

$R_{\infty}, I_{\mu}, \alpha, V_{\infty} \nu$

77227, SOV/89-8-1-21/29

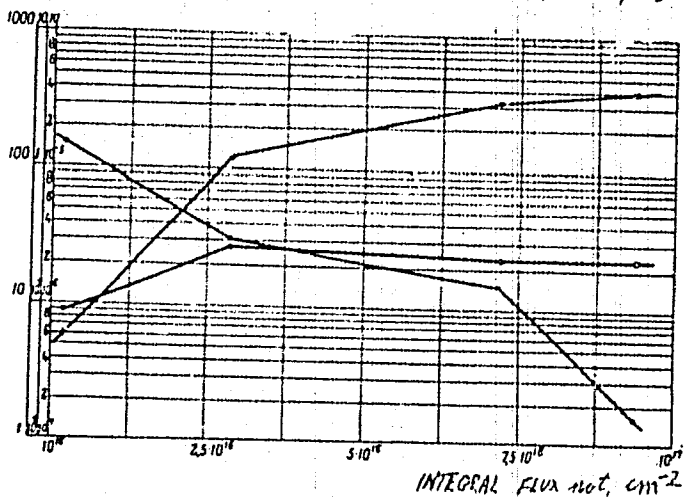


Fig. 4. $I_{cs}(x)$, $V_{\infty}(o)$ and $R(o)$ of an U_3O_8 -MgO sample vs integral neutron flux $no\dot{t}$ at a constant neutron flux density of $8 \cdot 10^{12} \text{ cm}^{-2} \cdot \text{sec}^{-1}$.

Card 8/10

A Study of Electromotive Forces Generated
in Semiconductor Systems Containing Uranium,
When Irradiated in Reactors. Letter to the
Editor

77227
SOV/89-8-1-21/29

10% enriched sample gave a 15 times larger effect than the natural one. Authors used also oxides and sulfides of Be, Ni, Mo, W, Zn, and Co. In all cases they observed an emf, although the biggest effect occurred with the U_3O_8 -MgO combination. Computation showed that in this last case 0.01% of the fragments' energy was transformed into electrical energy. Such small efficiency can be explained through the apparently short lifetime of the current carriers, and a poor relation between their diffusion path length compared with the sample thickness. The authors conclude that the emf is basically a result of a valve effect, although the volume and thermal emf may play some role too. Professor A. K. Krasin showed interest, G. N. Ushakov collaborated during experiments, and R. G. Bulycheva, V. A. Shalin, and G. V. Rykov were partially involved in experimental work. There are 4 figures; and 6 references, 4 Soviet, 1 U.K., 1 U.S. The U.K. and

Card 9/10

A Study of Electromotive Forces Generated
in Semiconductor Systems Containing Uranium,
When Irradiated in Reactors. Letter to the
Editor

77227
SOV/89-3-1-21/29

U.S. references are: G. Kinchin, R. Pease, Repts Progr.
Phys., 18, 1 (1955); J. Glen, Advances Phys., 4, Nr 16,
381 (1955).

SUBMITTED: August 3, 1959

Card 10/10

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from different materials on an increase
in neutron capture by the uranium shielding of a fast reactor.
Atom. energ. 15 no.3:258-259 S '63. (MIRA 16:10)

(Neutrons—Capture) (Nuclear reactors)

AUTHOR: Zvonarev, A. V.; Koleganov, Yu. F.; Mikhaylus, F. F.; Nikolayev, M. N. 35
31
B

ORG: none 19

TITLE: Measurement of neutron spectra in the energy region up to 3 kev by resonant indicators

SOURCE: Atomnaya energiya, v. 20, no. 6, 1966, 518-520

TOPIC TAGS: neutron spectroscopy, reactor neutron flux, fast neutron, neutron capture/
BR-1 reactor nuclear

ABSTRACT: The authors propose a modification of the method of V. I. Golubey et al. (Atomnaya energiya v. 11, 1961) for measuring neutron spectra at different points inside a nuclear reactor through the use of resonant self-screening of indicators by filters of the same material. The authors' modification, aimed at extending the possible energy range, consists of using the first resonances of neutron capture in W^{186} , Mn^{55} , and Na^{23} . The filter resonant self-screening factors needed to make use of the method are calculated for different thicknesses of the indicators themselves and of the filters surrounding them. Plots of these factors, obtained by a Monte Carlo computer calculation, are presented. The method was used to measure the distribution of neutrons with energies corresponding to the first resonances of In^{153} , Au^{197} , W^{186} , Mn^{55} , and Na^{23} inside a uranium block measuring 70 x 70 x 90 cm bombarding with neutrons in the Fermi spectrum. The results confirmed the possibility of

AP6021530

using the proposed resonant indicators for reactor measurements. The authors thank V. I. Golubev, M. Yu. Orlov, and O. P. Uznadze for taking part in the work, and the crew of the BR-1 reactor and K. I. Nesterov for help with the measurements. Orig. art. has: 4 figures, 1 table, and 1 formula.

SUB CODE: 18/ SUBM DATE: 29Nov65/ ORIG REF: 010

Card 2/2 LC

Effect of reflectors made from various materials on the number of
neutrons captured in the uranium carbide shield of a fast reactor.
Atom. energ. 15 no.4:327-328 0 '63. (MIRA 16:10)

BONDARENKO, I.I. [deceased]; GOLUBEV, V.I.; ZVONARIV, A.V.; NIKOLAYEV, M.H.;
ORLOV, M.Yu.; UZNADZE, O.P.

Neutron propagation in uranium carbide. Atom. energ. 17 no.2:
113-119 Ag '64 (MIRA 17:8)

HOROZOV, V.; ZVONAREY, E.; VINITSKIY, I.

Improve efficiency work. Den. i kred. 15 no.1:44-46 Ja '57.
(MIRA 10:3)

(Banks and banking)

ZVONAREV, F.

Checking cash discipline at trade enterprises. Den. i kred.
15 no.7:49-50 J1 '57. (MLRA 10:8)
(Leningrad--Retail trade)
(Banks and banking)

ZYONAREV, F.

Consolidating gains made. Den. 1 kred. 13 no.5:31-32 My '55.
(Leningrad--Banks and banking) (MLRA 8:7)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1
ZVONAREV, I.; SENDEKSON, E.; SHARUDO, I.; SHORIN, V.; SHUGUROV, V.;
YUSUPOV, T.

In memory of Aleksei Borisovich Travin. Geol. i geofiz. no.4:116-
119 '61. (MIRA 14:5)

(Travin, Aleksei Borisovich, 1908-1960)

CA

Extrater. I. N. Zemanov. U.S.S.R. 64,541, June
30, 1946. M. Kooch

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

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ZVONAREV, I. N.

Fourth Conference of the Coordinating Committee on the Problem
of "Regularities in the Distribution of Coals in the Earth's Crust."
Geol. i geofiz. no.8:131-133 '62. (MIRA 15:10)
(Coal geology--Congresses)

ZVONAREV, I.N., otv. red.; CHERNOVA, L.I., red.; SHMAKOVA, Ye.G.,
tekhn. red.

[Papers of the First Conference of the Siberian Special Commission on the History of Coal Accumulation] Materialy pervogo soveshchaniia Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniia. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, No.1. 1961. 115 p. (MIRA 15:10)

1. Soveshchaniye Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniya. 1st, Novosibirsk, 1959.
(Siberia--Coal geology)

ZVONAREV, I.N.

Third Conference of the Siberian Commission on the study of the
Distribution of and Prospecting for coals in the U.S.S.R. Geol.
i geofiz. no.11:125-127 '61. (MIRA 15:2)
(Coal geology)

ANATOLIEVA, Anna Ivanovna; ZVONAREV, I.W., ovt.red.; GREYNER, R.N., red.;
MAZUROVA, A.F., tech. red.

[Stratigraphy and problems of the Devonian paleogeography of the
Minusinsk intermountainous trough] Stratigrafia i nekotorye voprosy
paleogeografii devona Minusinskogo mezhgornogo progiba. Novosibirsk,
Izd-vo Sibirskogo otd-nia AN SSSR, 1960. 50 p. (Akademia nauk SSSR.
Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.2).

(MIRA 13:12)

(Minusinsk Basin--Geology, Stratigraphic)
(Minusinsk Basin--Paleography)

ZVONAREV, I.N.

Fifth Conference of the Interdepartmental Coordination Commission
on the Problem "Characteristics of the Distribution of Fossil
Coals in the Earth's Crust.". Geol. i geofiz. no.11:155-157 '64.
(MIRA 18:4)

ZVONAREV, I.N.

Combined study of coal sediments in Western Siberia and the Kras-
noyarsk Territory. Trudy Gor.-geol. inst. Zap.-Sib. fil. AN SSSR
no.18:3-17 '56. (MIRA 13:11)

(Siberia--Coal geology)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1
KHILONOVA, Anna Fedorovna; GREINER, R.N., red.; ZVONAREV, I.N., kand.geol.-
mineral.nauk, red.; MAZUROVA, A.F., tekhn.red.

[Specific composition of pollen and spore complexes in upper Cretaceous deposits of the Chulym-Yenisey Depression] Vidovoi sostav pyl'tsy i spor v otlozheniakh verkhnego mela Chulymo-Eniseiskoi vpadiny. Novosibirsk, Izd-vo Sibirskogo otdeleniia AN SSSR, 1960. 104 p. (Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.3). (MIRA 14:8)
(Chulym Valley--Palynology) (Yenisey Valley--Palynology)

ZVONAREV, I. N.

USSR/Coal
Geology

Sep/Oct 1967

"High Remuneration," I. N. Zvonarev, 2 pp

"Razvedka Nedr" No 5

Discusses the Stalin Prize winners G. P. Rudchenko, V. I. Skoku, I. I. Molchanov, V. V. Stanov and I. N. Zvonarev, who were responsible for most of the discovery and development of coal bases in Siberia. They belong to the West Siberian Geological Administration and the Kuznets Basin Coal Development Trust. The author discusses the success that this group of men has had in the discovery of coking coal in the Tom'-Usinskiy region.

27710

LC

ZVONAREV, I.N.

The problem of Siberian petroleum. Izv.vost.fil.AN SSSR no.6:35-38
'57. (MIRA 10:9)

1. Zapadno-Sibirskiy filial Akademii nauk SSSR.
(Siberia--Petroleum geology)

ZVONAREV, I.N., otv. red.

[Coal geology of Siberia and the Far East] Geologiya uglei
Sibiri i Dal'nego Vostoka. Moskva, Nauka, 1965. 174 p.
(MIRA 18:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut
geologii i geofiziki.

ZVOMAREV

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1
"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

Surveying

Problem of the minimum of operations in base networks of surface and mine surveying.
(Trudy) VNI: I 22, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October ²1952, Uncl.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 673 - I

BOOK

Call No.: AF500203

Author: ZVONAREV, K. A.

Full Title: CARTOGRAPHY

Transliterated Title: Kartografiya

PUBLISHING DATA

Originating Agency: None

Publishing House: Publishing House of Coal Technical Literature
(UGLETEKHIZDAT)

Date: '1951

No. pp.: 212

No. of copies: 5,000

Editorial Staff

Tech. Ed.: Prof. V. V. Kavrayskiy and Prof. A. P. Yushchenko

PURPOSE: A textbook for students of Mine Engineering Departments, specializing in mine surveying. Approved by the Ministry of Higher Education of the USSR for students of institutions of higher learning. The book is dedicated to the 175th anniversary of the Leningrad Institute of Mining Engineers

TEXT DATA

Coverage: The preface states that the absence of a textbook on cartography corresponding to the mine surveying programs of mine institutes and forming part of the course in higher

1/2

Kartografiya

AID 673 - I

geodsy made it necessary to publish this book. The text includes an introduction, four chapters, a conclusion and four supplements. Chapter I covers general information on cartographic projections; Chapter II, conical and corresponding azimuthal projections; Chapter III, cylindrical, perspective and other of the most important projections; Chapter IV, construction and publishing of charts. The conclusion gives a brief history of the development of cartography and the importance of cartography to the mine surveying engineer. The supplements include:
1) a table of the radii of curvature of the spheroid of F. N. Krasovskiy for every degree of latitudes from 0° to 90° ,
2) tables for computation of the projection of Krasovskiy's spheroid, 4) some mathematical constants. 68 figures, diagrams and maps illustrate the text.

No. of References: A few in Russian in the text and footnotes
Facilities: None

ABRAMOV, S.K., kand.tekhn.nauk; AVERSHIN, S.G., prof., doktor tekhn.nauk;
AMMOISOV, I.I., doktor geol.-min.nauk; ANDRIYEVSKIY, V.D., inzh.;
ANTROPOV, A.N., inzh.; APANAS'YEV, B.L., inzh.; BERGMAN, Ya.V.,
inzh.; BLOKHA, Ye.Ye., inzh.; BOGACHEVA, Ye.N., inzh.; BUKRINSKIY, V.A.,
kand.tekhn.nauk; VASIL'YEV, P.V., doktor geol.-min.nauk; VINOGRADOV,
B.G., inzh.; GOLUBEV, S.A., inzh.; GORDIYENKO, P.D., inzh.; GUSEV, N.A.,
kand.tekhn.nauk; DOROKHIN, I.V., kand.geol.-min.nauk; KALMYKOV, G.S.,
inzh.; KASATOCHKIN, V.I., doktor khim.nauk; KOROLEV, I.V., inzh.;
KOSTLIVTSEV, A.A., inzh.; KRATKOVSKIY, L.F., inzh.; KRASHENINNIKOV, G.F.,
prof., doktor geol.-min.nauk; KRIKUNOV, L.A., inzh.; LEVIT, D.Ye., inzh.;
LISITSA, I.G., kand.tekhn.nauk; LUSHNIKOV, V.A., inzh.; MATVEYEV, A.K.,
dots., kand.geol.-min.nauk; MEFURISHVILI, G.Ye., inzh.; MIRONOV, K.V.,
inzh.; MOLCHANOV, I.I., inzh.; NAUMOVA, S.N., starshiy nauchnyy sotrudnik;
NEKIPRELOV, V.Ye., inzh.; PAVLOV, F.F., doktor tekhn.nauk; PANYUKOV, P.N.,
doktor geol.-min.nauk; POPOV, V.S., inzh.; PYATLIN, M.P., kand.tekhn.
nauk; RASHKOVSKIY, Ya.E., inzh.; ROMANOV, V.A., prof., doktor tekhn.
nauk; RYZHOV, P.A., prof., doktor tekhn.nauk; SELYATITSKIY, G.A., inzh.;
SPERANSKIY, M.A., inzh.; TEREENT'YEV, Ye.V., inzh.; TITOV, N.G., doktor
khim.nauk; GOKAREV, I.F., inzh.; TROYANSKIY, S.V., prof., doktor geol.-
min.nauk; FEDOROV, B.D., dots., kand.tekhn.nauk; FEDOROV, V.S., inzh.
[deceased]; KHOMENTOVSKIY, A.S., prof., doktor geol.-min.nauk; TROYANOV-
SKIY, S.V., otvetstvennyy red.; TERPIGOREV, A.M., red.; KRIKUNOV, L.A.,
red.; KUZNETSOV, I.A., red.; MIRONOV, K.V., red.; AVERSHIN, S.G., red.;
BURTSEV, M.P., red.; VASIL'YEV, P.V., red.; MOLCHANOV, I.I., red.;
RYZHOV, P.A., red.; BALANDIN, V.V., inzh., red.; BLOKH, I.M., kand.
tekhn.nauk, red.; BUKRINSKIY, V.A., kand.tekhn.nauk; red.; VOLKOV, K.Yu.,
inzh., red.; VOROB'YEV, A.A., inzh., red.; SVOMAREV, K.A., prof., doktor
tekhn.nauk, red. (Continued on next card)

ABRAMOV, S.K. (continued) Card 2.

ZDANOVICH, V.G., prof., doktor tekhn.nauk, red.; IVANOV, G.A., doktor
geol.-min.nauk, red.; KARAVAYEV, N.M., red.; KOROTKOV, G.V., kand.geol.-
min.nauk, red.; KOROTKOV, M.V., kand.tekhn.nauk, red.; MAKKAVEYEV, A.A.,
doktor geol.-min.nauk, red.; OMEL'CHENKO, A.N., kand.tekhn.nauk, red.;
SENDERZON, E.M., kand.geol.-min.nauk, red.; USHAKOV, I.N., dots., kand.
tekhn.nauk, red.; YABLOKOV, V.S., kand.geol.-min.nauk, red.; KOROLEVA,
T.I., red.izd-va; KACHALKINA, Z.I., red.izd-va; PROZOROVSKAYA, F.L.,
tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Mining; an encyclopedia handbook] Gornoe delo; entsiklopedicheski
apravochnik. Glav. red. A.M.Terpigorev. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po ugol'noi promyshl. Vol.2. [Geology of coal deposits
and surveying] Geologiya ugol'nykh mestorozhdenii i marksheiderskoe
delo. Redkolegiia toma S.V.Troianskiy, 1957. 646 p. (MIRA 11:5)

1. Chlen-korrespondent AN SSSR (for Karavayev)
(Coal geology--Dictionaries)

SOV/154-58-2-12/22

AUTHOR: Zvonarev, K. A., Professor, Doctor of Technical Sciences

TITLE: With Reference to the Article by A. M. Leonov (Po povodu stat'i A. M. Leonova) Some Problems in Connection With the Formation of Marksheyder Mining Triangulations (Nekotoryye voprosy geometricheskogo postroyeniya Marksheyderskikh (rudnichnykh) triangulyatsiy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1958, Nr 2, pp 105-106 (USSR)

ABSTRACT: This is a letter to the editors of the present periodical. The author is of the opinion that present fundamental work in the field of geodesy in the USSR creates a new geodetic basis for the development of new surveys (of all scales) as well as for the solution of geodetic engineering problems (also those according to the Marksheyder principle). The author considers the elimination of triangulation nets of the 5th and 6th classes (according to Marksheyder) by A. M. Leonov unacceptable. Here, he refers to his papers (quoted by Leonov) in which he says that he permits three and four density stages of the triangulation of the 2nd class and uses nets with sides of 2,3 and 1,5 km

Card 1/2

SOV/154-58-2-12/22

With Reference to the Article by A. M. Leonov. Some Problems in Connection
With the Formation of Marksheyder Mining Triangulations

length, respectively. The author proves that the establishment of nets with a point density of more than 1,5 km (whereby points are placed directly among the points of the third and even second classes) is rational. The rather disadvantageous multi-stage structure of triangulation nets for the purposes of the Marksheyder method, to which A. M. Leonov wants to revert, is more precisely defined by the author.

ASSOCIATION: Leningradskiy ordena Lenina Gosudarstvennyy universitet im.
A. A. Zhdanova (Leningrad Lenin Order State University imeni
A. A. Zhdanov)

SUBMITTED: May 22, 1958

Card 2/2

ZVONAREV, K.A.

Basic problems in present-day cartography [with summary in English].
Vest. IGU 13 no.6:91-100 '58. (MIRA 11:5)
(Cartography)

ZVONAREV, K.A.

All-Union conference of Universities of the U.S.S.R. on scientific
methods in geography. Vest.LGU 13 no.18:167-169 '58.

(MIRA 12:1)

(Geography--Study and teaching)

ZVONAREV, K.

On the "Geodesy and cartography" journal. Mat. Otd. mat. geog.
i kart. Geog. ob-va SSSR no.1:47-48 '61. (MIRA 17:8)

ZVONAREV, K.A.

Scientific legacy of V.V.Kavraiskii. Vest.LGU 18 no.6:143-149
'63. (MIRA 16:4)

(Kavraiskii, Vladimir Vladimirovich)

ZVONAREV, E.A.

Problems of cartography in the light of the CPSU program, Vest,
IGU 17 no.18:56-62 '62. (MIRA 15:10)
(Cartography)

CHURKIN, Vladimir Gerasimovich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;
ZVONAREV, K.A., doktor tekhn.nauk,red.; DAGIN, Ye.G., red.izd-va;
VINOGRADOVA, N.F., tekhn.red.

[Geographical atlases] Geograficheskie atlasy. Moskva, Izd-vo Akad.
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Novaia seriia, vol.21.) (MIRA 14:7)

(Atlases)

ZDANOVICH, Vyacheslav Grigor'yevich; KELL', Nikolay Georgiyevich;
ZVONAREV, Klimentiy Aleksandrovich; BELOLIKOV, Antonin Nikolayevich; GUSEV, Nikolay Andreyevich; BUGAYETS, Ya.A., otv. red.; SLAVOROSOV, A.Kh., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.

[Advanced geodesy] Vysshaya geodesiya. By V.G.Zdanovich i dr.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961.
607 p. (MIRA 15:1)

(Geodesy)

ZVONAREV, N.K., inzh.

Nomograms for solving problems of the statistics of ground masses. [Trudy] VNIMI no. 47859-76 862 (MIRA 1787)

CHEKMAREV, A.P.; RABINOVICH, S.N.; Primalni uchastiye: KUS'MIN, V.P.;
ZVONAREV, V.K.; DEMKO, V.M.

Investigating power conditions in the rolling of lightweight
shaped sections on a 550mm. medium section mill. Izv. vys. ucheb.
sav.; chern. met. 6 no.4:56-67 '63. (MIRA 16:6)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Rolling mills)

ACCESSION NR: AF5014539

WM/0089/65/018/009/0483/0487
621.039.542:621.039.548

AUTHOR: Likhachev, Yu. I.; Zvonarev, V. P.; Pupko, V. Ya.

33

TITLE: Internal stresses due to uneven swelling of fissioning material

19 E

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 483-487

TOPIC TAGS: fissioning material, reactor fuel element, fuel element swelling, internal stress, macrostress

ABSTRACT: The authors consider a new cause of macrostresses of the first kind in fuel elements, namely uneven swelling of the fissioning material, brought about by the fact that the fission products are not produced at equal rates over the cross section of the fuel element. The resultant stresses are calculated under certain simplifying assumptions, with a fuel element in the form of a long solid cylindrical rod as an example. The joint action of the stresses due to uneven swelling and of the temperature stresses is considered for brittle material, for plastic material with negligible creep (metal at relatively low temperature), and plastic material with appreciable creep (relatively high temperature level). It is shown that the uneven swelling must be taken into account in the strength calculations in the case of brittle material and material with negligible creep. Orig. art.

L 01063-66

ACCESSION NR: AP5014539

has: 2 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 25May64

NR REF SOV: 003

ENCL: 00

OTHER: 004

SUB CODE: NP

Card 2/2 /T

GORODETSKAYA, E.G. [Horodets'ka, E.H.]; ZVONAREVA, G.N. [Zvonar'ova, H.N.];
SOFIYENKO, T.A. [Sofienko, T.A.]; YARMOLENKO, R.A.; ZHADANOVA, R.I.

Ballistocardiography in cardiovascular pathology in children.
Fiziol. zhur. [ukr.] 8 no.5:600-608 S-0 '62. (MIHA 17:11)

1. Department of Pediatrics of the Kiyev Post-Graduate Institute
for Physicians and the First Children's Hospital of Shevchenko
District, Kiyev.

ZVONAREVA, G. N., Cand Med Sci -- "Condition of the cardiovascular system in typhoid-paratyphoid diseases of children, according to ^{clinical and cardiographic data,} ~~data supplied by the clinic and cardiographs.~~"
Stalino, 1961. (Min of Health UkSSR. Stalin State Med Inst im A. M. Gor'kiy) (KL, 8-61, 261)

LEVIN, M.M.; ZVONAREVA, L.F.

Performance of peak diode voltmeters in measuring voltage of
video pulses. Izv. tekhn. no.1:47-50 Ja '64.

(MIRA 17:11)

ACCESSION NR: AP4007678

S/0214/63/000/007/0064/0067

AUTHOR: Zvonareva, M. L.

TITLE: The H_{α} line in the prominence spectra

SOURCE: Solnechny*ye danny*ye, no. 7, 1963, 64-67

TOPIC TAGS: solar prominence, hydrogen line, chromosphere, prominence spectrum, solar flare, H_{α} line

ABSTRACT: Parameters which characterize the physical conditions in solar prominences can be determined by comparison of theoretical and observational contours of the H_{α} line. Spectrograms obtained in the summer of 1960 at Pulkovo were used for determining cross sections of the H_{α} line at various heights above the chromosphere level. Formulas for computing contours and intensities of hydrogen lines were developed by solving the problem of diffusion of radiation with redistribution of energy between lines, in accordance with the frequency within the line. The velocity of gas motion in a prominence is found to be 11 km sec^{-1} . Photometric cross sections of the H_{α} line become narrower with increasing height above the chromosphere level. This phenomenon

Card 1/2

ACCESSION NR: AP4007678

may be caused by decreased scattering of quanta from the center of prominence toward its periphery without any change in the physical conditions within the prominence. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Kafedra astrofiziki Leningradskogo gosudarstvennogo universiteta (Department of Astrophysics, Leningrad State University)

SUBMITTED: 00

DATE ACQ: 21Jan64

ENCL: 00

SUB CODE: AS

NO REF SOV: 001

OTHER: 000

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

ARAKELYAN, M.A.; ZVONAREVA, M.L.; KOLESOV, A.K.

Calculating the Rosseland mean value for the atmospheres of
hot stars. Uch. Zap. LGU no.323:37-44 '64. (MIRA 17:12)

Mollier $i - x$ diagram and its use in designing evaporators. Prum
potravin 15 no.5:226-235 My '64.

1. Faculty of Mechanical Engineering, Czech Higher School of
Technology, Prague.

"Engineering for dairy and food products" by A.W. Farrall.
Reviewed by Zvonicek. Prum potravín 15 no.4:204 Ap '64.

ZVONAREVA, M.L.

Contours of emission lines in noncoherent scattering. Vest.LGU
15 no.13:141-146 '60. (MIRA 13:7)
(Light--Scattering)

81250

S/043/60/000/13/14/016
C111/C222

24.4500

AUTHOR: Zvonareva, M.L.

TITLE: On the Contours of the Emission Lines at the non-Coherent Scattering

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1960, No. 13, pp. 141 - 146

TEXT: The author considers the radiation diffusion¹ in a plane plate for a completely incoherent scattering. For the diffusion there results the integral equation

$$(9) \quad B(\tau) = \frac{\lambda}{2} \int_0^{\tau_0} K(|\tau - \tau'|) B(\tau') d\tau' + B_0(\tau),$$

where τ_0 is the optical thickness of the plate,

$$(10) \quad K(\tau) = A \int_{-\infty}^{\infty} \alpha^2(x) E i [\alpha(x)\tau] dx,$$

Card 1/3

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81250

On the Contours of the Emission Lines at the
non-Coherent Scattering

S/043/60/000/13/14/016
C111/C222

$$(11) \quad E i y = \int_y^{\infty} e^{-y} \frac{dy}{y}, \quad \alpha(x) = e^{-x^2}, \quad \Lambda = \frac{1}{\sqrt{\pi}}$$

and B, B_0 are defined by

$$(3) \quad \epsilon_y^0 = \sigma_y B_0, \quad \epsilon_y = \sigma_y B,$$

where σ_y, ϵ_y are the coefficients of absorption and emission, ϵ_y^0 relates to the direct emission of the sources. The solution of (9) is sought in the form

$$(13) \quad B(\tau) = a + b\tau - c\tau^2.$$

The results of the numerical calculations of a, b, c are given in tables. Then the contours of the emission lines are obtained according to the formula

$$(24) \quad I(x) = \alpha(x) \int_0^{\tau_0} B(\tau) e^{-\alpha(x)\tau} d\tau.$$

Card 2/3

4

On the Contours of the Emission Lines at the
non-Coherent Scattering

81250
S/043/60/000/13/14/016
C111/C222

The appearance of a central depression is characteristic which appears for
 $\tau_0 \sim 5$ and which increases with an increasing τ_0 .

The author mentions D. Ivanova. There are 2 figures, 4 tables and 2
references : 1 Soviet and 1 Swiss.

Card 3/3

4

ZVONAREV, S. M., and A. F. FEFANOV

Primenenie teoremy o trekh momentakh pri raschete gorizonta'nogo operen'ia.
(Tekhnika vozdushnogo flota, 1940, no. 12, p. 43-47, tables, diags.)

Title tr.: Application of the three moment equation in the design of
horizontal control surfaces.

TL504.T4 1940

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

ZVONAREVA, M.L.

Contours of absorption lines associated with noncoherent diffraction
[with summary in English]. Vest. LGU 13 no.7:189-195 '58. (MIRA 11:5)

(Stars--Spectra)

AUTHOR: ZVONAREVA, M.L.

43-7-18/18

TITLE: The Contour of the Absorption Lines for an Incoherent Diffusion Process (O konturakh liniy pogloshcheniya pri nekogerentnom rasseyanii)

PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya Matematiki, Mekhaniki i Astronomii, 1958, Nr 7 (2), pp 189-195 (USSR)

ABSTRACT: The author determines the contour of the absorption lines for a complete incoherent diffusion process and under the following assumption on the Planck's function $B_\nu(T)$:

$$B_\nu(T) = B_\nu(T_0)(a + bT + c e^{-mT}).$$

The paper joins papers of V.V.Sobolev [Ref.3,4] and the investigation carried out by the use of probability theoretical arrangements leads to an already published result of Ueno [Ref.5]. Some little numerical data are of certain interest. There are 3 figures, 3 Soviet and 2 foreign references.

SUBMITTED: 18 May 1957

AVAILABLE: Library of Congress

Card 1/1

1. Functions-Theory 2. Diffusion

ZVONAREVA, S.I. (Moskva)

Zealous investigators. Priroda 49 no.5:79 My '60.
(MIRA 13:5)

(Nature study)

ZVONAREVA, S.I.

Study of karst phenomena by the participants of the All-Union
Pioneers and Students Expeditions. Inform.sbor.Mezhd.kom.po
izuch.geol.geogr. Kar. no.1:227-242 '60. (MIRA 15:4)

1. Tsentral'naya detskaya ekskursionno-turistskaya stantsiya.
(Karst)

AVONAREVA, V. G.: "Homework in the English language in the tenth class in connection with polytechnic training." Academy of Pedagogical Sciences RSFSR. Sci Res Inst of Teaching Methods. Moscow, 1955. (Dissertation for the Degree of Candidate in Pedagogical Science.)

Knizhnaya letopis', No. 30, 1956. Moscow.

ZVONAREVA, V.V. (Moskva)

Prothrombin time in some infectious diseases. Klin.med. 36 no.3:
121 -124 Mr '58. (MIRA 11:4)

1. Iz bol'nitsy imeni S.P.Botkina (glavnyy vrach - prof. A.N.
Shabanov, nauchnyy rekovoditel' raboty - doktor meditsinskikh
nauk E.A.Gal'perin)

(PROTHROMBIN TIME, in various dis.
commun. dis. (Rus))

(COMMUNICABLE DISEASES, blood in
prothrombin time (Rus))

Processing water fowl with hot water on a semiautomatic conveyor
line. Mas. ind. SSSR. 30 no.4:36-37 '59. (MIRA 12:12)

1. Poltavskiy myasokombinat.
(Water birds) (Poltava--Poultry plants)

ZVONAROVA, Ye.

Hot water processing of waterfowl. *Mias.ind.* SSSR 30 no.1:43
'59. (MIRA 12:4)

1. Poltavskiy myasokombinat.
(Poultry plants)

(2)
Washing of the fusel oil which is withdrawn from batch
rectification apparatus. S. V. Bushuev and Z. M. Zedun-
reva (Mirof. moy. Alkohol. Plant, Chelyabinsk). *Spirtoy. Pr.*
Prim. 20, No. 1, 28-3 (1954).—A simple device is described
with drawing, where water is bubbled through the fusel oil.
Werner Jacobson

10-2-73
JJP

"APPROVED FOR RELEASE: Thursday, September 26, 2002
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1
CIA-RDP86-00513R002065710018-1"

BUSHUYEV, S.V.; ZVONAREVA, Z.M.

**Purification of fusel oil from periodic-action rectifiers. Spirt.prom.
20 no.1:28-29 '54. (MLRA 7:5)
(Fusel oil)**

ACCESSION NR: AP5016887

UR/0374/65/000/000/0087/0002
678:620.179.16

AUTHOR: Zvonarzh, V. (Pardubitsa); Tamshina, I. (Pardubitsa)

TITLE: Static and dynamic properties of fiberglass reinforced plastics.
Part 2. The effects of thickness

SOURCE: Mekhanika polimerov, no. 3, 1965, 87-92

TOPIC TAGS: fiberglass reinforced plastic, plastic elasticity, elasticity modulus, polyester resin, Beer equation

ABSTRACT: In a previous communication (Mekh. polim., 1965, 1, 146), the authors described the influence of the individual components of polyester resin and glass on the dynamic E and G moduli, and the mechanical loss coefficients d and d' of fiberglass-reinforced plastics. The present paper is devoted to the study of thickness effects, i. e., the influence of the number of layers and the thickness of single layers on the statically and dynamically determined E and G elasticity moduli. The temperature effects were also studied. The fiberglass-reinforced plastic was made of Yplast 3 and the unsaturated CHS-Polyester 104 resin with 2% methyl-ethyl ketone peroxide and 1% of a 10% solution of cobalt naphthenate in toluene. Tests showed that the E and G moduli are, for all practical purposes, independent of the total thickness of the material; they are sensitive, however, to the thickness of a single elementary layer, i. e., to the glass content

Co. 1/2

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ACCESSION NR: AP5016837

within the plastics. The results are in good agreement with theoretical approximate equations; the systematic deviation indicates that the Beer equation (F. Beer, VDI Ztschr., 1959, 101, 463) neglected the wave-like packing of the fibers and assumed an ideal connection between the resin and glass. The dynamic moduli are, as a rule, larger (in absolute terms) than the corresponding static quantities and the difference increases with the temperature. Orig. art. has: 10 formulas, 2 figures, and 3 tables.

ASSOCIATION: None

SUBMITTED: 10 Nov 64

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 003

Card

2/2

ZVONKOVA, Z.V.; RODIONOV, A.N.; POVET'YEVA, Z.P.

Role of hydrogen bonding in the structures of crystalline
hydrates of compound thiocyanates of metals. Kristallografiia
8 no.2:275-277 Mr-Ap '63. (MIRA 17:8)

1. Fiziko-khimicheskiy institut imeni Karpova.

Basic processes of food industry technology. Prum potravín
16 no.1:Suppl:no.1:1-8 '65.

STOLBA, F., inz.; ZYONICKER, F.

Experiences in taking winter precautions in waterworks. Vzd
hosp 15 no.1:6-9 '65.

1. Frazske vodarny, Prague.

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

SOURCE CODE: UM/0413/66/000/014/0042/0042

INVENTORS: Klimov, V. V.; Androyov, A. Ya.; Nakhodnova, A. P.; Kozachenko, V. N.;
Akhkozov, Ye. A.; Ivanov, D. G.; Didkovskaya, O. S.; Zvonik, V. A.

ORG: none

TITLE: A method for obtaining a piezoceramic material. Class 21, No. 183812
[announced by Donets Branch of All-Union Scientific Research Institute of Chemical
Reagents and of High Purity Chemicals (Donetskiy filial Vsesoyuznogo nauchno-
issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh
veshchestv)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 42

TOPIC TAGS: piezoelectric ceramic, barium compound, lead compound, calcium compound,
titanium compound, sintered alloy

ABSTRACT: This Author Certificate presents a method for obtaining a piezoceramic
material from a mixture of barium, lead, calcium, and titanium compounds by sintering
this mixture. To lower the temperature of sintering this material, the above com-
pounds are used in the form of nitric acid solutions of barium, lead, calcium, and
titanium. This solution is atomized in a stream of air at the temperature of 400--
500C. After this, the powder is sintered at the temperature of 800--1000C.

SUB CODE: 11/ SUBM DATE: 21May64

Card 1/1

UDC: 621.315.612.537.226.33

ZVONIMIR, Duric

"Some information about the prices of construction of hydro electric stations
in the Brbas - Pliva system"

SO: ELEKTROPRIVREDA, May - June 1955

ACC NR: AP6029824

SOURCE CODE: UR/0363/66/002/008/1483/1486

53
52
B

AUTHOR: Klimov, V. V.; Kozachenko, V. N.; Didkovskaya, O. S.; Zvonik, V. A.; Kisel', T. P.; Andreyev, A. Ya.

ORG: All-Union Scientific Research Institute of Chemical Reagents and High-Purity Substances, Donetsk Branch (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chislykh veshchestv, Donetskii filial)

TITLE: Preparation of piezo- and ferroelectric ceramics using spray dried solutions

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1483-1486

TOPIC TAGS: piezoelectric ceramic, ferroelectric ~~ceramic~~ ^{material}, ceramic technology, ceramic product property, barium titanate, titanate, lead ~~titanate~~, calcium ~~titanate~~

ABSTRACT: A preparative method was described for piezo- and ferroelectric ceramic materials on the base of triple titanate of barium, lead, and calcium. The method was designed to replace the conventional ceramic sintering technique in view of its substantial disadvantages. The first step of the described method consisted of preparation of the finely dispersed (particle size 6-8 μ) powder of the basic barium, lead, and calcium nitrates by spray drying of their aqueous solutions following a technique invented by the authors [Author Certificate no. 901979-29-14, 21.05.1964]. The powdered nitrates were then converted into titanates of varied

Card 1/2

UDC: 666.3:537.226.33+666.3:537.228.1

ACC NR: AP6029824

composition by firing the nitrate powder at 900—1000C at which temperature formation of the solid solutions with perovskite structure is completed. The particle size of titanates after firing was about 1 μ . High-purity powders may be obtained from adequately pure starting materials. The sintering of these powders into ceramic products occurs at a temperature in the 1230—1280C range, which is 100—150C lower than the temperature range of sintering the powders produced by conventional ceramic technique. The electrophysical properties of the ceramic products obtained by spray drying were shown to be superior to those of the products of ceramic technology. Notably, the piezoelectric modulus (d_{31}) was comparatively higher and, in certain samples, constant in the -60 to +80C range. Universality of the method described was stressed, insofar as it may be applied to most of the ferro- and piezoelectric ceramics presently used. Orig. art. has: 4 figures and 2 tables. [JK]

SUB CODE: 11/ SUBM DATE: 22Oct65/ ORIG REF: 001/ ATO Press 5065

Card 2/2 10

ZVONIMIR GALL

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1
APPROVED FOR RELEASE: Thursday, September 26, 2002
CIA-RDP86-00513R002065710018-1"

"A biological Method of investigation of Insectioides in Vitro". Zvonimir Gall & Isak Levi Vets. at Vet. Inst. of Republic of Bosnia-Herzegovina, Sarajavo.

SOURCE: Vet., SVEZAK 4, p. 667, 1953

ROMM, Ye.S.; GORYUNOV, I.I.; GMID, L.P.; GROMOV, V.K.;
DOROFEYeva, T.V.; KNORING, L.D.; KALACHEVA, V.M.; TATARINOV,
I.V.; KLEYNOSOV, Yu.F.; KAPLAN, M.Ye.; ZVONITSKAYA, I.V.;
MAZURKEVICH, Z.I.; DRYABINA, N.N.; RUSAKOVA, L.Ya., vedushchiy
red.; BARANOVA, L.G., tekhn. red.

[Methodological text on the study of the fracturing of rocks
and fractured oil and gas reservoirs]. Metodicheskoe posobie
po izucheniiu treshchinovatosti gornykh porod i treshchinnykh
kollektorov nefi i gaza. Leningrad, Gostoptekhizdat, 1962.
76 p. (Leningrad. Vsesoiuznyi nefianoi nauchno-issledovatel'-
skii geologorazvedochnyi institut. Trudy, no.201).

(Joints(Geology)) (Oil sands) (MIRA 16:4)

MARGARETA, M.F.; ZVONITSKAYA, T.M.

Hypertonia in scarlet fever in children. *Sovet.med.* no.3:9-10
Mr '50. (CML 19:2)

1. Of the Department of Children's Diseases, First Moscow Order
of Lenin Medical Institute (Director of Department -- Prof.
V.I.Molchanov).

S/123/61/000/014/015/045
A004/A101

AUTHORS: Zvonitskiy, A. Yu.; Belosel'skiy, N. V.

TITLE: The practice of developing and introducing the gang technology.

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1961, 2, abstract 14B8. (V sb. "Gruppovaya tekhnol. v mashinostr. i priborostr." Moscow - Leningrad, Mashgiz, 1960, 323-339)

TEXT: The introduction of the gang method was started with automatic and turret-lathe operations. For these purposes small-size pneumatic units with a clamping stress of 500 kg were utilized which made it possible to fasten in one fixture 3-4 parts simultaneously. The authors describe: a four-position gang fixture for the milling of slots, grooves and flats, a 72-position gang setting of a lapping automatic, indexing draw-in attachment, semi-automatic gang milling fixture for the processing of horned nuts, for-spindle drilling head with adjustable inter-center distances, gang jigs with automatic fastening and ejection of parts, fixture for the mandrel-less winding of cylindrical springs increasing the productivity by a factor of 10-15. The authors present examples of gang

Card 1/2

The practice of developing and introducing the ...

S/123/61/000/014/015/045
A004/A101

machining on centerless grinding and thread-rolling machines, as well as on cold-upsetting automatics. There are 16 figures.

I. Briskman

[Abstracter's note: Complete translation]

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/3998

Zvonitskiy, Aleksandr Yulianovich, Engineer

. Opyt gruppovoy obrabotki detaley na revol'vernykh stankakh (The Practice of Group Machining of Parts on Turret Lathes) Leningrad, 1959. 23 p. (Series: Leningrad. Dom nauchno-tehnicheskoy propagandy. Obmen peredovym opytom. Seriya: Mekhanicheskaya obrabotka metallov, vyp. 10) 6,500 copies printed.

Sponsoring Agencies: Leningrad. Dom nauchno-tehnicheskoy propagandy, and Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR.

Ed.: I.I. Verzhbinskaya, Engineer; Tech. Ed.: V.L. Gvirtz.

PURPOSE: This booklet is intended for production engineers and technicians in machine-building plants.

COVERAGE: The booklet deals with group machining of parts on turret lathes. Two basic groups of turret lathes are discussed: 1) the 1336M turret lathe of the Kiyevskiy zavod (Kiyev Plant) and the "Skoda-36" with 36-mm spindle holes, and 2) turret lathes of the "Boley-type", such as "Boley", "Leynen," and "Wolman".

Card 1/2

The Practice of Group (Cont.)

SOV/3998

with 10- and 20-mm spindle holes. The author states that the adoption of group machining of parts on turret lathes results in considerable economy of machining time and the number of special fixtures and cutting tools required. The method of group machining is explained by means of classification diagrams, operation instruction sheets, and classification guiding sheets. The material presented is said to be limited in scope, as it is based on practices and methods developed in only one plant. No personalities are mentioned. There are 3 references, all Soviet.

TABLE OF CONTENTS: None given.

AVAILABLE: Library of Congress

Card 2/2

VK/pw/gmp
7-27-60

GAFT, Ya.M., kand.med.nauk; Primali uchastiye: BRANZBURG, N.A., vrach;
GOL'TS, I.P., vrach; GORELIK, Ye.S., vrach; ZVONKINA, O.M., vrach;
LIVSHITS, R.I., vrach; LUR'YE, Ye.L., vrach; OZHE, N.B., vrach;
RYBAL'SKAYA, V.G., vrach; CHELNOKOVA, A.K., vrach; YAVORSKIY, A.V.,
vrach

Dynamics of the tuberculous process in patients transferred to the
third group of dispensary registration. Probl. tub. 38 no.3:3-8
'60. (MIRA 14:5)

1. Iz protivotuberkuleznogo dispansera No.4 Moskvy (glavnyy vrach -
zasluzhennyy vrach RSFSR S.M.Zamukhovskiy).
(TUBERCULOSIS)

BUTOMO, D.G.; VAYZHLIA, N.M.; ZVONKINA, V.F.; KOSHURIN, A.V.; SERGEYEV, L.N.;
FRUMKINA, Yu.A.

Concerning the "Handbook on the processing of nonferrous metals and
alloys" TSvet.met. 35 no.12:60 D '62. (MIRA 16:2)

1. Sovet Nauchno-tehnicheskogo obshchestva zavoda "Krasnyy
Vyborzhets".

(Nonferrous metals)

ZVONKO, Lukicevic

A new method for electric-arc welding in CO₂⁺ UM. Zavarivanje 5
no.11/12:260-266 D '62.

KOS'KOV, B.I.; MUKHIN, N.S.; SMIRNOV, A.A., kand. tekhn. nauk; NIKITIN, V.I., prepodavatel'; KONDRAT'YEVA, N.Ya., kand. tekhn. nauk, prepodavatel'; LOSEV, K.A., dotsent; ZVONKOV, A.P.; KOMAROVSKIY, V.M.; MARCHENKO, S.N., kand. tekhn. nauk

Discussion of an article by B.I. Gerzhuly. Geod. i kart.
no.4:28-36 Ap '64. (MIRA 17:8)

1. Nachal'nik tekhnicheskogo otdela Moskovskogo gorodskogo tresta geologo-geodezicheskikh i kartograficheskikh rabot (for Kos'kov). 2. Nachal'nik kompleksnogo otdela Moskovskogo otdeleniya Tsentral'nogo tresta inzhenerno-stroitel'nykh izyskaniy (for Mukhin). 3. Nachal'nik geodezicheskoy sluzhby pri Upravleni glavnogo arkhitekтора Voronezha (for Smirnov) 4. Kafedra geodezii Khabarovskogo politekhnicheskogo instituta (for Nitkin). 5. Kafedra kartografii Leningradskogo gosudarstvennogo universiteta (for Kondrat'yeva). 6. Kuybyshevskiy inzherno-stroitel'nyy institut (for Losev). 7. Rukovoditel' sektora Nauchno issledovatel'skogo institut gradostroitel'stva Kiyev (for Marchenko).

ACCESSION NR: AP4041736

S/0181/64/006/007/2198/2200

AUTHORS: Girayev, M. A.; Karpovich, I. A.; Zvonkov, B. N.

TITLE: Frequency dependence of the field effect in photosensitive films of CdS

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 2198-2200

TOPIC TAGS: thin film, cadmium sulfide, photoconductivity, frequency dependence, carrier mobility, photosensitivity

ABSTRACT: The investigation was undertaken in view of recent interest in such films, brought about by the development of field-effect transistors on their basis (P. K. Weimer, Proc. IRE v. 50, 1526, 1962). The films were prepared on glass substrates by evaporation in vacuum, and activated by heat treatment with air in a photoconductor powder. The frequency dependence was investigated by the method of Aigrain et al. (J. Phys. Rad. v. 13, 587, 1952). Constant

Card 1/5

ACCESSION NR: AP4041736

illumination was used to reduce the layer resistance and to make the method usable at high temperatures. The effective carrier mobility was found to be practically independent of the temperature but highly dependent on the intensity of illumination. For unactivated CdS layers with increased dark conductivity and weak photosensitivity, the effective mobility did not exceed $1 \text{ cm}^2/\text{V-sec}$ and was practically constant up to 20 kcs. The appreciable change in the effective mobility of photosensitive layers occurs in the same frequency interval in which the photocurrent changes strongly as a frequency of the light modulation frequency and is apparently connected with relaxation of the photoconductivity. The decrease in mobility beyond about 20 kcs may be due to disturbance of the equilibrium of the induced carriers with rapid surface states. A somewhat unexpected effect is that in polycrystalline CdS films the effective mobility at high frequencies may become comparable with that for CdS single crystals. This is confirmed by Hall-effect measurements, which will be reported elsewhere. "The authors thank S. Abdiyev

Card 2/5

ACCESSION NR: AP4041736

for preparing the samples for the investigation." Orig. art. has:
2 figures.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet (Gorkiy
Stat. University)

SUBMITTED: 22Feb64

ENCL: 02

SUB CODE: SS, EC

NR REF SOV: 002

OTHER: 004

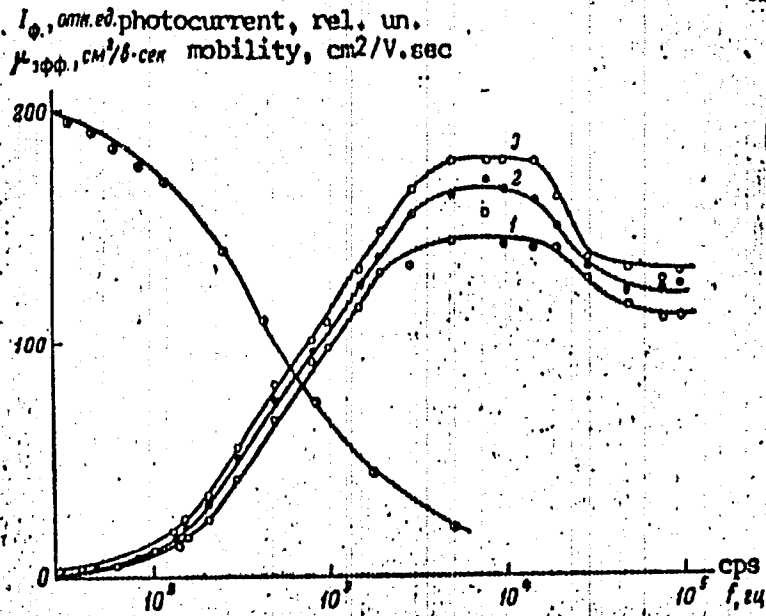
ACCESSION NR: AP4041736

ENCLOSURE 01

Frequency dependence of effective carrier mobility in CdS film (sample 1) under constant illumination

T, °C: 1 - 25, 2 - 58, 3 - 88;

4 - photocurrent vs. light modulation frequency at 25C



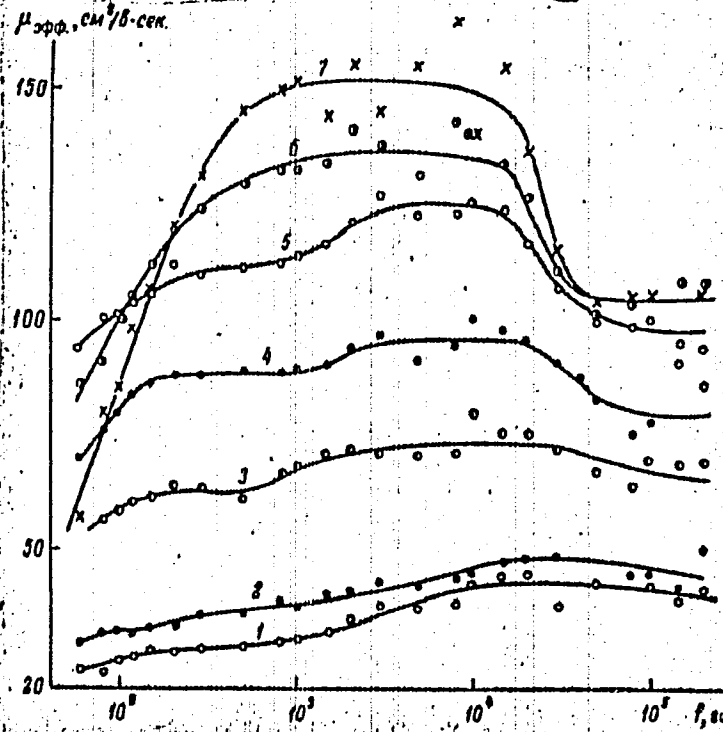
ACCESSION NR: AP4041736

ENCLOSURE 02

Frequency dependence of effective carrier mobility in CdS film (sample 2) under different illuminations

Film resistance under illumination, kilohm: 1 - 1000, 2 - 600, 3 - 300, 4 - 100, 5 - 40, 6 - 20, 7 - 10.

Card 5/5



Automatic welding of aluminum with a melting electrode. Avtom.svar.
9 no.1:21-28 Ja-F '56. (MIRA 9:6)

1.Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki imeni
Ye.O.Patona AN USSR.
(Aluminum--Welding) (Electric welding)

RABKIN, D.M.; ZVONKOV, M.L.; VERCHENKO, V.A.

Making welded aluminum-magnesium alloy containers. Avtom. svar.
11 no. 4:84-91 Ap '58. (MIRA 11:6)

1. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.
Ye.O. Patona AN USSR (for Babkin, Zvonkov). 2. Trest po montazu
prodovol'stvennykh predpriyatii (for Verchenko).
(Aluminum-magnesium alloy—Welding)
(Tanks—Welding)

RABKIN, D.M.; ZVONKOV, M.I.

Automatic welding of aluminum using twin electrodes. Avtom. svar.
11 no.5:25-31 My '58. (MIRA 11:6)

L. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.
Ye.O. Patona AN USSR.

(Aluminum--Welding) (Electrodes)

125-58-4-12/15

AUTHORS: Rabkin, D.M., Candidate of Technical Sciences, Zvonkov, M.L. and Verchenko, V.A., Engineers

TITLE: Experience in Constructing Welded Aluminum-Magnesium Containers (Opyt izgotovleniya svarnykh yemkostey iz aluminievogo-magniyevogo splava)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 4, pp 84-88 (USSR)

ABSTRACT: A detailed description is given of all operations performed in assembling 700 m³ aluminum-magnesium alloy containers at the Kombinat sinteticheskikh zhirozameniteley (Synthetic Fat Substitutes Combine). The electric arc welding method is used for all horizontal connections, and oxy-gas (propane-butane mixture) for the vertical welds which are welded by two operators simultaneously - one on the inside and one on the outside of the container, so that the operation proceeds with only one welding puddle. The information includes the chemical composition of the base metal - "AMg5B" alloy - and special "AN-AL03" electrode coating and "AN-A201" flux developed for the purpose at the Electric Welding Institute imeni Paton (Tables 1, 2). The following persons participated in the work:

Card 1/2

125-58-4-12/15

Experience in Constructing Welded Aluminum-Magnesium Containers

G.B. Al'terman, I.M. Bolotin, V.M. Pauler, L.D. Polonskiy,
O.A. Videnskiy, P.K. Chubukov, I.I. Kravtsov, Ya.M.
Yalovoy.

There are 3 tables and 7 photographs.

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (Elec-
tric Welding Institute imeni Ye.O. Paton of the AS UkrSSR);
Prodmontazh.

SUBMITTED: December 3, 1957

AVAILABLE: Library of Congress

Card 2/2

ZVONKOV. M.L.

AUTHORS: Rabkin, D.M., and Zvonkov, M.L. 125-58-5-4/13

TITLE: Automatic Welding of Aluminum by a Split Electrode (Avtomaticheskaya svarka alyuminiya rasshcheplennym elektrodom)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 5, pp 25-31 (USSR)

ABSTRACT: The peculiarities and application of the split-electrode method of welding were given previously [Ref. 2,3 and 4]. The method consists of the use of two electrodes moving parallel to one another and producing two puddles which merge when the distance between the electrodes diminishes. The merged-puddle is wider and shallower than the puddle produced by a single arc. The method is schematically illustrated (Fig. 1) and calculations of the fusion depth as a function of the distance between electrodes are made. The method permits welding butt-joints without the use of a steel support. The welds are dense, wide, with good mechanical properties. Regular welding equipment needs only minor adjustment when applying the split-electrode method: a special pulling-type holder (Fig. 5) with two pairs of guide pipes, and an additional bobbin for electrode wire. The method has been successfully introduced at the Kiyev plant

Card 1/2

125-58-5-4/13

Automatic Welding of Aluminum by a Split Electrode

"Bol'shevik" where it is used for welding aluminum vessels (the technology is briefly described in figure 6 and 7). The following advantages resulted: consumption of electrode wire has been reduced by 40%, and electric energy by 20%. Work efficiency has increased three times as compared with manual arc welding. The following engineers of the "Bol'shevik" plant took part in developing the split-electrode welding technology: I.M. Mirgorodskiy, F.S. Bugriy, V.M. Ponomar', I.M. Savich, V.M. Grishchenko. There are 7 figures and 5 Soviet references.

ASSOCIATION: Institut elektrosvariki imeni Ye.O. Patona AN UkrSSR (Electric Welding Institute imeni Ye.O. Paton of the AS UkrSSR)

SUBMITTED: January 9, 1958

AVAILABLE: Library of Congress

Card 2/2

PHASE I BOOK EXPLOITATION
SOV/5078

Akademiya nauk URSR, Kiev, Institut elektrozvaruyvaniya
Vnedreniye novykh sposobov svarki v promyshlennosti; sbornik statey
VVP, 3. (Introduction of New Welding Methods in Industry; Col-
lection of Articles, v. 3) Kiev, Oos. izd-vo tekhn. lit-ry
DzrSSR, 1960. 207 p. 5,000 copies printed.
Sponsoring Agency: Otdel Trudovogo Krasnogo Znameni Institut
elektrozvarki imeni akademika Ye. O. Patona Akademii nauk
Ukrainskoy SSR.

Ed.: M. Pisarenko; Tech. Ed.: S. Mabusovich.

PURPOSE: This collection of articles is intended for personnel in
the welding industry.

COVERAGE: The articles deal with the combined experiences of the
Institut elektrozvarki imeni Ye. O. Patona (Electric Welding
Institute imeni Ye. O. Paton) and several industrial enterprises
in solving scientific and engineering problems in welding
technology. Problems in the application of new methods of me-
chanized welding and electroslag welding in industry are discus-
sed. This is the third collection of articles published under the same
title. The Foreword was written by B. Ye. Paton, Academician of
the Academy of Sciences Ukrainian SSR and Lenin Prize winner.
There are no references.

TABLE OF CONTENTS:

Lashkevich, R. I. [Candidate of Technical Sciences],
Ye. L. Mandel'shteyn [Candidate of Technical Sciences],
Electric Welding Institute imeni Ye. O. Paton.
2. O. Kovshinnik [Candidate of Technical Sciences,
Ukrainian Scientific Research Institute for the Pipe
Industry], and S. A. Kuznetsov [Chief Engineer, Chaly-
binskiy truboprovodnyy zavod (Chalybinsk Pipe Mill)].
New Process for Producing Large-Diameter Straight-Weld
Pipes for Oil and Gas Lines

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Kryukov, I. I. [Engineer], D. M. Babitskiy [Candidate of
Technical Sciences], I. M. Sviridov [Engineer, Electric
Welding Institute imeni Ye. O. Paton], V. A. Verchenko
[Engineer of the Trust "Prodotzhami" Trust for Installa-
tion of Food Industry Establishments], and I. M. Mirgorod-
skiy [Formerly Chief Engineer of the "Bol'shevit' Plant],
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185
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Ye. S. Shubert [Engineer], Institute imeni Ye. O. Paton,
Mechanic, Belgorodskiy zavod (Belgorod Machine-
Plant), E. P. Ivanov [Assistant Chief of the Cement
Department, Krasnoyarskiy zavod "Sibiryachan" (Krasnoyarsk
Siberian Heavy Machinery Plant), and V. G. Kotlyarskiy
(Deputy Chief Process Engineer, Sverdlovskiy zavod "Tsvetmet"
(Sverdlov Heavy Machinery Plant), Sverdlovskiy zavod "Tsvetmet"
Large Type 35L Steel Tilting for Cement Kilns

176
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Welding Institute imeni Ye. O. Paton], A. I. Alkhanov
[Trust "Metal'konstruktsiya" (Metal Fabricated-Steel
Works)], and S. Yu. Babitskiy [Trust "Metal'konstruktsiya"
in the Mechanization of Welding (Trust)]. Experience
in the Mechanization of Welding (Trust) in the Fabrica-
tion of Metallic Structures for a Blast-Furnace Plant

16

PERIODICAL ABSTRACTS

Sub.: USSR/Engineering

AID 4191 - P

RABKIN, D. M. and M. L. ZVONKOV

VOПРОSY ТЕХНОЛОГИИ АВТОМАТИЧЕСКОЙ СВАРКИ АЛЮМИНИИ ПЛАВЯЩИМИ ЭЛЕКТРОДАМИ (Technical problems in Automatic Welding of Aluminum with Melting Electrodes). Avtomaticheskaya svarka, no. 1, Ja/F 1956: 21-29.

The technique and equipment used in automatic welding of aluminum with semi-open melting electrodes are discussed: amount of current required, thickness of electrode-wire used and determination of the electrode feeding speed and most favorable voltage. The selection of the proper welding speed and the exact quantity of flux used to get the best quality of welded seam with consideration of the thickness of the metal to be welded, and a description of a spout mechanism for feeding electrode wire, as well as of a measuring hopper for spreading flux, are presented. One table, 3 graphs and 7 macropictures. Four Russian references, 1953-1955.

$R_{\infty}, I_{\mu}, \alpha, V_{\infty} \nu$

77227, SOV/89-8-1-21/29

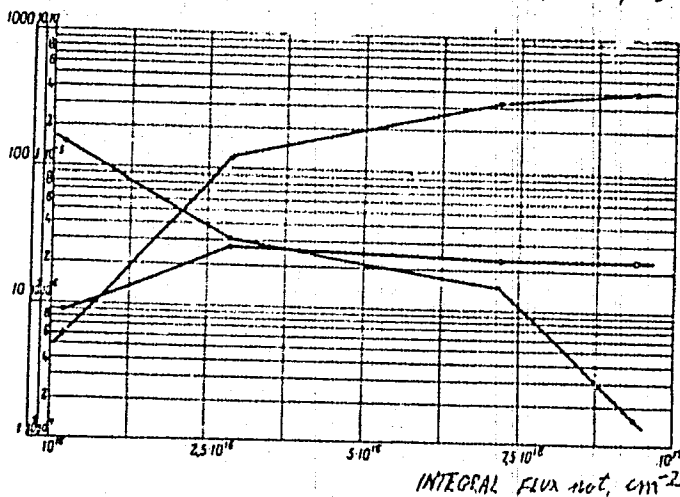


Fig. 4. $I_{cs}(x)$, $V_{\infty}(o)$ and $R(o)$ of an U_3O_8 -MgO sample vs integral neutron flux $no\dot{t}$ at a constant neutron flux density of $8 \cdot 10^{12} \text{ cm}^{-2} \cdot \text{sec}^{-1}$.

Card 8/10

A Study of Electromotive Forces Generated
in Semiconductor Systems Containing Uranium,
When Irradiated in Reactors. Letter to the
Editor

77227
SOV/89-8-1-21/29

10% enriched sample gave a 15 times larger effect than the natural one. Authors used also oxides and sulfides of Be, Ni, Mo, W, Zn, and Co. In all cases they observed an emf, although the biggest effect occurred with the U_3O_8 -MgO combination. Computation showed that in this last case 0.01% of the fragments' energy was transformed into electrical energy. Such small efficiency can be explained through the apparently short lifetime of the current carriers, and a poor relation between their diffusion path length compared with the sample thickness. The authors conclude that the emf is basically a result of a valve effect, although the volume and thermal emf may play some role too. Professor A. K. Krasin showed interest, G. N. Ushakov collaborated during experiments, and R. G. Bulycheva, V. A. Shalin, and G. V. Rykov were partially involved in experimental work. There are 4 figures; and 6 references, 4 Soviet, 1 U.K., 1 U.S. The U.K. and

Card 9/10

A Study of Electromotive Forces Generated
in Semiconductor Systems Containing Uranium,
When Irradiated in Reactors. Letter to the
Editor

77227
SOV/89-3-1-21/29

U.S. references are: G. Kinchin, R. Pease, Repts Progr.
Phys., 18, 1 (1955); J. Glen, Advances Phys., 4, Nr 16,
381 (1955).

SUBMITTED: August 3, 1959

Card 10/10

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from different materials on an increase
in neutron capture by the uranium shielding of a fast reactor.
Atom. energ. 15 no.3:258-259 S '63. (MIRA 16:10)

(Neutrons—Capture) (Nuclear reactors)

AUTHOR: Zvonarev, A. V.; Koleganov, Yu. F.; Mikhaylus, F. F.; Nikolayev, M. N. 35
31/

ORG: none 19 B

TITLE: Measurement of neutron spectra in the energy region up to 3 kev by resonant indicators

SOURCE: Atomnaya energiya, v. 20, no. 6, 1966, 518-520

TOPIC TAGS: neutron spectroscopy, reactor neutron flux, fast neutron, neutron capture/
BR-1 reactor nuclear

ABSTRACT: The authors propose a modification of the method of V. I. Golubey et al. (Atomnaya energiya v. 11, 1961) for measuring neutron spectra at different points inside a nuclear reactor through the use of resonant self-screening of indicators by filters of the same material. The authors' modification, aimed at extending the possible energy range, consists of using the first resonances of neutron capture in W^{186} , Mn^{55} , and Na^{23} . The filter resonant self-screening factors needed to make use of the method are calculated for different thicknesses of the indicators themselves and of the filters surrounding them. Plots of these factors, obtained by a Monte Carlo computer calculation, are presented. The method was used to measure the distribution of neutrons with energies corresponding to the first resonances of In^{153} , Au^{197} , W^{186} , Mn^{55} , and Na^{23} inside a uranium block measuring 70 x 70 x 90 cm bombarding with neutrons in the Fermi spectrum. The results confirmed the possibility of

AP6021530

using the proposed resonant indicators for reactor measurements. The authors thank V. I. Golubev, M. Yu. Orlov, and O. P. Uznadze for taking part in the work, and the crew of the BR-1 reactor and K. I. Nesterov for help with the measurements. Orig. art. has: 4 figures, 1 table, and 1 formula.

SUB CODE: 18/ SUBM DATE: 29Nov65/ ORIG REF: 010

Card 2/2 LC

Effect of reflectors made from various materials on the number of
neutrons captured in the uranium carbide shield of a fast reactor.
Atom. energ. 15 no.4:327-328 0 '63. (MIRA 16:10)

BONDARENKO, I.I. [deceased]; GOLUBEV, V.I.; ZVONARIV, A.V.; NIKOLAYEV, M.H.;
ORLOV, M.Yu.; UZNADZE, O.P.

Neutron propagation in uranium carbide. Atom. energ. 17 no.2:
113-119 Ag '64 (MIRA 17:8)

HOROZOV, V.; ZVONAREK, E.; VINITSKIY, I.

Improve efficiency work. Den. i kred. 15 no.1:44-46 Ja '57.
(MIRA 10:3)

(Banks and banking)

ZVONAREV, F.

Checking cash discipline at trade enterprises. Den. i kred.
15 no.7:49-50 J1 '57. (MLRA 10:8)
(Leningrad--Retail trade)
(Banks and banking)

ZYONAREV, F.

Consolidating gains made. Den. 1 kred. 13 no.5:31-32 My '55.
(Leningrad--Banks and banking) (MLRA 8:7)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1
ZVONAREV, I.; SENDEZON, E.; SHARUDO, I.; SHORIN, V.; SHUGUROV, V.;
YUSUPOV, T.

In memory of Aleksei Borisovich Travin. Geol. i geofiz. no.4:116-
119 '61. (MIRA 14:5)

(Travin, Aleksei Borisovich, 1908-1960)

CA

Extrater. I. N. Zemanov. U.S.S.R. 64,541, June
30, 1946. M. Kooch

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

FROM EDMLM

ALUMINUM INDEX

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

Fourth Conference of the Coordinating Committee on the Problem
of "Regularities in the Distribution of Coals in the Earth's Crust."
Geol. i geofiz. no.8:131-133 '62. (MIRA 15:10)
(Coal geology--Congresses)

ZVONAREV, I.N., otv. red.; CHERNOVA, L.I., red.; SHMAKOVA, Ye.G.,
tekhn. red.

[Papers of the First Conference of the Siberian Special Commission on the History of Coal Accumulation] Materialy pervogo soveshchaniia Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniia. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, No.1. 1961. 115 p. (MIRA 15:10)

1. Soveshchaniye Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniya. 1st, Novosibirsk, 1959.
(Siberia--Coal geology)

ZVONAREV, I.N.

Third Conference of the Siberian Commission on the study of the
Distribution of and Prospecting for coals in the U.S.S.R. Geol.
i geofiz. no.11:125-127 '61. (MIRA 15:2)
(Coal geology)

ANATOLIEVA, Anna Ivanovna; ZVONAREV, I.W., ovt.red.; GREYNER, R.N., red.;
MAZUROVA, A.F., techm. red.

[Stratigraphy and problems of the Devonian paleogeography of the
Minusinsk intermountainous trough] Stratigrafia i nekotorye voprosy
paleogeografii devona Minusinskogo mezhgornogo progiba. Novosibirsk,
Izd-vo Sibirskogo otd-nia AN SSSR, 1960. 50 p. (Akademiia nauk SSSR.
Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.2).

(MIRA 13:12)

(Minusinsk Basin--Geology, Stratigraphic)
(Minusinsk Basin--Paleography)

ZVONAREV, I.N.

Fifth Conference of the Interdepartmental Coordination Commission
on the Problem "Characteristics of the Distribution of Fossil
Coals in the Earth's Crust.". Geol. i geofiz. no.11:155-157 '64.
(MIRA 18:4)

ZVONAREV, I.N.

Combined study of coal sediments in Western Siberia and the Kras-
noyarsk Territory. Trudy Gor.-geol. inst. Zap.-Sib. fil. AN SSSR
no.18:3-17 '56. (MIRA 13:11)

(Siberia--Coal geology)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1
KHILONOVA, Anna Fedorovna; GREINER, R.N., red.; ZVONAREV, I.N., kand.geol.-
mineral.nauk, red.; MAZUROVA, A.F., tekhn.red.

[Specific composition of pollen and spore complexes in upper Cretaceous deposits of the Chulym-Yenisey Depression] Vidovoi sostav pyl'tsy i spor v otlozheniakh verkhnego mela Chulymo-Eniseiskoi vpadiny. Novosibirsk, Izd-vo Sibirskogo otdeleniia AN SSSR, 1960. 104 p. (Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.3). (MIRA 14:8)
(Chulym Valley--Palynology) (Yenisey Valley--Palynology)

ZVONAREV, I. N.

USSR/Coal
Geology

Sep/Oct 1967

"High Remuneration," I. N. Zvonarev, 2 pp

"Razvedka Nedr" No 5

Discusses the Stalin Prize winners G. P. Rudchenko, V. I. Skoku, I. I. Molchanov, V. V. Stanov and I. N. Zvonarev, who were responsible for most of the discovery and development of coal bases in Siberia. They belong to the West Siberian Geological Administration and the Kuznets Basin Coal Development Trust. The author discusses the success that this group of men has had in the discovery of coking coal in the Tom'-Usinskiy region.

27710

LC

ZVONAREV, I.N.

The problem of Siberian petroleum. Izv.vost.fil.AN SSSR no.6:35-38
'57. (MIRA 10:9)

1. Zapadno-Sibirskiy filial Akademii nauk SSSR.
(Siberia--Petroleum geology)

ZVONAREV, I.N., otv. red.

[Coal geology of Siberia and the Far East] Geologiya uglei
Sibiri i Dal'nego Vostoka. Moskva, Nauka, 1965. 174 p.
(MIRA 18:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut
geologii i geofiziki.

ZVOMAREV

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1
"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

Surveying

Problem of the minimum of operations in base networks of surface and mine surveying.
(Trudy) VNI: I 22, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October ²1952, Uncl.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 673 - I

BOOK

Call No.: AF500203

Author: ZVONAREV, K. A.

Full Title: CARTOGRAPHY

Transliterated Title: Kartografiya

PUBLISHING DATA

Originating Agency: None

Publishing House: Publishing House of Coal Technical Literature
(UGLETEKHIZDAT)

Date: '1951

No. pp.: 212

No. of copies: 5,000

Editorial Staff

Tech. Ed.: Prof. V. V. Kavrayskiy and Prof. A. P. Yushchenko

PURPOSE: A textbook for students of Mine Engineering Departments, specializing in mine surveying. Approved by the Ministry of Higher Education of the USSR for students of institutions of higher learning. The book is dedicated to the 175th anniversary of the Leningrad Institute of Mining Engineers

TEXT DATA

Coverage: The preface states that the absence of a textbook on cartography corresponding to the mine surveying programs of mine institutes and forming part of the course in higher

1/2

Kartografiya

AID 673 - I

geodsy made it necessary to publish this book. The text includes an introduction, four chapters, a conclusion and four supplements. Chapter I covers general information on cartographic projections; Chapter II, conical and corresponding azimuthal projections; Chapter III, cylindrical, perspective and other of the most important projections; Chapter IV, construction and publishing of charts. The conclusion gives a brief history of the development of cartography and the importance of cartography to the mine surveying engineer. The supplements include:
1) a table of the radii of curvature of the spheroid of F. N. Krasovskiy for every degree of latitudes from 0° to 90° ,
2) tables for computation of the projection of Krasovskiy's spheroid, 4) some mathematical constants. 68 figures, diagrams and maps illustrate the text.

No. of References: A few in Russian in the text and footnotes
Facilities: None

ABRAMOV, S.K., kand.tekhn.nauk; AVERSHIN, S.G., prof., doktor tekhn.nauk;
AMMOISOV, I.I., doktor geol.-min.nauk; ANDRIYEVSKIY, V.D., inzh.;
ANTROPOV, A.N., inzh.; APANAS'YEV, B.L., inzh.; BERGMAN, Ya.V.,
inzh.; BLOKHA, Ye.Ye., inzh.; BOGACHEVA, Ye.N., inzh.; BUKRINSKIY, V.A.,
kand.tekhn.nauk; VASIL'YEV, P.V., doktor geol.-min.nauk; VINOGRADOV,
B.G., inzh.; GOLUBEV, S.A., inzh.; GORDIYENKO, P.D., inzh.; GUSEV, N.A.,
kand.tekhn.nauk; DOROKHIN, I.V., kand.geol.-min.nauk; KALMYKOV, G.S.,
inzh.; KASATOCHKIN, V.I., doktor khim.nauk; KOROLEV, I.V., inzh.;
KOSTLIVTSEV, A.A., inzh.; KRATKOVSKIY, L.F., inzh.; KRASHENINNIKOV, G.F.,
prof., doktor geol.-min.nauk; KRIKUNOV, L.A., inzh.; LEVIT, D.Ye., inzh.;
LISITSA, I.G., kand.tekhn.nauk; LUSHNIKOV, V.A., inzh.; MATVEYEV, A.K.,
dots., kand.geol.-min.nauk; MEFURISHVILI, G.Ye., inzh.; MIRONOV, K.V.,
inzh.; MOLCHANOV, I.I., inzh.; NAUMOVA, S.N., starshiy nauchnyy sotrudnik;
NEKIPRELOV, V.Ye., inzh.; PAVLOV, F.F., doktor tekhn.nauk; PANYUKOV, P.N.,
doktor geol.-min.nauk; POPOV, V.S., inzh.; PYATLIN, M.P., kand.tekhn.
nauk; RASHKOVSKIY, Ya.E., inzh.; ROMANOV, V.A., prof., doktor tekhn.
nauk; RYZHOV, P.A., prof., doktor tekhn.nauk; SELYATITSKIY, G.A., inzh.;
SPERANSKIY, M.A., inzh.; TEREENT'YEV, Ye.V., inzh.; TITOV, N.G., doktor
khim.nauk; GOKAREV, I.F., inzh.; TROYANSKIY, S.V., prof., doktor geol.-
min.nauk; FEDOROV, B.D., dots., kand.tekhn.nauk; FEDOROV, V.S., inzh.
[deceased]; KHOMENTOVSKIY, A.S., prof., doktor geol.-min.nauk; TROYANOV-
SKIY, S.V., otvetstvennyy red.; TERPIGOREV, A.M., red.; KRIKUNOV, L.A.,
red.; KUZNETSOV, I.A., red.; MIRONOV, K.V., red.; AVERSHIN, S.G., red.;
BURTSEV, M.P., red.; VASIL'YEV, P.V., red.; MOLCHANOV, I.I., red.;
RYZHOV, P.A., red.; BALANDIN, V.V., inzh., red.; BLOKH, I.M., kand.
tekhn.nauk, red.; BUKRINSKIY, V.A., kand.tekhn.nauk; red.; VOLKOV, K.Yu.,
inzh., red.; VOROB'YEV, A.A., inzh., red.; SVOMAREV, K.A., prof., doktor
tekhn.nauk, red.

(Continued on next card)

ABRAMOV, S.K. (continued) Card 2.

ZDANOVICH, V.G., prof., doktor tekhn.nauk, red.; IVANOV, G.A., doktor
geol.-min.nauk, red.; KARAVAYEV, N.M., red.; KOROTKOV, G.V., kand.geol.-
min.nauk, red.; KOROTKOV, M.V., kand.tekhn.nauk, red.; MAKKAVEYEV, A.A.,
doktor geol.-min.nauk, red.; OMEL'CHENKO, A.N., kand.tekhn.nauk, red.;
SENDERZON, E.M., kand.geol.-min.nauk, red.; USHAKOV, I.N., dots., kand.
tekhn.nauk, red.; YABLOKOV, V.S., kand.geol.-min.nauk, red.; KOROLEVA,
T.I., red.izd-va; KACHALKINA, Z.I., red.izd-va; PROZOROVSKAYA, F.L.,
tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Mining; an encyclopedia handbook] Gornoe delo; entsiklopedicheski
apravochnik. Glav. red. A.M.Terpigorev. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po ugol'noi promyshl. Vol.2. [Geology of coal deposits
and surveying] Geologiya ugol'nykh mestorozhdenii i marksheiderskoe
delo. Redkolegiia toma S.V.Troianskiy, 1957. 646 p. (MIRA 11:5)

1. Chlen-korrespondent AN SSSR (for Karavayev)
(Coal geology--Dictionaries)

SOV/154-58-2-12/22

AUTHOR: Zvonarev, K. A., Professor, Doctor of Technical Sciences

TITLE: With Reference to the Article by A. M. Leonov (Po povodu stat'i A. M. Leonova) Some Problems in Connection With the Formation of Marksheyder Mining Triangulations (Nekotoryye voprosy geometricheskogo postroyeniya Marksheyderskikh (rudnichnykh) triangulyatsiy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1958, Nr 2, pp 105-106 (USSR)

ABSTRACT: This is a letter to the editors of the present periodical. The author is of the opinion that present fundamental work in the field of geodesy in the USSR creates a new geodetic basis for the development of new surveys (of all scales) as well as for the solution of geodetic engineering problems (also those according to the Marksheyder principle). The author considers the elimination of triangulation nets of the 5th and 6th classes (according to Marksheyder) by A. M. Leonov unacceptable. Here, he refers to his papers (quoted by Leonov) in which he says that he permits three and four density stages of the triangulation of the 2nd class and uses nets with sides of 2,3 and 1,5 km

Card 1/2

SOV/154-58-2-12/22

With Reference to the Article by A. M. Leonov. Some Problems in Connection
With the Formation of Marksheyder Mining Triangulations

length, respectively. The author proves that the establishment of nets with a point density of more than 1,5 km (whereby points are placed directly among the points of the third and even second classes) is rational. The rather disadvantageous multi-stage structure of triangulation nets for the purposes of the Marksheyder method, to which A. M. Leonov wants to revert, is more precisely defined by the author.

ASSOCIATION: Leningradskiy ordena Lenina Gosudarstvennyy universitet im.
A. A. Zhdanova (Leningrad Lenin Order State University imeni
A. A. Zhdanov)

SUBMITTED: May 22, 1958

Card 2/2

ZVONAREV, K.A.

Basic problems in present-day cartography [with summary in English].
Vest. IGU 13 no.6:91-100 '58. (MIRA 11:5)
(Cartography)

ZVONAREV, K.A.

All-Union conference of Universities of the U.S.S.R. on scientific
methods in geography. Vest.LGU 13 no.18:167-169 '58.
(MIRA 12:1)

(Geography--Study and teaching)

ZVONAREV, K.

On the "Geodesy and cartography" journal. Mat. Otd. mat. geog.
i kart. Geog. ob-va SSSR no.1:47-48 '61. (MIRA 17:8)

ZVONAREV, K.A.

Scientific legacy of V.V.Kavraiskii. Vest.LGU 18 no.6:143-149
'63. (MIRA 16:4)

(Kavraiskii, Vladimir Vladimirovich)

ZVONAREV, E.A.

Problems of cartography in the light of the CPSU program. Vest.
IGU 17 no.18:56-62 '62. (MIRA 15:10)
(Cartography)

CHURKIN, Vladimir Gerasimovich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;
ZVONAREV, K.A., doktor tekhn.nauk,red.; DAGIN, Ye.G., red.izd-va;
VINOGRADOVA, N.F., tekhn.red.

[Geographical atlases] Geograficheskie atlasy. Moskva, Izd-vo Akad.
nauk SSSR, 1961. 116 p. (Geograficheskoe obshchestvo SSSR. Zapiski.
Novaia seriia, vol.21.) (MIRA 14:7)

(Atlases)

ZDANOVICH, Vyacheslav Grigor'yevich; KELL', Nikolay Georgiyevich;
ZVONAREV, Klimentiy Aleksandrovich; BELOLIKOV, Antonin Nikolayevich; GUSEV, Nikolay Andreyevich; BUGAYETS, Ya.A., otv. red.; SLAVOROSOV, A.Kh., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.

[Advanced geodesy] Vysshaya geodesiya. By V.G.Zdanovich i dr.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961.
607 p. (MIRA 15:1)

(Geodesy)

ZVONAREV, N.K., inzh.

Nomograms for solving problems of the statics of ground
masses. [Trudy] VNIMI no. 47859-76 '62 (MIRA 1787)

CHEKMAREV, A.P.; RABINOVICH, S.N.; Primalni uchastiye: KUS'MIN, V.P.;
ZVONAREV, V.K.; DEMKO, V.M.

Investigating power conditions in the rolling of lightweight
shaped sections on a 550mm. medium section mill. Izv. vys. ucheb.
sav.; chern. met. 6 no.4:56-67 '63. (MIRA 16:6)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Rolling mills)

ACCESSION NR: AF5014539

WM/0089/65/018/009/0483/0487
621.039.542:621.039.548

AUTHOR: Likhachev, Yu. I.; Zvonarev, V. P.; Pupko, V. Ya.

TITLE: Internal stresses due to uneven swelling of fissioning material

33
19 E

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 483-487

TOPIC TAGS: fissioning material, reactor fuel element, fuel element swelling, internal stress, macrostress

ABSTRACT: The authors consider a new cause of macrostresses of the first kind in fuel elements, namely uneven swelling of the fissioning material, brought about by the fact that the fission products are not produced at equal rates over the cross section of the fuel element. The resultant stresses are calculated under certain simplifying assumptions, with a fuel element in the form of a long solid cylindrical rod as an example. The joint action of the stresses due to uneven swelling and of the temperature stresses is considered for brittle material, for plastic material with negligible creep (metal at relatively low temperature), and plastic material with appreciable creep (relatively high temperature level). It is shown that the uneven swelling must be taken into account in the strength calculations in the case of brittle material and material with negligible creep. Orig. art.

L 01063-66

ACCESSION NR: AP5014539

has: 2 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 25May64

NR REF SOV: 003

ENCL: 00

OTHER: 004

SUB CODE: NP

Card 2/2 /T

GORODETSKAYA, E.G. [Horodets'ka, E.H.]; ZVONAREVA, G.N. [Zvonar'ova, H.N.];
SOFIYENKO, T.A. [Sofiienko, T.A.]; YARMOLENKO, R.A.; ZHADANOVA, R.I.

Ballistocardiography in cardiovascular pathology in children.
Fiziol. zhur. [ukr.] 8 no.5:600-608 S-0 '62. (MIHA 17:11)

1. Department of Pediatrics of the Kiyev Post-Graduate Institute
for Physicians and the First Children's Hospital of Shevchenko
District, Kiyev.

ZVONAREVA, G. N., Cand Med Sci -- "Condition of the cardiovascular system in typhoid-paratyphoid diseases of children, according to ^{clinical and cardiographic data,} ~~data supplied by the clinic and cardiographs.~~"
Stalino, 1961. (Min of Health UkSSR. Stalin State Med Inst im A. M. Gor'kiy) (KL, 8-61, 261)

LEVIN, M.M.; ZVONAREVA, L.F.

Performance of peak diode voltmeters in measuring voltage of
video pulses. Izv. tekhn. no.1:47-50 Ja '64.

(MIRA 17:11)

ACCESSION NR: AP4007678

S/0214/63/000/007/0064/0067

AUTHOR: Zvonareva, M. L.

TITLE: The H_{α} line in the prominence spectra

SOURCE: Solnechny*ye danny*ye, no. 7, 1963, 64-67

TOPIC TAGS: solar prominence, hydrogen line, chromosphere, prominence spectrum, solar flare, H_{α} line

ABSTRACT: Parameters which characterize the physical conditions in solar prominences can be determined by comparison of theoretical and observational contours of the H_{α} line. Spectrograms obtained in the summer of 1960 at Pulkovo were used for determining cross sections of the H_{α} line at various heights above the chromosphere level. Formulas for computing contours and intensities of hydrogen lines were developed by solving the problem of diffusion of radiation with redistribution of energy between lines, in accordance with the frequency within the line. The velocity of gas motion in a prominence is found to be 11 km sec^{-1} . Photometric cross sections of the H_{α} line become narrower with increasing height above the chromosphere level. This phenomenon

Card 1/2

ACCESSION NR: AP4007678

may be caused by decreased scattering of quanta from the center of prominence toward its periphery without any change in the physical conditions within the prominence. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Kafedra astrofiziki Leningradskogo gosudarstvennogo universiteta (Department of Astrophysics, Leningrad State University)

SUBMITTED: 00 DATE ACQ: 21Jan64 ENCL: 00
SUB CODE: AS NO REF SOV: 001 OTHER: 000

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ARAKELYAN, M.A.; ZVONAREVA, M.L.; KOLESOV, A.K.

Calculating the Rosseland mean value for the atmospheres of
hot stars. Uch. Zap. LGU no.323:37-44 '64. (MIRA 17:12)

Mollier $i - x$ diagram and its use in designing evaporators. Prum
potravin 15 no.5:226-235 My '64.

1. Faculty of Mechanical Engineering, Czech Higher School of
Technology, Prague.

"Engineering for dairy and food products" by A.W. Farrall.
Reviewed by Zvonicek. Prum potravín 15 no.4:204 Ap '64.

ZVONAREVA, M.L.

Contours of emission lines in noncoherent scattering. Vest.LGU
15 no.13:141-146 '60. (MIRA 13:7)
(Light--Scattering)

81250

S/043/60/000/13/14/016
C111/C222

24.4500

AUTHOR: Zvonareva, M.L.

TITLE: On the Contours of the Emission Lines at the non-Coherent Scattering

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1960, No. 13, pp. 141 - 146

TEXT: The author considers the radiation diffusion¹ in a plane plate for a completely incoherent scattering. For the diffusion there results the integral equation

$$(9) \quad B(\tau) = \frac{\lambda}{2} \int_0^{\tau_0} K(|\tau - \tau'|) B(\tau') d\tau' + B_0(\tau),$$

where τ_0 is the optical thickness of the plate,

$$(10) \quad K(\tau) = A \int_{-\infty}^{\infty} \alpha^2(x) E i [\alpha(x)\tau] dx,$$

Card 1/3

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81250

On the Contours of the Emission Lines at the
non-Coherent Scattering

S/043/60/000/13/14/016
C111/C222

$$(11) \quad E i y = \int_y^{\infty} e^{-y} \frac{dy}{y}, \quad \alpha(x) = e^{-x^2}, \quad \Lambda = \frac{1}{\sqrt{\pi}}$$

and B, B_0 are defined by

$$(3) \quad \epsilon_y^0 = \sigma_y B_0, \quad \epsilon_y = \sigma_y B,$$

where σ_y, ϵ_y are the coefficients of absorption and emission, ϵ_y^0 relates to the direct emission of the sources. The solution of (9) is sought in the form

$$(13) \quad B(\tau) = a + b\tau - c\tau^2.$$

The results of the numerical calculations of a, b, c are given in tables. Then the contours of the emission lines are obtained according to the formula

$$(24) \quad I(x) = \alpha(x) \int_0^{\tau_0} B(\tau) e^{-\alpha(x)\tau} d\tau.$$

Card 2/3

4

On the Contours of the Emission Lines at the
non-Coherent Scattering

81250
S/043/60/000/13/14/016
C111/C222

The appearance of a central depression is characteristic which appears for
 $\tau_0 \sim 5$ and which increases with an increasing τ_0 .

The author mentions D. Ivanova. There are 2 figures, 4 tables and 2
references : 1 Soviet and 1 Swiss.

Card 3/3

4

ZVONAREV, S. M., and A. F. FEFANOV

Primenenie teoremy o trekh momentakh pri raschete gorizonta'nogo operen'ia.
(Tekhnika vozdushnogo flota, 1940, no. 12, p. 43-47, tables, diags.)

Title tr.: Application of the three moment equation in the design of
horizontal control surfaces.

TL504.T4 1940

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

ZVONAREVA, M.L.

Contours of absorption lines associated with noncoherent diffraction
[with summary in English]. Vest. LGU 13 no.7:189-195 '58. (MIRA 11:5)

(Stars--Spectra)

AUTHOR: ZVONAREVA, M.L.

43-7-18/18

TITLE: The Contour of the Absorption Lines for an Incoherent Diffusion Process (O konturakh liniy pogloshcheniya pri nekogerentnom rasseyanii)

PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya Matematiki, Mekhaniki i Astronomii, 1958, Nr 7 (2), pp 189-195 (USSR)

ABSTRACT: The author determines the contour of the absorption lines for a complete incoherent diffusion process and under the following assumption on the Planck's function $B_\nu(T)$:

$$B_\nu(T) = B_\nu(T_0)(a + bT + c e^{-mT}).$$

The paper joins papers of V.V.Sobolev [Ref.3,4] and the investigation carried out by the use of probability theoretical arrangements leads to an already published result of Ueno [Ref.5]. Some little numerical data are of certain interest. There are 3 figures, 3 Soviet and 2 foreign references.

SUBMITTED: 18 May 1957

AVAILABLE: Library of Congress

Card 1/1

1. Functions-Theory 2. Diffusion

ZVONAROVA, S.I. (Moskva)

Zealous investigators. Priroda 49 no.5:79 My '60.
(MIRA 13:5)

(Nature study)

ZVONAREVA, S.I.

Study of karst phenomena by the participants of the All-Union
Pioneers and Students Expeditions. Inform.sbor.Mezhd.kom.po
izuch.geol.geogr. Kar. no.1:227-242 '60. (MIRA 15:4)

1. Tsentral'naya detskaya ekskursionno-turistskaya stantsiya.
(Karst)

AVONAREVA, V. G.: "Homework in the English language in the tenth class in connection with polytechnic training." Academy of Pedagogical Sciences RSFSR. Sci Res Inst of Teaching Methods. Moscow, 1955. (Dissertation for the Degree of Candidate in Pedagogical Science.)

Knizhnaya letopis', No. 30, 1956. Moscow.

ZVONAREVA, V.V. (Moskva)

Prothrombin time in some infectious diseases. Klin.med. 36 no.3:
121 -124 Mr '58. (MIRA 11:4)

1. Iz bol'nitsy imeni S.P.Botkina (glavnyy vrach - prof. A.N. Shabanov, nauchnyy rekovoditel' raboty - doktor meditsinskikh nauk E.A.Gal'perin)

(PROTHROMBIN TIME, in various dis.
commun. dis. (Rus))

(COMMUNICABLE DISEASES, blood in
prothrombin time (Rus))

Processing water fowl with hot water on a semiautomatic conveyor
line. Mas. ind. SSSR. 30 no.4:36-37 '59. (MIRA 12:12)

1. Poltavskiy myasokombinat.
(Water birds) (Poltava--Poultry plants)

ZVONAROVA, Ye.

Hot water processing of waterfowl. *Mias.ind.* SSSR 30 no.1:43
'59. (MIRA 12:4)

1. Poltavskiy myasokombinat.
(Poultry plants)

②
Washing of the fusel oil which is withdrawn from batch
rectification apparatus. S. V. Bushuev and Z. M. Zedun-
reva (Mirof. moy. Alkohol. Plant, Chelyabinsk). *Spirtovarn.*
Prim. 20, No. 1, 28-3 (1954).—A simple device is described
with drawing, where water is bubbled through the fusel oil.
Werner Jacobson

10-2-73
JJP

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CIA-RDP86-00513R002065710018-1"

BUSHUYEV, S.V.; ZVONAREVA, Z.M.

**Purification of fusel oil from periodic-action rectifiers. Spirt.prom.
20 no.1:28-29 '54. (MLRA 7:5)
(Fusel oil)**

ACCESSION NR: AP5016887

UR/0374/65/000/000/0087/0002
678:620.179.16

AUTHOR: Zvonarzh, V. (Pardubitsa); Tamshina, I. (Pardubitsa)

TITLE: Static and dynamic properties of fiberglass reinforced plastics.
Part 2. The effects of thickness

SOURCE: Mekhanika polimerov, no. 3, 1965, 87-92

TOPIC TAGS: fiberglass reinforced plastic, plastic elasticity, elasticity modulus, polyester resin, Beer equation

ABSTRACT: In a previous communication (Mekh. polim., 1965, 1, 146), the authors described the influence of the individual components of polyester resin and glass on the dynamic E and G moduli, and the mechanical loss coefficients d and d' of fiberglass-reinforced plastics. The present paper is devoted to the study of thickness effects, i. e., the influence of the number of layers and the thickness of single layers on the statically and dynamically determined E and G elasticity moduli. The temperature effects were also studied. The fiberglass-reinforced plastic was made of Yplast 3 and the unsaturated CHS-Polyester 104 resin with 2% methyl-ethyl ketone peroxide and 1% of a 10% solution of cobalt naphthenate in toluene. Tests showed that the E and G moduli are, for all practical purposes, independent of the total thickness of the material; they are sensitive, however, to the thickness of a single elementary layer, i. e., to the glass content

Co. 1/2

25
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6
15.11.5

ACCESSION NR: AP5016837

within the plastics. The results are in good agreement with theoretical approximate equations; the systematic deviation indicates that the Beer equation (F. Beer, VDI Ztschr., 1959, 101, 463) neglected the wave-like packing of the fibers and assumed an ideal connection between the resin and glass. The dynamic moduli are, as a rule, larger (in absolute terms) than the corresponding static quantities and the difference increases with the temperature. Orig. art. has: 10 formulas, 2 figures, and 3 tables.

ASSOCIATION: None

SUBMITTED: 10 Nov 64

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 003

Card 2/2 *sh*

ZVONKOVA, Z.V.; RODIONOV, A.N.; POVET'YEVA, Z.P.

Role of hydrogen bonding in the structures of crystalline
hydrates of compound thiocyanates of metals. Kristallografiia
8 no.2:275-277 Mr-Ap '63. (MIRA 17:8)

1. Fiziko-khimicheskiy institut imeni Karpova.

Basic processes of food industry technology. Prum potravin
16 no.1:Suppl:no.1:1-8 '65.

STOLBA, F., inz.; ZYONICKER, F.

Experiences in taking winter precautions in waterworks. Vzd
hosp 15 no.1:6-9 '65.

1. Frazske vodarny, Prague.

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

SOURCE CODE: UM/0413/66/000/014/0042/0042

INVENTORS: Klimov, V. V.; Androyov, A. Ya.; Nakhodnova, A. P.; Kozachenko, V. N.;
Akhkozov, Ye. A.; Ivanov, D. G.; Didkovskaya, O. S.; Zvonik, V. A.

ORG: none

TITLE: A method for obtaining a piezoceramic material. Class 21, No. 183812
[announced by Donets Branch of All-Union Scientific Research Institute of Chemical
Reagents and of High Purity Chemicals (Donetskiy filial Vsesoyuznogo nauchno-
issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh
veshchestv)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 42

TOPIC TAGS: piezoelectric ceramic, barium compound, lead compound, calcium compound,
titanium compound, sintered alloy

ABSTRACT: This Author Certificate presents a method for obtaining a piezoceramic
material from a mixture of barium, lead, calcium, and titanium compounds by sintering
this mixture. To lower the temperature of sintering this material, the above com-
pounds are used in the form of nitric acid solutions of barium, lead, calcium, and
titanium. This solution is atomized in a stream of air at the temperature of 400--
500C. After this, the powder is sintered at the temperature of 800--1000C.

SUB CODE: 11/ SUBM DATE: 21May64

Card 1/1

UDC: 621.315.612.537.226.33

ZVONIMIR, Duric

"Some information about the prices of construction of hydro electric stations
in the Brbas - Pliva system"

SO: ELEKTROPRIVREDA, May - June 1955

ACC NR: AP6029824

SOURCE CODE: UR/0363/66/002/008/1483/1486

AUTHOR: Klimov, V. V.; Kozachenko, V. N.; Didkovskaya, O. S.; Zvonik, V. A.;
Kisel', T. P.; Andreyev, A. Ya.

53
52
B

ORG: All-Union Scientific Research Institute of Chemical Reagents and High-Purity
Substances, Donetsk Branch (Vsesoyuznyy nauchno-issledovatel'skiy institut
khimicheskikh reaktivov i osobo chislykh veshchestv, Donetskii filial)

TITLE: Preparation of piezo- and ferroelectric ceramics using spray dried solutions

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966,
1483-1486

TOPIC TAGS: piezoelectric ceramic, ferroelectric ^{material} ceramic technology,
ceramic product property, barium titanate, titanate, lead ~~titanate~~, calcium ~~titanate~~

ABSTRACT: A preparative method was described for piezo- and ferroelectric ceramic materials on the base of triple titanate of barium, lead, and calcium. The method was designed to replace the conventional ceramic sintering technique in view of its substantial disadvantages. The first step of the described method consisted of preparation of the finely dispersed (particle size 6-8 μ) powder of the basic barium, lead, and calcium nitrates by spray drying of their aqueous solutions following a technique invented by the authors [Author Certificate no. 901979-29-14, 21.05.1964]. The powdered nitrates were then converted into titanates of varied

Card 1/2

UDC: 666.3:537.226.33+666.3:537.228.1

ACC NR: AP6029824

composition by firing the nitrate powder at 900—1000C at which temperature formation of the solid solutions with perovskite structure is completed. The particle size of titanates after firing was about 1 μ . High-purity powders may be obtained from adequately pure starting materials. The sintering of these powders into ceramic products occurs at a temperature in the 1230—1280C range, which is 100—150C lower than the temperature range of sintering the powders produced by conventional ceramic technique. The electrophysical properties of the ceramic products obtained by spray drying were shown to be superior to those of the products of ceramic technology. Notably, the piezoelectric modulus (d_{31}) was comparatively higher and, in certain samples, constant in the -60 to +80C range. Universality of the method described was stressed, insofar as it may be applied to most of the ferro- and piezoelectric ceramics presently used. Orig. art. has: 4 figures and 2 tables. [JK]

SUB CODE: 11/ SUBM DATE: 22Oct65/ ORIG REF: 001/ ATO Press 5065

Card 2/2 10

ZVONIMIR GALL

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1
APPROVED FOR RELEASE: Thursday, September 26, 2002
CIA-RDP86-00513R002065710018-1"

"A biological Method of investigation of Insectioides in Vitro". Zvonimir Gall & Isak Levi Vets. at Vet. Inst. of Republic of Bosnia-Herzegovina, Sarajavo.

SOURCE: Vet., SVEZAK 4, p. 667, 1953

BULACH, M.G., sand. geol.-mineral. nauk;
ROMM, Ye.S.; GORYUNOV, I.I.; GMID, L.P.; GROMOV, V.K.;
DOROFEYeva, T.V.; KNORING, L.D.; KALACHEVA, V.M.; TATARINOV,
I.V.; KLEYNOSOV, Yu.F.; KAPLAN, M.Ye.; ZVONITSKAYA, I.V.;
MAZURKEVICH, Z.I.; DRYABINA, N.N.; RUSAKOVA, L.Ya., vedushchiy
red.; BARANOVA, L.G., tekhn. red.

[Methodological text on the study of the fracturing of rocks
and fractured oil and gas reservoirs]. Metodicheskoe posobie
po izucheniiu treshchinovatosti gornykh porod i treshchinnykh
kollektorov nefi i gaza. Leningrad, Gostoptekhizdat, 1962.
76 p. (Leningrad. Vsesoiuznyi nefianoi nauchno-issledovatel'-
skii geologorazvedochnyi institut. Trudy, no.201).

(Joints(Geology)) (Oil sands) (MIRA 16:4)

MARGARETA, M.F.; ZVONITSKAYA, T.M.

Hypertonia in scarlet fever in children. *Sovet.med.* no.3:9-10
Mr '50. (CML 19:2)

1. Of the Department of Children's Diseases, First Moscow Order
of Lenin Medical Institute (Director of Department -- Prof.
V.I.Molchanov).

S/123/61/000/014/015/045
A004/A101

AUTHORS: Zvonitskiy, A. Yu.; Belosel'skiy, N. V.

TITLE: The practice of developing and introducing the gang technology.

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1961, 2, abstract 14B8. (V sb. "Gruppovaya tekhnol. v mashinostr. i priborostr." Moscow - Leningrad, Mashgiz, 1960, 323-339)

TEXT: The introduction of the gang method was started with automatic and turret-lathe operations. For these purposes small-size pneumatic units with a clamping stress of 500 kg were utilized which made it possible to fasten in one fixture 3-4 parts simultaneously. The authors describe: a four-position gang fixture for the milling of slots, grooves and flats, a 72-position gang setting of a lapping automatic, indexing draw-in attachment, semi-automatic gang milling fixture for the processing of horned nuts, for-spindle drilling head with adjustable inter-center distances, gang jigs with automatic fastening and ejection of parts, fixture for the mandrel-less winding of cylindrical springs increasing the productivity by a factor of 10-15. The authors present examples of gang

Card 1/2

The practice of developing and introducing the ...

S/123/61/000/014/015/045
A004/A101

machining on centerless grinding and thread-rolling machines, as well as on cold-upsetting automatics. There are 16 figures.

I. Briskman

[Abstracter's note: Complete translation]

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/3998

Zvonitskiy, Aleksandr Yulianovich, Engineer

. Opyt gruppovoy obrabotki detaley na revol'vernykh stankakh (The Practice of Group Machining of Parts on Turret Lathes) Leningrad, 1959. 23 p. (Series: Leningrad. Dom nauchno-tehnicheskoy propagandy. Obmen peredovym opytom. Seriya: Mekhanicheskaya obrabotka metallov, vyp. 10) 6,500 copies printed.

Sponsoring Agencies: Leningrad. Dom nauchno-tehnicheskoy propagandy, and Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR.

Ed.: I.I. Verzhbinskaya, Engineer; Tech. Ed.: V.L. Gvirta.

PURPOSE: This booklet is intended for production engineers and technicians in machine-building plants.

COVERAGE: The booklet deals with group machining of parts on turret lathes. Two basic groups of turret lathes are discussed: 1) the 1336M turret lathe of the Kiyevskiy zavod (Kiyev Plant) and the "Skoda-36" with 36-mm spindle holes, and 2) turret lathes of the "Boley-type", such as "Boley", "Leynen," and "Wolman".

Card 1/2

The Practice of Group (Cont.)

SOV/3998

with 10- and 20-mm spindle holes. The author states that the adoption of group machining of parts on turret lathes results in considerable economy of machining time and the number of special fixtures and cutting tools required. The method of group machining is explained by means of classification diagrams, operation instruction sheets, and classification guiding sheets. The material presented is said to be limited in scope, as it is based on practices and methods developed in only one plant. No personalities are mentioned. There are 3 references, all Soviet.

TABLE OF CONTENTS: None given.

AVAILABLE: Library of Congress

Card 2/2

VK/pw/gup
7-27-60

GAFT, Ya.M., kand.med.nauk; Primali uchastiye: BRANZBURG, N.A., vrach;
GOL'TS, I.P., vrach; GORELIK, Ye.S., vrach; ZVONKINA, O.M., vrach;
LIVSHITS, R.I., vrach; LUR'YE, Ye.L., vrach; OZHE, N.B., vrach;
RYBAL'SKAYA, V.G., vrach; CHELNOKOVA, A.K., vrach; YAVORSKIY, A.V.,
vrach

Dynamics of the tuberculous process in patients transferred to the
third group of dispensary registration. Probl. tub. 38 no.3:3-8
'60. (MIRA 14:5)

1. Iz protivotuberkuleznogo dispansera No.4 Moskvy (glavnyy vrach -
zasluzhennyy vrach RSFSR S.M.Zamukhovskiy).
(TUBERCULOSIS)

BUTOMO, D.G.; VAYZHYA, N.M.; ZVONKINA, V.F.; KOSHURIN, A.V.; SERGEYEV, L.N.;
FRUMKINA, Yu.A.

Concerning the "Handbook on the processing of nonferrous metals and
alloys" TSvet.met. 35 no.12:60 D '62. (MIRA 16:2)

1. Sovet Nauchno-tehnicheskogo obshchestva zavoda "Krasnyy
Vyborzhets".

(Nonferrous metals)

ZVONKO, Lukicevic

A new method for electric-arc welding in CO₂⁺ UM. Zavarivanje 5
no.11/12:260-266 D '62.

KOS'KOV, B.I.; MUKHIN, N.S.; SMIRNOV, A.A., kand. tekhn. nauk; NIKITIN, V.I., prepodavatel'; KONDRAT'YEVA, N.Ya., kand. tekhn. nauk, prepodavatel'; LOSEV, K.A., dotsent; ZVONKOV, A.P.; KOMAROVSKIY, V.M.; MARCHENKO, S.N., kand. tekhn. nauk

Discussion of an article by B.I. Gerzhuly. Geod. i kart.
no.4:28-36 Ap '64. (MIRA 17:8)

1. Nachal'nik tekhnicheskogo otdela Moskovskogo gorodskogo tresta geologo-geodezicheskikh i kartograficheskikh rabot (for Kos'kov). 2. Nachal'nik kompleksnogo otdela Moskovskogo otdeleniya Tsentral'nogo tresta inzhenerno-stroitel'nykh izyskaniy (for Mukhin). 3. Nachal'nik geodezicheskoy sluzhby pri Upravleni glavnogo arkhitekтора Voronezha (for Smirnov) 4. Kafedra geodezii Khabarovskogo politekhnicheskogo instituta (for Nitkin). 5. Kafedra kartografii Leningradskogo gosudarstvennogo universiteta (for Kondrat'yeva). 6. Kuybyshevskiy inzherno-stroitel'nyy institut (for Losev). 7. Rukovoditel' sektora Nauchno issledovatel'skogo institut gradostroitel'stva Kiyev (for Marchenko).

ACCESSION NR: AP4041736

S/0181/64/006/007/2198/2200

AUTHORS: Girayev, M. A.; Karpovich, I. A.; Zvonkov, B. N.

TITLE: Frequency dependence of the field effect in photosensitive films of CdS

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 2198-2200

TOPIC TAGS: thin film, cadmium sulfide, photoconductivity, frequency dependence, carrier mobility, photosensitivity

ABSTRACT: The investigation was undertaken in view of recent interest in such films, brought about by the development of field-effect transistors on their basis (P. K. Weimer, Proc. IRE v. 50, 1526, 1962). The films were prepared on glass substrates by evaporation in vacuum, and activated by heat treatment with air in a photoconductor powder. The frequency dependence was investigated by the method of Aigrain et al. (J. Phys. Rad. v. 13, 587, 1952). Constant

Card 1/5

ACCESSION NR: AP4041736

illumination was used to reduce the layer resistance and to make the method usable at high temperatures. The effective carrier mobility was found to be practically independent of the temperature but highly dependent on the intensity of illumination. For unactivated CdS layers with increased dark conductivity and weak photosensitivity, the effective mobility did not exceed $1 \text{ cm}^2/\text{V-sec}$ and was practically constant up to 20 kcs. The appreciable change in the effective mobility of photosensitive layers occurs in the same frequency interval in which the photocurrent changes strongly as a frequency of the light modulation frequency and is apparently connected with relaxation of the photoconductivity. The decrease in mobility beyond about 20 kcs may be due to disturbance of the equilibrium of the induced carriers with rapid surface states. A somewhat unexpected effect is that in polycrystalline CdS films the effective mobility at high frequencies may become comparable with that for CdS single crystals. This is confirmed by Hall-effect measurements, which will be reported elsewhere. "The authors thank S. Abdiyev

Card 2/5

ACCESSION NR: AP4041736

for preparing the samples for the investigation." Orig. art. has:
2 figures.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet (Gorkiy
Stat. University)

SUBMITTED: 22Feb64

ENCL: 02

SUB CODE: SS, EC

NR REF SOV: 002

OTHER: 004

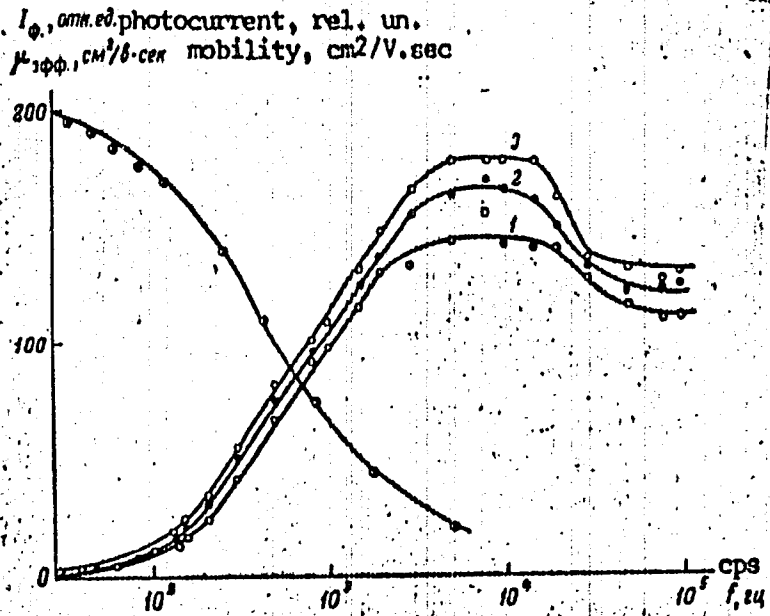
ACCESSION NR: AP4041736

ENCLOSURE 01

Frequency dependence of effective carrier mobility in CdS film (sample 1) under constant illumination

T, °C: 1 - 25, 2 - 58, 3 - 88;

4 - photocurrent vs. light modulation frequency at 25C



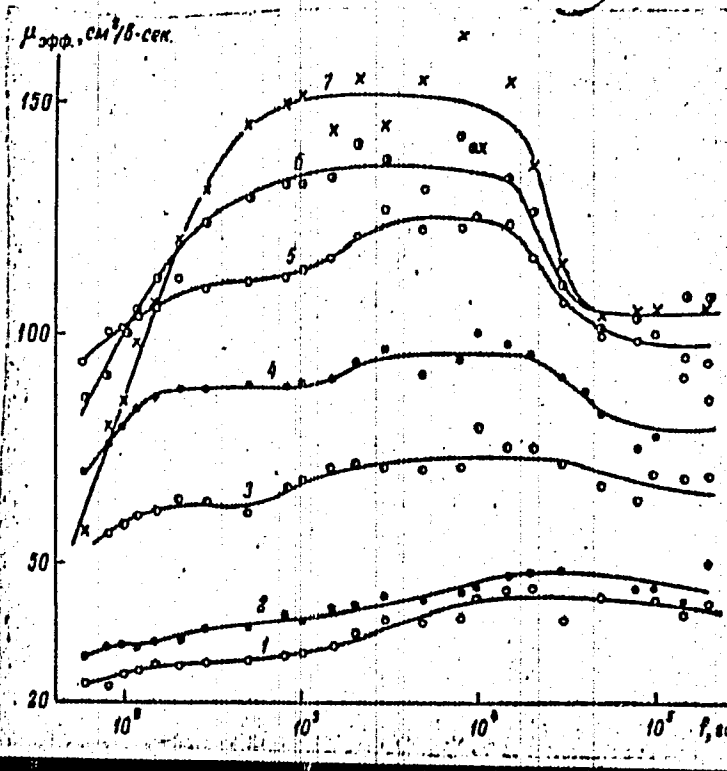
ACCESSION NR: AP4041736

ENCLOSURE 02

Frequency dependence of effective carrier mobility in CdS film (sample 2) under different illuminations

Film resistance under illumination, kilohm: 1 - 1000, 2 - 600, 3 - 300, 4 - 100, 5 - 40, 6 - 20, 7 - 10.

Card 5/5



Automatic welding of aluminum with a melting electrode. Avtom.svar.
9 no.1:21-28 Ja-F '56. (MIRA 9:6)

1.Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki imeni
Ye.O.Patona AN USSR.
(Aluminum--Welding) (Electric welding)

RABKIN, D.M.; ZVONKOV, M.L.; VERCHENKO, V.A.

Making welded aluminum-magnesium alloy containers. Avtom. svar.
11 no. 4:84-91 Ap '58. (MIRA 11:6)

1. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.
Ye.O. Patona AN USSR (for Babkin, Zvonkov). 2. Trest po montazu
prodovol'stvennykh predpriyatii (for Verchenko).
(Aluminum-magnesium alloy—Welding)
(Tanks—Welding)

RABKIN, D.M.; ZVONKOV, M.I.

Automatic welding of aluminum using twin electrodes. Avtom. svar.
11 no.5:25-31 My '58. (MIRA 11:6)

1. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.
Ye.O. Patona AN USSR.

(Aluminum--Welding) (Electrodes)

125-58-4-12/15

AUTHORS: Rabkin, D.M., Candidate of Technical Sciences, Zvonkov, M.L. and Verchenko, V.A., Engineers

TITLE: Experience in Constructing Welded Aluminum-Magnesium Containers (Opyt izgotovleniya svarnykh yemkostey iz aluminievogo-magniyevogo splava)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 4, pp 84-88 (USSR)

ABSTRACT: A detailed description is given of all operations performed in assembling 700 m³ aluminum-magnesium alloy containers at the Kombinat sinteticheskikh zhirozameniteley (Synthetic Fat Substitutes Combine). The electric arc welding method is used for all horizontal connections, and oxy-gas (propane-butane mixture) for the vertical welds which are welded by two operators simultaneously - one on the inside and one on the outside of the container, so that the operation proceeds with only one welding puddle. The information includes the chemical composition of the base metal - "AMg5B" alloy - and special "AN-AL03" electrode coating and "AN-A201" flux developed for the purpose at the Electric Welding Institute imeni Paton (Tables 1, 2). The following persons participated in the work:

Card 1/2

125-58-4-12/15

Experience in Constructing Welded Aluminum-Magnesium Containers

G.B. Al'terman, I.M. Bolotin, V.M. Pauler, L.D. Polonskiy,
O.A. Videnskiy, P.K. Chubukov, I.I. Kravtsov, Ya.M.
Yalovoy.

There are 3 tables and 7 photographs.

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (Elec-
tric Welding Institute imeni Ye.O. Paton of the AS UkrSSR);
Prodmontazh.

SUBMITTED: December 3, 1957

AVAILABLE: Library of Congress

Card 2/2

ZVONKOV. M.L.

AUTHORS: Rabkin, D.M., and Zvonkov, M.L. 125-58-5-4/13

TITLE: Automatic Welding of Aluminum by a Split Electrode (Avtomaticheskaya svarka alyuminiya rasshcheplennym elektrodom)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 5, pp 25-31 (USSR)

ABSTRACT: The peculiarities and application of the split-electrode method of welding were given previously [Ref. 2,3 and 4]. The method consists of the use of two electrodes moving parallel to one another and producing two puddles which merge when the distance between the electrodes diminishes. The merged-puddle is wider and shallower than the puddle produced by a single arc. The method is schematically illustrated (Fig. 1) and calculations of the fusion depth as a function of the distance between electrodes are made. The method permits welding butt-joints without the use of a steel support. The welds are dense, wide, with good mechanical properties. Regular welding equipment needs only minor adjustment when applying the split-electrode method: a special pulling-type holder (Fig. 5) with two pairs of guide pipes, and an additional bobbin for electrode wire. The method has been successfully introduced at the Kiyev plant

Card 1/2

125-58-5-4/13

Automatic Welding of Aluminum by a Split Electrode

"Bol'shevik" where it is used for welding aluminum vessels (the technology is briefly described in figure 6 and 7). The following advantages resulted: consumption of electrode wire has been reduced by 40%, and electric energy by 20%. Work efficiency has increased three times as compared with manual arc welding. The following engineers of the "Bol'shevik" plant took part in developing the split-electrode welding technology: I.M. Mirgorodskiy, F.S. Bugriy, V.M. Ponomar', I.M. Savich, V.M. Grishchenko. There are 7 figures and 5 Soviet references.

ASSOCIATION: Institut elektrosvariki imeni Ye.O. Patona AN UkrSSR (Electric Welding Institute imeni Ye.O. Paton of the AS UkrSSR)

SUBMITTED: January 9, 1958

AVAILABLE: Library of Congress

Card 2/2

PHASE I BOOK EXPLOITATION
SOV/5078

Akademiya nauk URSR, Kiev, Institut elektrozvaruyvaniya
Vnedreniye novykh sposobov svarki v promyshlennosti; sbornik statey
VVP, 3. (Introduction of New Welding Methods in Industry; Col-
lection of Articles, v. 3) Kiev, Oos. izd-vo tekhn. lit-ry
DzrSSR, 1960. 207 p. 5,000 copies printed.
Sponsoring Agency: Otdel na Trudovogo Krasnogo Znameni Institut
elektrozvarki imeni akademika Ye. O. Patona Akademii nauk
Ukrainskoy SSR.

Ed.: M. Pisarenko; Tech. Ed.: S. Mabusovich.

PURPOSE: This collection of articles is intended for personnel in
the welding industry.

COVERAGE: The articles deal with the combined experiences of the
Institut elektrozvarki imeni Ye. O. Patona (Electric Welding
Institute imeni Ye. O. Paton) and several industrial enterprises
in solving scientific and engineering problems in welding
technology. Problems in the application of new methods of me-
chanized welding and electroslag welding in industry are discus-
sed. This is the third collection of articles published under the same
title. The Foreword was written by B. Ye. Paton, Academician of
the Academy of Sciences Ukrainian SSR and Lenin Prize winner.
There are no references.

TABLE OF CONTENTS:

Lashkevich, R. I. [Candidate of Technical Sciences],
Ye. L. Mandel'tsin [Candidate of Technical Sciences],
Electric Welding Institute imeni Ye. O. Paton.
2. O. Kovshinnik [Candidate of Technical Sciences,
Ukrainskiy nauchno-issledovatel'skiy tsentr
(Ukrainian Scientific Research Institute for the Pipe
Industry)], and S. A. Kuznetsov [Chief Engineer, Chaly-
binskiy truboprovodnyy zavod (Chalybinsk Pipe Mill)].
New Process for Producing Large-Diameter Straight-Weld
Pipes for Oil and Gas Lines

184
Kuznetsov, S. A. [Engineer], D. M. Babits [Candidate of
Technical Sciences], I. M. Svirid [Engineer, Electric
Welding Institute imeni Ye. O. Paton], V. A. Verchenko
[Engineer of the Trust "Prodotzhami" Trust for Installa-
tion of Food Industry Establishments], and I. M. Mirgorod-
skiy [Formerly Chief Engineer of the "Bol'shevit' Plant].
Alloys

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Rosenberg, O. G. [Engineer], L. M. Kalomizaita [Engineer],
Ye. L. Mandel'tsin [Candidate of Technical Sciences],
Institut imeni Ye. O. Patona, I. G. Sviridov [Chief
Mechanic, Belgorodskiy zavod (Belgorod Steel
Plant)], E. P. Ivanov [Assistant Chief of the Cement
Department, Krasnoyarskiy zavod "Sibiryachan" (Krasnoyarsk
Siberian Heavy Machinery Plant)], and V. G. Kotlyarskiy
[Deputy Chief Process Engineer, Sverdlovskiy zavod
(Sverdlov Heavy Machinery Plant)]. Electroslag Welding of
Large Type 35L Steel Tie-Rings for Cement Kilns

176
Yabedov, E. V. [Candidate of Technical Sciences, Electric
Welding Institute imeni Ye. O. Paton], A. I. Alkhanov
[Trust "Metal'konstruktsiya" (Metal Fabricated-Steel
Works)], and S. Yu. Babits [Trust "Metal'konstruktsiya"
in the Mechanization of Welding (Metal Fabricated-Steel
Works)]. Experience in the Fabrication of
Metallic Structures for a Blast-Furnace Plant

16

PERIODICAL ABSTRACTS

Sub.: USSR/Engineering

AID 4191 - P

RABKIN, D. M. and M. L. ZVONKOV

VOПРОSY ТЕХНОЛОГИИ АВТОМАТИЧЕСКОЙ СВАРКИ АЛЮМИНИИ С ПЛАВЯЩИМИСЯ ЭЛЕКТРОДАМИ (Technical problems in Automatic Welding of Aluminum with Melting Electrodes). Avtomaticheskaya svarka, no. 1, Ja/F 1956: 21-29.

The technique and equipment used in automatic welding of aluminum with semi-open melting electrodes are discussed: amount of current required, thickness of electrode-wire used and determination of the electrode feeding speed and most favorable voltage. The selection of the proper welding speed and the exact quantity of flux used to get the best quality of welded seam with consideration of the thickness of the metal to be welded, and a description of a spout mechanism for feeding electrode wire, as well as of a measuring hopper for spreading flux, are presented. One table, 3 graphs and 7 macropictures. Four Russian references, 1953-1955.