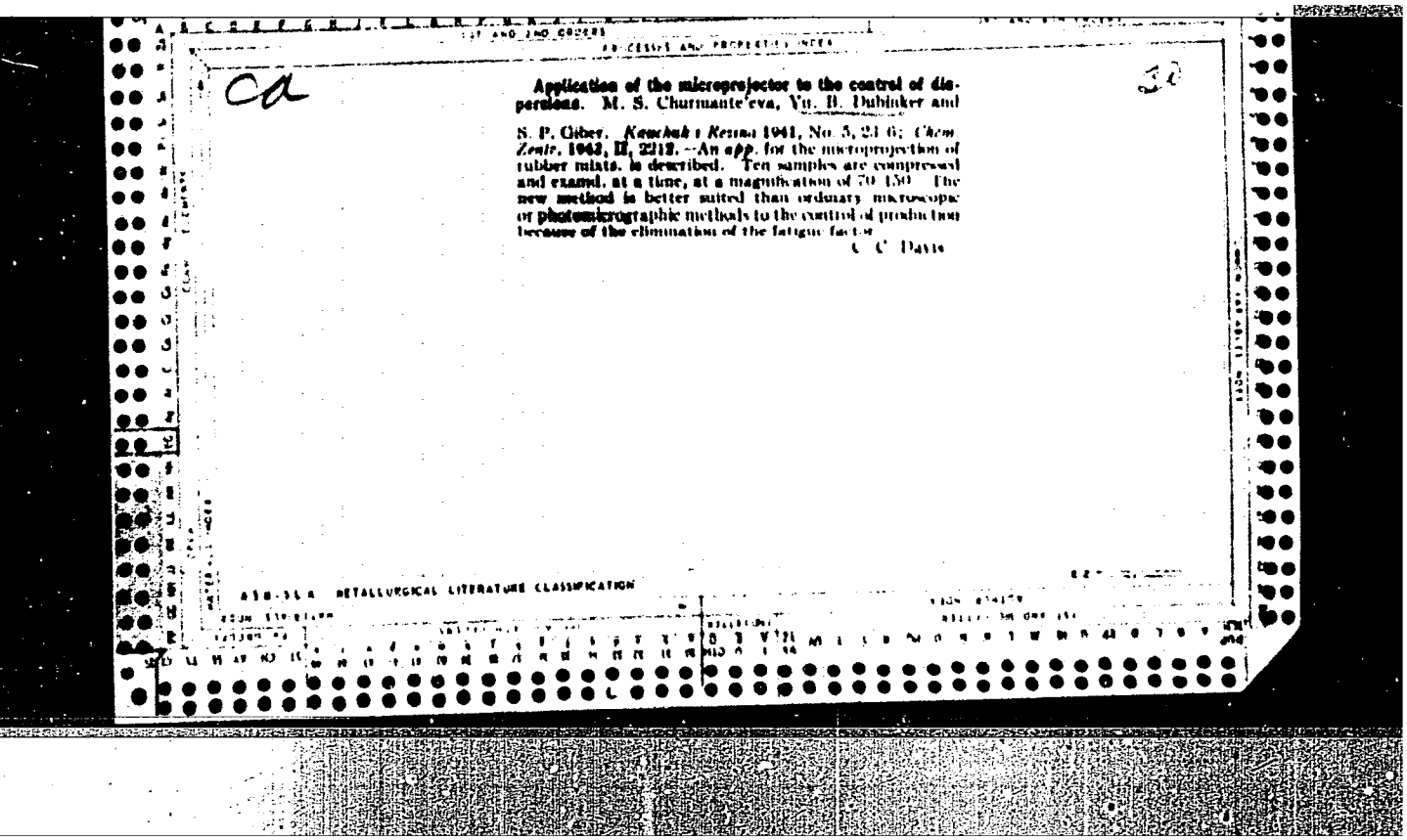
30

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



Apparatus for the determination of the plasticity of rubber. L. S. Frumkin and Yu. B. Dubinker. Russ. 58,812, Jan. 31, 1941. Construction details.

30



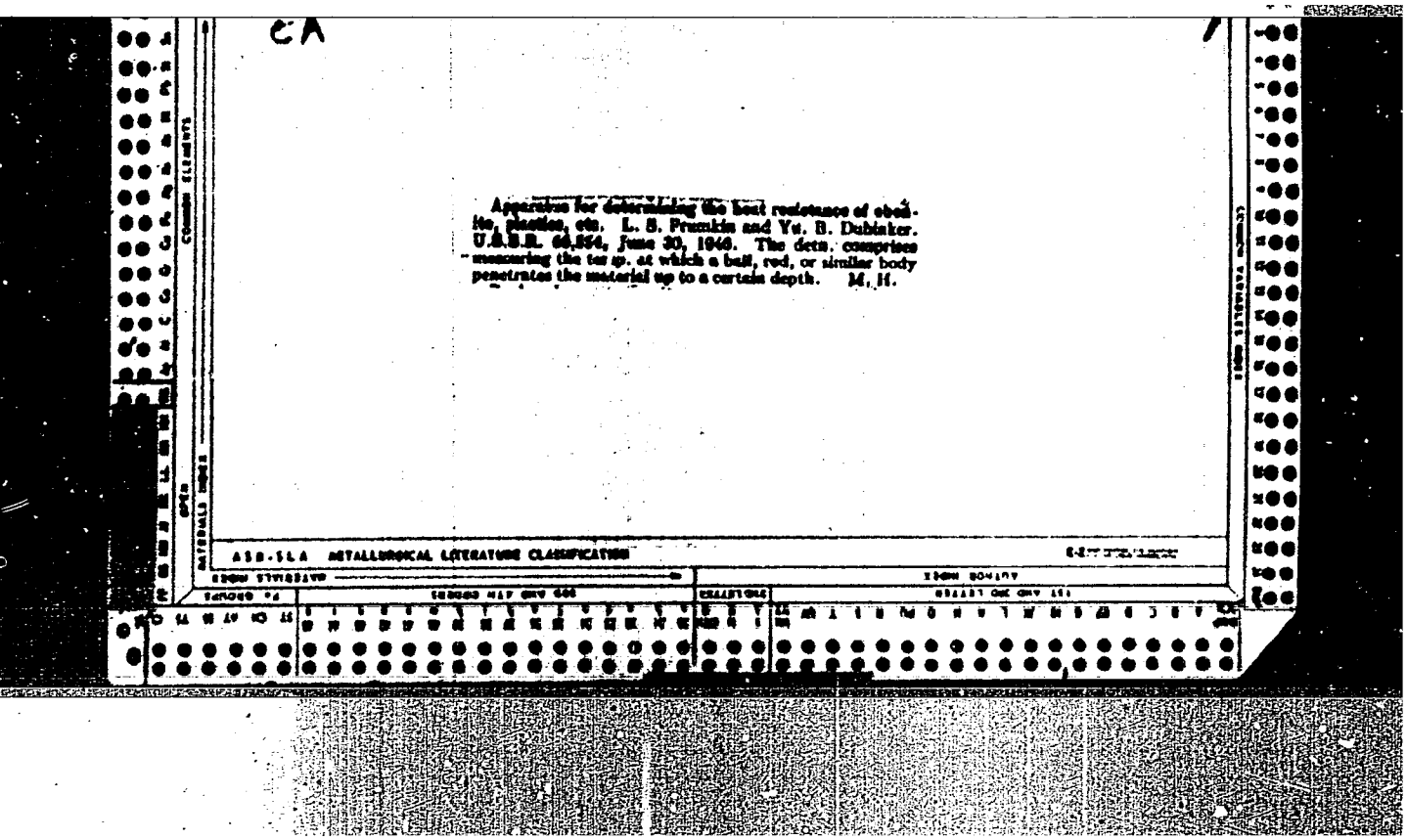
Ca

Application of the microprojector to the control of dispersions. M. S. Churmante'eva, Yu. B. Dubinker and S. P. Giber. *Kauchuk i Rezina* 1941, No. 5, 21-6; *Chem. Zentr.* 1942, II, 2213.—An *app.* for the microprojection of rubber mixts. is described. Ten samples are compressed and exam'd. at a time, at a magnification of 70-150. The new method is better suited than ordinary microscopic or photomicrographic methods to the control of production because of the elimination of the fatigue factor.

C. C. Davis

30

A58-31 A METALLURGICAL LITERATURE CLASSIFICATION



BYKOVA, O.V.; DUBINKER, Yu.B.; YERSHOVA, A.I.

Statistical evaluation of the quality of natural rubber. Kauch. i rez. 20 no.8:12-16 Ag '61. (MIRA 14:8)
(Rubber)

L 4284-66 EWT(d)/EWT(m)/EPF(c)/EWP(w)/T/EWP(v)/EWP(h)/EWP(l)

ACCESSION NR: AP5024108 UR/0138/65/000/009/0042/0045
678.017:620.172.251.224.225

AUTHOR: Dubinker, Yu. B. ; Slepukha, T. I.

TITLE: Tensile testing of materials at high temperatures

SOURCE: Kauchuk i rezina, no. 9, 1965, 42-45

TOPIC TAGS: tensile test, rubber, test instrumentation, radiative heat transfer

ABSTRACT: The article describes a device for the tensile testing of rubber and other elastic materials with the aid of a reflecting radiant heater, and reports some results obtained with this device under equilibrium temperature conditions. The heater (see Fig. 1 of the Enclosure) permits a rapid heating of the samples to high temperatures and their exposure to a constant temperature for the desired period of time prior to the extension. A study of the kinetics of heating of a heat-resistant material to temperatures from 100 to 700C for preselected powers of the radiator showed that the equilibrium temperature was reached after 2 minutes. The dependence of the temperature of samples of various heat-resistant materials on the power of the radiator was also determined. On the basis of these experiments, a technique of tensile testing was elaborated, and it was found that

Card 1/3

L 4284-66
ACCESSION NR: AP5024108

a comparison of the properties of materials at high temperatures is possible only by using [illegible] tests performed immediately after the samples have reached a given tempera- [illegible] figures, 1 table, and 1 formula.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 01 SUB CODE: MT

NO REF SOV: 002 OTHER: 005

Card 2/3

L 32[illegible]-66

ACCESSION NR: AP5024108 ENCLOSURE: 01

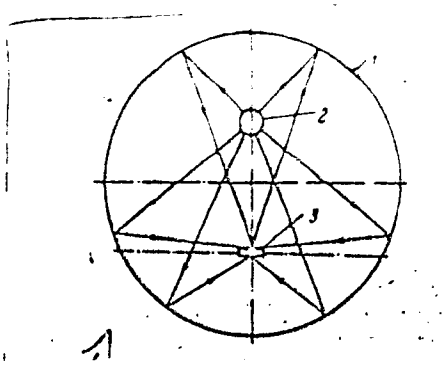


Figure 1. Diagram of reflecting heater and path of rays in the chamber: 1 - mirrors; 2 - radiator; 3 - sample.

Card 3/3

DUBINKIN, A.G.

Structural shortcomings of the T-128 tower crane. Bezop. truda v prom. 3 no.6:21-22 Je '59. (MIRA 12:10)

1.Kostromskoy ekskavatornyy zavod.
(Cranes, derricks, etc.)

DUBINKIN, G. G.

DUBINKIN, G. G. and MARTYCH'YAN, A. I. "The treatment of firearm wounds to the pelvis under conditions of frontline evacuation hospitals", Trudy Sred. gos. med. in-ta, Vol. II, 1946, p. 126-36.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

DUBINKIN, G. V.

AUTHOR BERLOVICH,E.E., and DUBINKIN,G.V. PA - 2664

TITLE Some Cases of very Small Life Times of Low Nuclear Levels. (Nekotoryye sluchai ves'ma malykh vremen zhizni nizhnikh urovney yader, Russian)

PERIODICAL Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 32, Nr 2, pp 223 - 226 (U.S.S.R.)

Received: 5 / 1957 Reviewed: 6 / 1957

ABSTRACT The present work shows the results of the investigation of the short-lived states of the nuclei of Ti^{46}, Mo^{95}, and Tl^{203}. Measuring results for the transition of $Sc^{46} \rightarrow Ti^{46}$ are given in a diagram. The energy limit of the β-spectrum amounts to 0,340 MeV and the energies of the accompanying β-decay processes of both -transitions occuring in the cascade amount to 0,880 and 1,120 MeV. The experimental curves of $\beta\gamma$- and $\gamma\beta$-coincidences are not shifted towards each other. The means that the life τ of the lowest two levels of the Ti^{46} nucleus is less than 10^{-10} sec. Also in the case of the level 0,764 MeV of the Mo^{95} nucleus life is less than 10^{-10} sec. A further diagram shows the results obtained for the life of the level 0,279 MeV of the Tl^{203} nucleus. The value $\tau = 4.10^{-10}$ sec. found in a previous work by E.E.Berlovich is to be investigated only as the

Card 1/2

PA - 2664

Some Cases of very Small Life Times of Low Nuclear Levels. upper limit for half life.

On the occasion of the variation of the amplitudes in the channels the curves of the $\beta\gamma$- and the $\gamma\beta$-coincidences always shifted in the same direction. For the average value of half life in the case of measurements with equivalent amplitude intervals $T = (2,9 \pm 0,3).10^{-10}$ sec. was found. From this experimental value the expression

$T_{\frac{1}{2}} = T(1 + \alpha) = (3,7 \pm 0,4).10^{-10}$ sec is obtained for the half life of radiation. This value also agrees well with the results obtained by other authors. (2 illustrations)

ASSOCIATION Leningrad Physical-Technical Institute of the Academy of Science of the U.S.S.R.

PRESENTED BY

SUBMITTED 14.8.1956

AVAILABLE Library of Congress.

Card 2/2

SOV/24-58-12-22/27

AUTHOR: Dubinkin, M.V. (Moscow)

TITLE: Vibrations of Plates taking into Account Rotatory Inertia and Shear (Kolebaniya plit s uchetom inertsii vrashcheniya i sdviga)

PERIODICAL: Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 12, pp 131-5 (USSR)

ABSTRACT: The system of equations (1.1) due to Uflyand (Ref.1) is solved in the following cases: 1) free vibrations of unloaded plates and 2) plate freely supported on all sides and under the action of an instantaneous impulse distributed over the surface of the plate. Fig.1-4 show graphs of deflections and bending moments at the centre of a plate for two values of the thickness/length ratio χ. The dotted curves show these functions plotted against time when shear and rotatory inertia are neglected. When these factors are taken into account the maximum values of the deflections and bending moments become smaller as shown by the continuous curves. The two sets of curves approach each other at smaller values of the thickness to length ratio. Calculations show that when this ratio is 0.05 the difference between

Card 1/2

Vibrations of Plates Taking Into Account Rotatory Inertia and Shear

the dotted and the continuous curves almost entirely disappears. There are 4 figures and 3 references of which 2 are Soviet and 1 English.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics Ac.Sc. USSR)

SUBMITTED: 24th March 1958.

Card 2/2

DUBINKIN. M. V., Cand Phys-Math Sci -- (diss) "Influence of the intertia of rotation and displacement on transverse vibrations of plates and cylindrical casings." Moscow, 1960. 5 pp; (Moscow State Univ im M. V. Lomonosov); 150 copies; price not given; (KL, 25-60, 126)

GENKIN, B.S.; GUMILEVSKIY, M.S.; DUBINKIN, N.P.; KACHER, Kh.A.; MEDINSKIY, L.B.; FISH, A.Ya.; KHMIROV, G.I.; [illegible], redaktor.

[Technical norms and wages in the electrical industry] Tekhnicheskoe normirovanie i zarabotnaia plata v elektropromyshlennosti. Moskva, Gos. energ. izd-vo, 1953. 247 p. (MLRA 7:1)
(Electric industries) (Industrial management)

1. DUBINKIN, S. F.

2. USSR (600)

4. Geology - Sarasa Valley

7. Report on the prospecting-surveying activities of the Sarasa party for 1943. /Abstract/ Izv. Glav. upr. geol. fon. no. 3. 1947.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

DUBINKIN, S.F.

New data on the Mayma moraine in the Gornyy Altai. Sov.geol. 4 no.4:133-137 Ap '61. (MIRA 14:5)

1. Sibirskiy nauchno-issledovatel'skiy institut geologii geofiziki i mineral'nogo syr'ya.
(Mayma Valley--Geology, Structural)

SOURCE CODE: UR/0286/65/000/022/0043/0043

INVENTOR: Sul'zhenko, N. K.; Barannik, V. P.; Polyakov, V. S.; Dubinkin, V. P.; Semenov, V. P.

ORG: none

TITLE: Method for preparing lubricating greases for parts from titanium and titanium based alloys. Class 23, No. 176352

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 43

TOPIC TAGS: titanium, titanium alloy, lubrication, halogenated organic compound, grease, paraffin wax, hydrocarbon, antifriction metal, anticorrosion additive, chlorinated paraffin

ABSTRACT: An Author Certificate has been issued for a preparative method for lubricating greases for titanium and titanium-alloy parts. The grease is based on halogenated hydrocarbons. To enhance the antifriction properties of titanium and the anticorrosive properties of the grease, a chlorinated paraffin is thickened with solid chlorine-containing organic compounds, such as chlorinated poly(vinyl chloride) resin, hexachlorobenzene, or 70% chlorinated paraffin [sic]. [BN]

SUB CODE: 11/ SUBM DATE: 13Jan64/ ATD PRESS: 4158

Card 1/1

UDC: 621.893.002.235:546.821

ACC NR: AP6029040 (A) SOURCE CODE: UR/0413/66/000/014/0056/0056

INVENTOR: Sul'zhenko, N. K.; Barannik, V. P.; Polyakov, V. S.; Semenov, V. P.; Dubinkin, V. P.

ORG: none

TITLE: Preparative method for a lubricant. Class 23, No. 183863

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 56

TOPIC TAGS: lubricant, titanium, titanium alloy, ~~methylene~~ iodide, ~~iodoform~~, iodine

ABSTRACT: An Author Certificate has been issued for a preparative method for a methylene iodide-base lubricant suitable for parts made of titanium and its alloys. To lower the friction coefficient, iodine, iodoform, or a mixture of the two is dissolved in the methylene iodide. [SM]

SUB CODE: 11/ SUBM DATE: 05Jul62/ ATD PRESS: 5061

Card 1/1 UDC: 621.892.84

VINOGRADOV, A.N.; LIVSHIN, G.L.; OHRAZTSOVA, R.I.; TULUPOV, L.P.; Prinimali uchastiye: RAZORENOVA, L.K., inzh.; DUBINKINA, L.I., inzh.; PODGORNYKH, A.L., inzh.; LAVRENT'YEV, M.V., retsenzent; MINAKOV, A.D., retsenzent; NESTEROV, Ye.P., retsenzent; STEFANOV, N.Ya., retsenzent; USHAKOV, P.S., retsenzent; KRISHTAL', L.I., red.; KHITROVA, N.A., tekhn. red.

[Calculating machines in accounting, planning and administration in railroad transportation] Vychislitel'naia tekhnika v uchete, planirovanii i upravlenii na zheleznodorozhnom transporte. [By] A.N.Vinogradov i dr. Moskva, Transzheldorizdat, 1963. 407 p. (MIRA 17:2)

DUBINKINA, R.P.

CA

8

A new variety of vanadium containing oellacherite S. V. Kultiasov and R. P. Dubinkina. *Mém. soc. russe minéral.* **75**, 187-92(1946); *Chem. Zentr.* **1947**, II, 1090. The discovery of a previously unknown mineral in the mountains of Kara-Tau in Kazakhstan is reported. It occurs in 3 forms: (*a*) as light green, silky, fibrous aggregates, which are intimately intertwined with the quartz of the gang, (*b*) as mica like, dark green platelets with a mother-of-pearl luster which are imbedded in the quartz gang, and (*c*) as dark green flakes with a gray glitter which are found on the surface of the rock. The content of the principal constituents in the 3 forms in order (*a*, *b*, *c*) is reported as: SiO_2 43.91, 42.08, 44.87; Al_2O_3 27.92, 19.37, 14.21; V_2O_3 6.18, 17.92, 10.44; MgO 2.10, 2.08, 3.50; BaO 7.17, 3.27, 7.20; K_2O 6.13, 5.91, 5.13. The optical properties of the 3 forms are reported as: (*a*) n_γ = 1.634, n_α = 1.625; (*b*) n_γ = 1.676, n_α = 1.620; (*c*) n_γ = 1.634, n_α = 1.627. The chem. analysis shows the mineral to be very similar to the oellacherite of Tirol as regards BaO content and similar to the roscoelite of Placerville, Colo. as regards V_2O_3 content. On the basis of mol. ratios, the following formula is offered 3(K, Ba, Na) 0.6H_2O.(Mg, Mn) 0.8 (Al, V, Cr, Fe)$_2O_3$.18 SiO_2 or, abbreviated (K, Ba)H_2(Al, V, Mg)$_3Si_3O_{12}$. The deduced formula corresponds in form to muscovite; the chem. compn. corresponds to oellacherite in which a part of the Al_2O_3 is isomorphically displaced by V_2O_3. M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AKIMENKO, N.M.; BELEVTSEV, Ya.N.; GOROSHNIKOV, B.I.; DUBINKINA, R.P.; ISHCHENKO, D.I.; KARSHENBAUM, A.P.; KULISHOV, M.P.; LYASHCHENKO, K.P.; MAKSIMOVICH, V.L.; SKURIDIN, S.A.; SIROSHTAN, R.I.; TOKHTUYEV, G.V.; FOMENKO, V.Yu.; SHCHERBAKOVA, K.F.; SEMENOV, M.V., red.izd-va; AVERKIYEVA, T.A., tekhn.red.

[Geological structure and iron ores of the Krivoy Rog Basin] Geologicheskoe stroenie i zheleznye rudy Krivorozhskogo basseina. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr, 1957. 278 p. (MIRA 11:3)
(Krivoi Rog Basin--Geology)

BELEVTSEV, Yakov Nikolayevich; BURA, Galina Georgiyevna; DUBINKINA, Raisa Pavlovna; YEFATKO, Yuriy Mikhaylovich; ISHCHENKO, Dmitriy Ivanovich; MEL'NIK, Yuriy Petrovich; STRYGIN, Aleksey Il'ich. Prinimali uchastiye: KOZHARA, V.L.; KRAVCHENKO, V.M.; TAKHTUYEV, G.V.; SHCHERBAKOVA, K.F.. RODIONOV, S.P., otv.red.; ZAVIRYUKHINA, V.N., red. izd-va; YEFIMOVA, M.I., tekhn.red.

[Genesis of iron ores in the Krivoy Rog Basin] Genezis zheleznykh rud Krivorozhskogo basseina. Kiev, Izd-vo Akad.nauk USSR, 1959. 306 p. (MIRA 13:2)

1. Chlen-korrespondent AN USSR (for Rodionov).
(Krivoy Rog Basin--Iron ores)

LUSHNIKOVA, M.V.; DUBINKINA, Ye.P.

Errors in diagnosing tumors of uterine adnexae. Akush. i gin. 35 no.3:123-124 My-Je '59. (MIRA 12:8)

1. Iz kafedry akusherstva i ginekologii (zav. - prof.Ye.S. Akopyan) Kubanskogo meditsinskogo instituta imeni Krasnoy Armii.

(ADNEXA UTERI, neoplasms
diag. errors (Rus))

RUSINOV, A.A.; VOSKOBOYNIKOV, V.N.; DUBINKO, T.P.; ILYUSHIN, V.I.; VRUBLEVSKAYA, F.L.; BUNCHUK, M.I.; RYABEN'KIY, L.M.; MARGOLIN, D.I.; SAZYKINA, K.V., kand.ekon.nauk; BUGAREVICH, V.S.; KUPTSOVA, V.A.; KALINOVSKIY, M.D.; MELESHKEVICH, O.A.; TYABUT, M.A., red.; LAZARCHIK, K., red.; KALECHITS, G., tekhn.red.

[Reference book on the establishment of work norms on collective farms] Spravochnik po normirovaniiu truda v kolkhozakh. Minsk, Gos.izd-vo BSSR, Red.sel'khoz.lit-ry, 1960. 151 p.
(MIRA 14:3)

1. Akademiya sel'skokhozyaystvennykh nauk BSSR. Institut ekonomiki. 2. Institut ekonomiki i organizatsii sel'skokhozyaystvennogo proizvodstva Akademii sel'skokhozyaystvennykh nauk BSSR (for Voskoboynikov, Dubinko, Ilyushin, Vrublevskaya, Bunchuk, Bugarevich, Kuptsova, Kalinovskiy). 3. Starshiy inspektor Upravleniya po orgkolkhoznym delam Ministerstva sel'skogo khozyaystva BSSR (for Meleshkevich).
(Agriculture--Production standards)

COUNTRY : USSR
CATEGORY : Cultivated Plants. Fruits. Berries.

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104397

AUTHOR : Lubinko, V. [illegible]
INST. : Crimean Agricultural Institute.
TITLE : Irrigation of Vineyards in the Steppe of Crimea.

ORIG. PUB. : Tr. Krymsk. s.-kh. in-ta, 1957, No. 4, 55-79

ABSTRACT : Investigations were conducted in the northeastern part of the steppe Crimea having precipitation of 350 m.m. The soils are meadow-chernozem-like steppes, carbonate on alluvial deposits. The groundwater level is 3.5 meters in November and 2.7 meters in June; pH is 7.2 - 7.6. No contamination with salt was observed to the depth of 2 meters. Vegetative applications of water were made with the lowering of moisture reserves in the active soil layer (19-100 cm) to 60, 70 and 80%. In all irrigated

CARD: 1/4

COUNTRY :
CATEGORY : M

APS. JOUR. : RZhBiol., No. 1958, No. 104807

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : variants, winter moisture-charging applications of water was carried out to the depth of one and a half meters to the level of the maximum moisture holding capacity of the field. In the first half of the vegetation (from the beginning of the sap flow to the end of blossoming) the moisture content of the active soil layer was above 80-85%. In the absence of irrigation, the reserve of moisture in the soil was becoming progressively lower from the beginning of July. To maintain the soil moisture at the level of 60-100%, it is necessary to carry out one moisture-

CARD: 2/4

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1958, No. 10/807

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : charging application at the rate of 500 m³/ha and one vegetative application on the 20-22 of August at the rate of 1,400 m³/ha. The use of the second vegetative application of water at the beginning of August creates the best conditions for the growth and during this time it is possible to increase the load per vine. The weight and the dimensions of the berries were in direct proportion to the degree of the wetness of the soil in the period of

CARD: 3/4

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1956 No. 10807

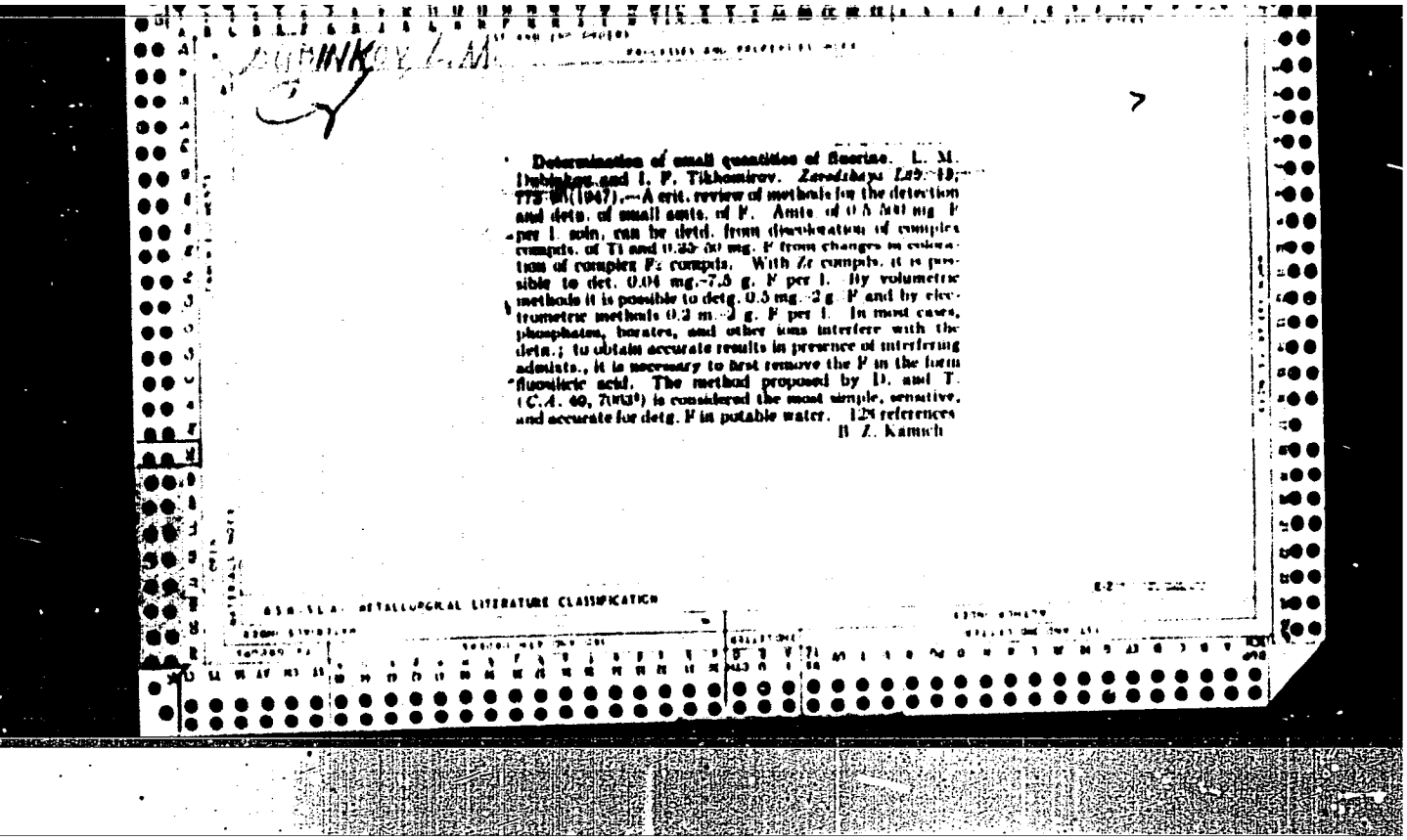
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : their growth and ripening, and reaches the maximum with the soil moisture at 80-100% of the maximum moisture holding capacity of the field. The increase in the yield attributable to the moisture charging application of water was 4-16% in comparison with the non-irrigated variant. The increase in the yield with irrigation was 50-55 c/ha without lowering the quality of the grapes and wine. -- T. K. Fortunatov

CARD: 4/4

DUBINKO, V. K. Cand Agr Sci-- (diss) "Irrigation of vineyards in the steppes of the Crimea." Odessa, 1958. 17 pp (Min of Agr USSR. Odessa Agr Inst), 100 copies (KL, 30-58, 113)



Determination of small quantities of fluorine. L. M. Dubinkaya and I. P. Tikhomirov. *Zavodskaya Lab.* 13: 773-80(1947).—A crit. review of methods for the detection and detn. of small amts. of F. Amts. of 0.5 Mol mg. F per l. soln. can be detd. from discoloration of complex cmpds. of Ti and 0.35-50 mg. F from changes in coloration of complex Fe cmpds. With Zr cmpds. it is possible to det. 0.04 mg.-7.5 g. F per l. By volumetric methods it is possible to detg. 0.5 mg.-2 g. F and by electrometric methods 0.2 m.-2 g. F per l. In most cases, phosphates, borates, and other ions interfere with the detn.; to obtain accurate results in presence of interfering admixts., it is necessary to first remove the F in the form fluosilicic acid. The method proposed by D. and T. (*C.A.* 40, 7003[8]) is considered the most simple, sensitive, and accurate for detg. F in potable water. 128 references.
B. Z. Kamich

DUBINOV, O.A.

Certain complications in trepanations of the sclera. Vest. oft., Moskva 32 no.2:12-16 Mar-Apr 1953. (CIML 24:4)

1. Professor. 2. Of the Eye Clinic of Kirgiz Medical Institute.

DUBINOV, P G

DUBINOV, Petr Georgiyevich

[For high profits from collective farms; practices of the Manuil Collective Farm, Zhitomir District, Zhitomir Province] Za vysokyi dokhid u kolhospakh (z dosvidu roboty kolhospu im. Manuilskoho, ZHytomyrskoho raionu, ZHytomyrskoi oblasti) Kyiv, Derzh. vyd-vo sil's'kohospodars'koi lit-ry, Ukrainskoi RSR, 1957. 65 p. (MIRA 11:1)

(Collective farms)

L 2109-65

ACCESSION NR: AP4044184 S/0119/64/000/008/0023/0024

AUTHOR: Dubinovskiy, A. M. (Engineer) 4

TITLE: Using photoresistors in measuring devices

SOURCE: Priborostroyeniye, no. 8, 1964, 23-24

TOPIC TAGS: photoresistor, CdS photoresistor, measuring photoresistor/ FSK-P1 photoresistor

ABSTRACT: Some problems of using photoresistors in measuring instruments are discussed, and fundamental characteristics of a new CdS film photoresistor are reported. As the commercial FSK-P1 photoresistor had entirely unsatisfactory characteristics, a new type intended for measurement purposes was developed; from 0.1—0.2 v on, it has a linear current-voltage characteristic; supplied at 2.6 v, the new photoresistor developes 3—5 microamp at 1 lux, or 200—300 microamp at 100 luxes. Its sensitivity within 0—100 luxes is 15,000—

Card 1/2

L 2109-65
ACCESSION NR: AP4044184

20,000 microamp/lum-v. An aging test revealed that after 200—300 hrs, the photo-current falls off by 10—20% and then remains constant. The new photo-resistor used in an exposure meter increased its photoelectric sensitivity by 10—20 times (as compared to a selenium cell) and ensured a ± 10% error of the illumination measurement. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: IE NO REF SOV: 000 OTHER: 000

Card 2/2

DUBINOVSKIY, I.V. (pos.Chernomorskiy Krasnodarskogo kraya); KOTIK, V.G.

Answers to readers' questions. Stroi. truboprov. 7 no.8: 26-27 Ag '62. (MIRA 15:9)

1. Rukovoditel' sektora elektrozashchity lineynykh sooruzheniy Vsesoyuznogo nauchno-issledovatel'skogo instituta po stroitel'stvu magistral'nykh truboprovodov (for Kotik).
(Electric currents—Grounding)

DUBINOVSKIY, V.B.

Horizontal and vertical bridging of aerial photographs. Geod. i kart. no.4:43-45 Ap '60. (MIRA 13:8)
(Aerial photogrammetry)

DUBINOVSKIY, V.B.; LYSENKO, F.F.

Increasing accuracy in fixing points on aerial photographs.
Geod.i kart. no.1:44-47 Ja '63. (MIRA 16:2)
(Aerial photogrammetry)

DUBINOVSKIY, V.B., kand. tekhn. nauk

Determining the elements of mutual orientation of aerial photographs by means of an electronic computer. Izv. vys. ucheb. zav.; geod. i aerof. no.5:99-108 '63.
(MIRA 17:8)

LOBANOV, A.N., doktor tekhn. nauk; PULTORAK, V.K., dotsent, kand. tekhn. nauk; DUBINOVSKIY, V.B., kand. tekhn. nauk

Programmed teaching and the use of teaching machines in photogrammetry. Izv. vys. ucheb. zav.; geod. i aerof. no.5:75-82 '64. (MIRA 18:5)

L 32638-66 EWT(1)/T IJP(c)
ACC NR: AP6016919 (A) SOURCE CODE: UR/0006/66/000/005/0048/0053

AUTHOR: Dubinovskiy, V. B.

35
B

ORG: none

TITLE: Field determination of coordinates of points on aerial photographs with known elements of external orientation

SOURCE: Geodeziya i kartografiya, no. 5, 1966, 48-53

TOPIC TAGS: aerial photograph, photogrammetry, triangulation

ABSTRACT: A method is proposed for identifying in the field, with satisfactory precision, the coordinates of any point, using aerial photographs with known elements of external orientation, a protractor, and a scale. All three angular elements of external orientation of the aerial photographs are needed. These are introduced into equations for transformation of the coordinates obtained from each photograph of a stereographic pair. It is then necessary merely to measure the coordinates of the point on each photograph and to use the standard equations and the derived transformation equations to compute the correct space coordinates. The precision of these coordinates depends on the precision with which the angular elements of external orientation are determined and the accuracy with which the coordinates on the two photographs are measured. All work of determining space coordinates may be done in 5—8 minutes. Orig. art. has: 1 figure, 1 table, and 8 formulas.

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 007

Card 1/1

UDC: 528.735.2:528.738

JANUSZKO, Tadeusz; DUBINSKA, Lidia

Estimation of the activator of fibrinolysis by means of the euglobulin test. Acta med. Pol. 6 no.2:269-276 '65.

1. Department of General and Experimental Pathology, Medical Academy, Bialystok (Director: Prof. Dr. K. Buluk).

BOGDANIK, Tadeusz; DUBINSKA, Lidia

Probabilistic model for differential diagnosis of diabetes.
Pol. tyg. lek. 20 no.27:987-989 5 Jl '65.

1. Z II Kliniki Chorob Wewnetrznych AM w Bialymstoku (Kierownik: prof. dr. J. Chlebowski) i z Zakladu Anatomii Patologicznej AM w Bialymstoku (Kierownik: prof. dr. L. Komczynski).

DUBINSKA-BIELICKA, Alina; SZYMCZYK, Wlodzimierz

Results of supporting osteotomy in the treatment of fractures of the femoral neck. Chir.narz.ruchu ortop.polska 25 no.1:43-47 '60.

1. Z I Zakladu Chirurgii Urazowo-Ortopedycznej Studium Doskonalenia Lekarzy w A.M. w Warszawie. Kierownik: prof.dr. S. Lukasik
(FEMUR NECK fracty.&disloc.)

D U D Z

ZABOKRZYCKI, Juliusz, doc. dr. med.; DUBIŃSKA-BIELICKA, Alina

A contribution on the diangnostic difficulties in tuberculosis of the bones and joints and in rheumatoid arthritis. Reumatologia (Warsz) 3 no.1:75-80 '65.

1. Z Oddzialu Ortopedycznego Instytutu Reumatologicznego (Kierownik: doc. dr. med. W. Barcikowski) i z Zakladu Radiologii Instytutu Reumatologicznego (Kierownik: doc. dr. med. J. Zabokrzycki; Dyrektor Instytutu: dr. med. W. Bruhl).

DUBINSKA, Alina; PISKORSKA, Zofia

Primary and metastatic bone tumors. Chir. narzad. ruchu ortop. pol. 28 no.2:209-218 '63.

1. Z Kliniki Chirurgii Urazowo-Ortopedycznej SDL AM w Warszawie Kierownik: prof. dr S. Lukasik Z Oddzialu Urazowego Szpitala PKP w Warszawie Konsultant: prof. dr S. Lukasik.
(BONE NEOPLASMS) (NEOPLASM METASTASIS)

MALIKHINA, R.I. [Malykhina, R.I.]; DUBINS'KA, N.I. [Dubyns'ka, N.I]; GREDITOR, Ye.M. [Hredytor, IE.M.]

Embolism of the pulmonary vessels caused by amniotic fluid. Ped., akush. i gin. 25 no.1:57-58 '63. (MIRA 16:5)

1. Kafedra akusherstva i ginekologii (zav.-doktor med.nauk R.I.Malikhina [R.I.Malykhina]) Ukrains'kogo institutu udoskonalennya likariv (rektor-dotsent I.I.Ovsiyenko [I.I.Ovsiienko]).
(AMNIOTIC FLUID) (PULMONARY EMBOLISM)

BERLIN, A.A.; DUBININSKAYA, A.M.

Studies in the mechanochemistry of polymers. Part 8: Degradation of polydimethylsiloxane by ultrasonic waves. Vysokom.soed. 1 no.11:1678-1684 N '59. (MIRA 13:5)

1. Institut khimicheskoy fiziki AN SSSR.
(Siloxanes) (Ultrasonic waves)

S/190/60/002/009/017/019
B004/B060

5.3830A also 2109, 2209

AUTHORS: Berlin, A. A., Dubinskaya, A. M.

TITLE: Studies in the Field of the Mechanochemistry of Polymeric Substances. X. Initiation of Polymerization With Radicals Forming on the Destruction of Macromolecules by Means of Ultrasonics

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 9, pp. 1426-1431

IX

TEXT: In contrast to other papers (Refs. 1, 2, 5), the authors studied the ultrasonic destruction and the formation of copolymers in anhydrous medium, solutions of polymethyl methacrylate (PMMA) in acrylonitrile, methyl methacrylate, and styrene. The molecular weight of PMMA (viscosimetrically determined in benzene) was 3,160,000. The solution of the polymer in the monomer was exposed in argon atmosphere to ultrasonic radiation of 1500 kc/sec and a calorically measured intensity of 5 - 50 w/cm^2. The apparatus had been described earlier (Refs. 6, 8). Since the temperature

Studies in the Field of the Mechanochemistry of Polymeric Substances. X. Initiation of Polymerization With Radicals Forming on the Destruction of Macromolecules by Means of Ultrasonics

rose to 50°C, cooling spells were put in. The degree of polymerization was determined on the strength of changes in the refractive index of the solution, on the strength of increase in the polymer weight, and - in acrylonitrile - on the strength of the nitrogen content. For control, monomers alone were acoustically irradiated, and no polymerization occurred after 30 min either. Acoustical irradiation of 1-2% PMMA solutions in the monomers always gave rise to polymerization, the rate of which decreased in the order acrylonitrile - methyl methacrylate - styrene (Table 1). The reaction of PMMA with acrylonitrile was examined more closely. Table 2 gives the action of various ultrasonic intensities, Table 3 supplies the experimental results at 7 w/cm^2, 1.5 min irradiation, and a 3 min pause. A block copolymerization of PMMA with polyacrylonitrile (PAN) was established. The infrared spectrum of the copolymer with a ratio PMMA/PAN = 30/70 exhibited both bands of the nitrile group and of

Card 2/4

Studies in the Field of the Mechanochemistry of Polymeric Substances. X. Initiation of Polymerization With Radicals Forming on the Destruction of Macromelecules by Means of Ultrasonics

S/190/60/002/009/017/019
B004/B060

the ester group. The viscosity and the Huggins constant were also determined (Table 4). The thermomechanical curve (Fig. 4) for PMMA/PAN = 47/53 and for a mixture of the polymer components in the same ratio shows that the copolymer has a branched, partly cross-linked structure. As in the polymerization by means of gamma rays, an after-polymerization occurred here as well, especially at higher temperatures. There are 1 figure, 4 tables, and 12 references: 4 Soviet, 2 US, 3 British, and 3 German.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR
(Institute of Chemical Physics of the AS USSR)

Studies in the Field of the Mechanochemistry of Polymeric Substances. X. Initiation of Polymerization With Radicals Forming on the Destruction of Macromolecules by Means of Ultrasonics

83482
S/190/60/002/009/017/019
B004/B060

SUBMITTED: April 22, 1960

Card 4/4

L 2[illegible] EWT(1)/EPA(s)-2/EWT(m)/EPF(c)/EWG/EWA(m)/EWP(1)/T/EWA(h)/ETC(m) IJP(c)

ACC NR: AP5028544 DS/WW/AT/RM SOURCE CODE: UR/0286/65/000/020/0161/0161

INVENTOR: Berlin, A. A.; Dubinskaya, A. M.

ORG: none

TITLE: Preparation of heat-resistant polymers. Class 39, No. 151811

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 161

TOPIC TAGS: heat resistant polymer, semiconducting polymer, ion exchange polymer

ABSTRACT: An Author Certificate has been issued for a preparative method for heat-resistant polymers with ion exchange and semiconductor properties. The method involves polycondensation of halogen substituted quinones with carboxylic acid amides such as acetamide, formamide, or dimethylformamide. [BO]

SUB CODE: GC, MT/ SUBM DATE: 28Oct61/ ATD PRESS: 4189

Card 1/1

KALABINA, A.V.; DUBINSKAYA, E.I.; FILIPPOVA, A.Kh.; FROLOV, Yu.L.; RATOVSKIY, G.V.

Synthesis of vinyl ethers of nitro- and halonitrophenols. Izv. vys.ucheb.zav.; khim. i khim.tekh. 7 no.2:232-236 '64. (MIRA 18:4)

1. Irkutskiy gosudarstvennyy universitet im. A.A.Zhdanova, kafedra vysokomolekulyarnykh soyedineniy.

VAL'DBERG, A.Yu.; DUBINSKAYA, F.Ye.

Gas purification in closed iron alloy furnaces during the making of silicomanganese. Stal' 23 no.3:283-285 Mr '63. (MIRA 16:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut po promyshlennoy i sanitarnoy ochistke gazov.
(Gases--Purification)
(Silicon-manganese alloys--Electrometallurgy)

DUBINSKAYA, F.Ye.; ZAYTSEV, M.M.

Use of multitubular turbulent-foam scrubber for cleaning converter gases. Stal' 25 no.8:864-866 S '65. (MIRA 18:9)

VAL'DBERG, A.Yu.; DUBINSKAYA, F.Ye.

Specific features and prospects of introducing gas purification systems in closed feroalloy furnaces. Stal' 24 no.12:1096-1099 D '64. (MIRA 18:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut po promyshlennoy i sanitarnoy ochistke gazov.

DUBINSKAYA, G.I.

Results of using thiodiphenylamine (Phenthiozine) and of kerosene in control of fly larvae during 1955-56. Zhur.mikrobiol.epid. i immun. 28 no.8:82-84 Ag '57. (MIRA 11:2)

1. Iz Kiyevskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
(PHENOTHIAZINE, effects,
fly larvae eradiaction (Rus))
(PETROLEUM PRODUCTS, effects,
kerosene, fly larvae eradication (Rus))
(FLIES,
eradication with phenothiazine & kerosene (Rus))
(INSECTICIDES, effects,
kerosene & phenothiazine, flies eradication (Rus))

PROTSENKO, D.F.; DUBINSKAYA, G.M.; YADRINTSEVA, Ye.F.

Effect of growing conditions on the frost-resistance of winter crops. Nauk.zap.Kiev.un. 8 no.5:91-116 '49. (MLRA 9:10)

(Wheat) (Plants--Frost resistance)

FAKTOROVICH, B.S.; DUBINSKAYA, G.N. [Dubyns'ka, H.N.]

Proposals of efficiency promoters adopted by the Kiev Combine of Syntheic Fibers. Leh.prom. no.3:45-47 Je - Ag '62. (MIRA 16:2)
(Kiev—Textile industry—Technological innovations)

BUKHSHTAB, Ye.A.; DUBINSKAYA, I.D.

Eosinophilias in children. Vop.okh.mat. i det. 4 no.5:85-88 S-O '59.
(MIRA 13:1)

1. Iz kafedry propedevtiki detskikh bolezney (zav. - prof. V.A. Vlasov) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova na baze detskoy bol'nitsy imeni N.F. Filatova (glavnyy vrach M.N. Kalugina).

(EOSINOPHILES)