

Thermal Conditions in Cowper Stoves

130-1-6/17

and higher blast temperatures. He discusses briefly the changes in equipment necessary to achieve the shorter cycle.

ASSOCIATION: Kuznetsk Metallurgical Combine
(Kuznetskiy metallurgicheskiy kombinat)

AVAILABLE: Library of Congress
Card 2/2

BARANOVSKIY, P.G.

AUTHORS: Baranovskiy, P.G. and Pinus, Ya.S. 130-58-2-8/21

TITLE: Automation of an Open-hearth Furnace with the Application of Electronic Apparatus (Avtomatizatsiya martenovskoy pechi s primeneniye elektronnoy apparatury)

PERIODICAL: Metallurg, 1958, Nr 2, pp 15 - 17 (USSR)

ABSTRACT: Early attempts at the automation of open-hearth furnaces according to a linked and programmed system proposed by Kashtyal, were not successful at the Kuznets Metallurgical Combine programme because of deficiencies in apparatus. Electronic regulating apparatus was first applied at the Combine in 1955 for regulating gas flows: it consisted of quantity-regulators ERK-77 linked with DM-218 differential manometers and was unsatisfactory. At the end of 1956, one furnace at the Combine was automated; the apparatus for regulating furnace firing consisted of three electronic quantity-regulators controlled by a selector, a programme controller, three DM-218 differential manometers, IM-2/120 and IMT-25/120 valve actuating mechanisms for gas and air, respectively and a regulator for the time interval between reversals (a diagram of the system is given). With the new system, the melter sets only the maximal value of the firing rate for a given stage of the process and the remaining operations for fixing the appropriate quantities of

Card1/2

130-58-2-8/21

Automation of an Open-hearth Furnace with the Application of
Electronic Apparatus

coke-oven and blast-furnace gases and air and the interval between reversals are carried out automatically. The gas and air feeds and the overall firing rate automatic controls are based on two factors: the temperature of the combustion products and the speed and value of the heating of the regenerator tops. The system can deal with an unbalanced condition of the regenerator even if due to unequal fuel losses at the two ends. The authors conclude that the operating results since December, 1956, show that the system has several advantages over those with hydraulic regulators but requires further improvement. Its adoption has led to mean tap-to-tap times of 8 hours 57 min. and fuel consumptions of 166.6 kg/ton steel in five months of 1957, compared with 9 hours 7 min. and 167 kg/ton, respectively, in 1956. There is 1 figure.

ASSOCIATION: Kuznetskiy metallurgicheskiy kombinat
(Kuznetsk Metallurgical Combine)

AVAILABLE: Library of Congress

Card 2/2

1. Open hearth furnaces-Operation
2. Electronic equipment-Applications
3. Open hearth furnaces-Automation

CHERNOV, N.N., kand.tekhn.nauk, dots.; BARANOVSKIY, P.G., inzh.

Automatic control of gas flow in blast furnaces. Izv. vys. ucheb.
zav.; chern. met. no.7:79-89 J1 '58. (MIRA 11:10)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy
kombinat.

(Blast furnaces) (Gas flow) (Automatic control)

BARANOVSKIY, P.G.

Automatic correction of asymmetry in heat flow entering open hearth furnaces. Izv.vys.ucheb.zav.; chern.met. no.9:71-76 S '58.
(MIRA 11:11)

1. Kuznetskiy metallurgicheskiy kombinat.
(Heat--Convection) (Open-hearth furnaces) (Automatic control)

AUTHORS: Chernov N.N., (Candidate of Technical Science), Docent,
SOV/133-58-12-4/19
Zhigulev P.G., Baranovskiy P.G., Obsharov, V.M., Rayev, Yu.
O., and Kargin A.A., (Engineers).

TITLE: An Automatic Control of the Operation of a Blast Furnace
Based on the Drop in Static Pressure (Avtomaticheskoye
regulirovaniye khoda domennoy pechi po perepadu
statischeckogo davleniya)

PERIODICAL: Stal', 1958, Nr 12, pp 1071-1077 (USSR)

ABSTRACT: The Central Automation Laboratory designed experimental
equipment for the automatic control of blast furnace
operation based on the pressure drop between the bustle
pipe and furnace throat. The signal from the differential
manometer acted in turn on the following controls: top
pressure, temperature and humidity of blast, blast volume.
The equipment was tested on a furnace in the Zaporozhstal'
Works in 1954 and on the Kuznetsk Metallurgical Combine
in 1956. It was soon found that the system as designed
was unworkable. The investigations carried out in the
Kuznetsk Combine indicated that changes in top pressure
influence mainly the pressure drop between the throat and
the middle of the stack, and changes in the blast

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SOV/133-58-12-4/19

An Automatic Control of the Operation of a Blast Furnace Based on the Drop in Static Pressure

humidity, blast temperature and blast volume affect mainly the pressure drop between the middle of the stack and tuyere level. It was therefore decided to base the automatic control on partial pressure drops between the tuyere level and the middle of the stack and between the middle of the stack and the throat. These partial drops in static pressure were measured with two DPES type differential manometers with a double electronic bridge (two standard electronic bridges operating on to a common recording strip). The reliability of the operation of this equipment depends mainly on the state of the opening in the furnace stack for measuring static pressure. This was successfully solved by arranging the opening through a cooler and cleaning it by a pneumatically operated rod (Figs 1 and 2). The recorded curve of the pressure drop between the above two levels during normal furnace operation is shown in Fig 3; during top hanging of the burden in Fig 4; during bottom hanging in Fig 5, and when the hearth is filled with iron and

Card 2/5

SOV/133-58-12-4/19

An Automatic Control of the Operation of a Blast Furnace Based on the Drop in Static Pressure

bottom pressure drop exceeds the normal value then the controller of the top pressure drop is not permitted to restore normal operating conditions, but instead the controller of the bottom pressure drop begins to introduce corrections at first of blast temperature or moisture (in stages of 20°C and 2g/m³) and then of the blast volume. Between each correction a time interval of 5 - 7 minutes is maintained. The restoration of the normal operating conditions is done in reverse order. If the pressure drop falls below the predetermined value, then at first either the blast temperature is increased or its humidity decreased and then the blast volume is

Card 4/5

SOV/133-58-12-4/19

An Automatic Control of the Operation of a Blast Furnace Based on the Drop in Static Pressure

increased. The system was tested during a period of two weeks and in the great majority of cases gave the correct solutions.
There are 7 figures.

ASSOCIATION: Sibirskiy metallurgicheskii institut i Kuznetskiy metallurgicheskii kombinat (Siberian Metallurgical Institute and Kuznetsk Metallurgical Combine)

Card 5/5

8(2)

PHASE I BOOK EXPLOTTATION

SOV/2604

Baranovskiy, Petr Grigor'yevich

Nastroyka avtomaticheskikh regulyatorov v metallurgicheskoy promyshlennosti
(Adjustment of Automatic Controllers in the Metallurgical Industry)
Sverdlovsk, Metallurgizdat, 1959. 128 p. Errata slip inserted. 4,000
copies printed.

Ed.: M.D. Kuzin; Ed. of Publishing House: B.G. Krapivin; Tech. Ed.: R.M.
Matlyuk.

PURPOSE: This book is intended for engineers and technicians engaged in the
automation of thermal processes. It may also be useful to students of
tekhnikums and qualified workers in inspection departments.

COVERAGE: The author presents the basic theory of automatic control and
describes types and characteristics of systems and elements for the auto-
matic control of thermal processes. Problems in adjusting thermal-control
systems and some distinguishing features of the physical processes of auto-
matic control in metal-cutting plants are discussed. Types of test benches

Card 1/4

Adjustment of (Cont.)

SOV/2604

and methods of testing and adjusting controllers are described. No personalities are mentioned. There are 10 references, all Soviet.

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| AVAILABLE: Library of Congress | | |
| Card 4/4 | | GO/jb 12-18-59 |

BARANOVSKIY, P.G.

Certain characteristics of a moisture control system for blast
furnace blow. Izv. vys. ucheb. zav.; chern. met. 4 no.8:158-164
'61. (MIRA 14:9)

1. Kuznetskiy metallurgicheskiy kombinat.
(Blast furnaces--Equipment and supplies)

BARANOVSKIY, P.G.

Certain causes for the malfunctioning of the system of automatic pressure control in furnaces. Izv. vys. shchek. zav.; chern. met. 7 no.8:184-187 '64. (MIK 17:9)

1. Sibirskiy metallurgicheskiy institut.

BARANOVSKIY, F.G.

Insufficiencies in the performance of metal temperature control systems in compartment-type furnaces. Izv.vys.ucheb.zav.; chern. met. 8 no.6:185-187 '65. (MIRA 18:8)

1. Sibirskiy metallurgicheskii institut.

BARANOVSKIY, P.M.

25104 BARANOVSKIY, P. M. Mineral'noye Pitaniye I Dinamika Nakopleniya Uglevodov, Smol I Kauchuka V Kornyakh Kok-sagyza. Vestnik Akad. Nauk Kazakh. SSR, 1949, No 3, S. 62-71. - Rezyume Na Kazakh Yz. - Bibliogr: 25 Nazv.

SO: Letopis', No. 33, 1949

FRANCOUZY, F. M.

34746. Nizhniye elementy mineral'nogo putanilya i nizhniye s'bi pody na perimernost' kachestva kok-syaga. Vestnik Akad. nauk Kazakh. SSR, 1949, No 7, s. 55-57. Poryama na Kazakh. yez.--Bibliogr: 13 nazv.

35: Letopis' Shurnaliyakh Staloy, Vol. 20, Moskva, 1949

BARANOVSKIY, P. M.

"Kok-Saghyz; Biology, Agricultural Methods, Transplanting," Alma-Ata,
Kazakh SSR AS, 1951

BARANOVSKIY, P. M.

178T5

USSR/Biology - Natural Rubber

1 Feb 51

"Modification of Composition of Latex of Kok-Sagyz
Roots Under the Influence of Inorganic Fertilizers,"
P. M. Baranovskiy

"Dok Ak Nauk SSSR" Vol LXXVI, No 4, pp 583-586

Use of N and P fertilizers, particularly the latter,
leads to substantial improvement of crude rubber
yield. Furthermore, mol wt of the rubber is increased
and, as result of this, the latex globules become
larger.

187T5 ?

BARONOVSKIĬ, P.M.

biology, cultivation, transplantation Akademiia nauk Kazakhskoi SSR, 1951.
107 p. (Nauchno-populiarnaia seriia)

BARANOVSKIY, P.M.

Biological significance of dormancy in plants. Izv. AN Kazakh SSR.
Ser. biol. no. 10:52-65 '55. (MLRA 9:4)

1. Institut botaniki AN KazSSR.
(DORMANCY (PLANTS))

BARANOVSKIY, P. N.

Baranovskiy, P. N.

"Regular measurements of wild kok-saryz and its cultivation under the conditions of Kazakhstan." Acad Sci USSR. Botanical Institute named V. L. Komarov. Leningrad, 1956 (Dissertation for the degree of Doctor in Biological Sciences)

Knishnaya letopis'
No. 25, 1956. Moscow

PARAVYAN, A.V., kand.biolog.nauk; DOBRUNOV, L.G., doktor biolog.nauk;
DARKANBAYEV, T.B., professor; BARANOVSKIY, P.M.; MOSEVICHEVA,
L.N., red.; RZHONDKOVSKAYA, I.S., red.; ROROKINA, Z.P., tekhn.red.

[Proceedings of the Interrepublic Scientific Conference of Plant
Physiologists and Biochemists] Trudy Mezhrespublikanskoi nauchnoi
konferentsii fiziologov i biokhimikov rastenii. Alma-Ata, 1958.
203 p.

(MIRA 12:2)

1. Mezhrespublikanskaya nauchnaya konferentsiya fiziologov i
biokhimikov rasteniy. Alma-Ata, 1956. 2. Institut botaniki AN
KazSSR (for Paravyan, Dobrunov, Darkanbayev). 3. Kazgosuniversitet
im. S.M. Kirova (for Darkanbayev). 4. Chlen-korrespondent AN
KazSSR (for Dobrunov, Darkanbayev).
(Biochemistry) (Botany--Physiology)

BARANOVSEIY, P.M.

Vegetative propagation as a method for cultivating kok-saghyz.
Trudy Inst.bot.AN Kazakh.SSR 7:352-367 '59.

(Kok-saghyz)

(MIRA 13:5)

1. BARANOVSKIY, P. P., Eng.; VAYSBERG, Kh. I. Eng.
2. USER (6.0)
4. Electric Welding
7. Experience with semi-automatic welding of barrels, Avtog. delo, 23, No. 11, 1952.

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

USSR / Human and Animal Physiology. Nervous System, Higher Nervous Activity, Behavior. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70552

Author : Baranovskiy, P. P.

Inst : Scientific Research Institute of Psychology UkrainianRSR

Title : The Problem of Studying Auditory Sensitivity

Orig Pub : Nauk. zap. Nauk. dosl. in-t psikhol. URSS, 1956, Vol 4, 58-90

Abstract : Description is given of an apparatus for studying intonation, interval, amplitude, timbre, tempo, and rhythm sensitivity (a lingual device for the study of reception of discrete frequencies, a generator set-up with smooth gradations of frequencies, an intonemeter, and a universal audiograph), and the studies conducted with it are described. Intonation in the active reproduction of the sought-for sound was more precise than upon comparison of auditory

Card 1/2

USSR / Human and Animal Physiology. Nervous System, Higher Nervous T
Activity, Behavior.

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70552

signals; deviations of the sought-for sound and of general high-pitched melodies from the nominal tended chiefly to the higher side. There was noticed a lability of the thresholds of intonation and interval sensitivity, as well as their dependence on musical experience (especially with smooth changes in the sinusoidal frequency) and on fatigue (particularly of the thresholds of interval sensitivity). With labile frequency of the original tone (two beats per sec), the reproduced tone deviated less from the nominal than with stable frequency. The interval sensitivity was reduced upon inclusion of the original sound in a harmonic complex (a triad). Free intonation of a melody was remarkable for its variability. An intonation dualism (ascending and descending order of intonation) of the diatonic major gamut, with increments of 2, 3, 6, and 7 stops was noted. -- M. I. Lisina

Card 2/2

BARANOVSKIY, P.P. (Kiyev).

Universal apparatus for studying auditory sensitivity (polyaudiograph).
Vop. psikhol. 4 no.1:177-183 Ja-F '58. (MIRA 1:3)
(Physiological apparatus)

24(1)

AUTHOR:

Baranovskiy, P.P.

SOV/21-59-3-8/27

TITLE:

The Construction of a Chromatic Sound Scale of Pure Pitch (Postroyeniye khromaticheskogo zvukoryada chistogo stroya)

PERIODICAL:

Dopovidi Akademii nauk Ukrain's'koi RSR, 1959, Nr 3, pp 261-263 (USSR)

ABSTRACT:

The author presents a simple and, according to him, very precise scheme of construction of ascending and descending chromatic scale of pure pitch, employing the method of zero beats of synchronously contrasted adjoining tones of two chains of simple consonant intervals, tuned within one octave, by means of two tone-generators, from an initial frequency in a certain sequence. Figures 3 and 4 present the scheme, wherein \bigcirc stands for the octave, \square for the quint and \square for the fourth. The shapes denote various notes. A table on page 263 presents the step variations of tones at various intervals,

Card 1/2

The Construction of a Chromatic Sound Scale of Pure Pitch SOV/21-59-3-8/27

of chromatic sound scale of pure pitch, beginning with the tone "la". There are 2 graphs, 2 diagrams and 1 table.

ASSOCIATION: Institut iskusstvovedeniya, fol'klora i etnografii AN UkrSSR (Institute for the Study of Art, Folklore and Ethnography of the AS UkrSSR)

PRESENTED: October 11, 1958, by L.N. Revutskiy, Member of the AS UkrSSR

Card 2/2

BARANOVSKIY, P.P. [Baranovs'kyi, P.P.]

New objective methods for the study of auditory sensitivity. Nauk.
zap. Nauk.-dosl. inst. psikhol. 11:39-42 '59. (MIRA 13:11)

1. Institut istorii iskusstva, fol'klora i etnografii AN USSR.
(Hearing)

BARANOVSKIY, P.P.

The **KKON-3** mounted corn-picking combine. Biul.tekh.-ekon.inform.
no.8:53-55 '60. (MIRA 13:9)

(Corn picker (Machine))

ROYTMAN, M., kand.tekhn,nauk; BARANOVSKIY, R., inzh.

Evacuation of the public from motion-picture theaters. Pozh.delo 7
no.3:10 Mr '61. (MIRA 14:5)
(Motion-picture theaters--Fires and fire prevention)

BARANOVSKIY, R.

Latvia is training specialists. Pozh.delo 9 no.10:26 0 '63.
(MIRA 16:12)
1. Nachal'nik uchebnogo otryada Upravleniya pozharney okhrany
Latviyskoy SSR, Riga.

137-58-2-2831

BARANOVSKIY, S. M.
Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 90 (USSR)

AUTHOR: Baranovskiy, S. M.

TITLE: Ways of Increasing the Output Capacity of Disk Saws (Puti povysheniya proizvoditel'nosti diskovykh pil)

PERIODICAL: Tr. Donetsk. industr. in-ta, 1957, Vol 19, pp 69-72

ABSTRACT: Results are given of experimental studies made of the performance of a No. 2 swing saw at the blooming-mill shop of the Stalin Metallurgical Plant. The purpose of the studies was to determine the force required in the cutting of hot metal and to ascertain the effect of some of the principal factors on the magnitude of that force. Analysis of the data obtained has suggested empirical formulae which state the relationship between the shaft torque of the electric motor of the disk-rotating mechanism, the output capacity of the saw, and the mechanical properties of the steel being cut.

D.M.

1. Saws--Production--Analysis

Card 1/1

BARANOVSKIY, S. M. Cand Tech Sci -- (diss) ^{7/1/24} "Stress of the cutting of hot metal with disk saws." Stalino, 1959. 10 pp (Min of Higher and Secondary Specialized Education UkSSR. ■■■ Donets Order of Labor Red Banner Industrial Inst), 170 copies (KL, 52-59, 120)

BARANOVSKIY, S.M.

Investigating forces in hot metal cutting with disk saws. Trudy
DII 36 Ser.met. no.6:29-62 '59. (MIRA 14:9)
(Circular saws) (Metal cutting)

BARANOVSKIY, S.M.

Design of prismatic taper keys. Trudy DII 36 Ser.met. no.f:
83-86 '59. (MIRA 14:9)
(Machinery--Design)

MEMESHKIN, G.; KAZHDAN, B.; BARANOVSKIY, S.

Bookkeeping

"Journal-order system of bookkeeping," I. S. Kaznichenko, Reviewed by: 1. G. Memeshkin;
2. B. Kazhdan; 3. S. Baranovskiy, *Bukh. uchët*, 11, No. 4, 1962.

Monthly List of Russian Accessions, Library of Congress, July 1962. Unclassified.

BRANOVSEY, S.

Shoe Industry - Accounting

Organization of accounting in the stamp shop of the "Kosinskaya Koronna" factory.
Buldy. uchët 12, No. 4, 1953.

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

BARANOVSKIY, S.

A great distance covered. Bukhg.uchet. 14 [i.e. 16] no.8:36-37
Ag '57.

(MLRA 10:8)

(Accounting)

BARANOVSKIY, S.

Use of cumulative work orders is an important means for increasing accounting efficiency. Bukhg.uchet 14 no.7: 37-41 J1 '57.

(MLRA 10:7)

1. Glavnyy bukhgalter 1-y shtsenabivnoy fabriki, Moskva.
(Accounting)

BARANOVSKIY, S.M.

Efficient organization of recordkeeping at the "Parizhskaia
Kommuna" factory. Leg. prom. 16 no.1:49-51 Ja '56.(MLRA 9:6)
(Shoe industry) (Industrial management)

BARANOVSKIY, S.M.

Experience in curtailing initial accounting. Tekst. prom. 18 no.6:
54-55 Ja '58. (MIRA 11:7)

1. Glavnyy bukhgalter Pervoy sitsenabivnoy fabriki.
(Textile industry--Accounting)

BARAIKOVSKIY, S. M.

Simplification of accounting processes. Tekst. pron. 19 no.4:
16-18 Ap '59. (MIRA 12:6)
(Textile industry---Accounting)

PARADYSHNY, S. N.

"Study of Deviating and Focusing Properties of a Straight Magnetic
Slit." Cand. Phys-Math Sci., Leningrad Physicotechnical Inst., Acad. Sci.
USSR, Leningrad, 1954. (RZhFiz, Feb 55)

SO: Sw. No 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (14)

BARANOVSKIY, S.N.

Category : USSR/Electronics - Electronic Optics

H-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4279

Author : Baranovskiy, S.N., Kaminskiy, D.L., Kel'man, V.M.

Title : Investigation of the Electron-Optical Properties of Straight Magnetic Slits.

Orig Pub : Zh. tekhn. fiziki, 1955, 25, No 4, 610-624

Abstract : An investigation was made of the electron-optical properties of many magnetic slit lenses (cylindrical lenses), having various structural dimensions. The constructions of these lenses and their properties are described. A study was made of the qualitative picture of the distribution of the magnetic field in the lens. A qualitative study of the distribution of the field was carried out with the aid of a ballistic galvanometer in three planes, oriented at different angles ($\alpha = 90^\circ, 180^\circ, \text{ and } 135^\circ$) relative to the surface of the pole pieces and intersecting under the central line of the non-magnetic gap of the lens. It is shown that the distribution obtained in the planes $\alpha = 90^\circ$ and 135° are in very close agreement with the field of the isolated single conductor, if the current in this conductor is properly chosen.

Card : 1/2

Category : USSR/Electronics - Electronic Optics

H-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4279

It is thus possible to find the linear current producing a "equivalent" field. Equations for the distribution of the trajectories of the electrons in the field of the isolated linear current were taken from the work by Kel'man and Roknikov (Zh. eksperim. i teoret. fiziki, 1951, 21, 1364). These equations are used to determine the trajectories which start at the peaks of a conical beam and which then fall into the field of the isolated current. It is shown that the field of the isolated current focuses such a beam, forming focal lines.

The authors describe an experimental camera, in which it is possible to study the electron-optical properties of beams of particles, emerging from a gun and entering into the field of the slit lenses of the above construction. The quality of focusing of the beam into a focal line is checked from the image on a fluorescent screen, which is placed on a mount that can be moved in two mutually perpendicular directions, so that the screen can be placed in any previously specified position.

Photographs of the focal line obtained in this manner are given. It is shown that the results of calculation using the "equivalent" linear current and the results of the experiments are close to each other.

Card : 2/2

BARANOVSKIY, S. N.

Category : USSR/Electrons - Electronic Optics

H-3

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1662

Author : Baranovskiy, S.N., Kaminskiy, D.L., Kel'man, B.M.

Title : Double Magnetic Slit

Orig Pub : Zh. tekhn. fiziki, 1955, 25, No 11, 1954-1956

Abstract : Description of the construction and of several characteristics of a system consisting of two magnetic slits. Experiments have shown that a double magnetic slit deflects and focuses an electric beam, forming a linear image of a point source.

Card : 1/1

9.6.180

20827

5/139/61/000/003/007/013
E073/E335

AUTHORS: Gorodetskiy, A.F., Baranovskiy, S.N. and
Marchenko, V.G.

TITLE: Investigation of the Strain-gauge Properties of
Semiconductors
I. Germanium

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,
1961, No.3, pp.66-70

TEXT: Published work of various authors indicates that in principle it is possible to use semiconductors for strain gauges. In earlier work of A. F. Gorodetskiy, S. S. Gutin, I. G. Mel'nik, M. G. Serbulenko, V. S. Shadrin (Ref.4: Izvestiya vuzov, Fizika No.4, 91, 1958; Ref.10: A. F. Gorodetskiy, G. N. Guk, D.I. Puchkin, Fizika tverdogo tela "Solid State Physics", Symposium, Vol.1, 1959) it was established that vacuum-deposited germanium films had a strain sensitivity of 30 - 60 units and preliminary experiments with single-crystal germanium plates have shown that their strain sensitivity is of the order of 100 and more. In this case, the strain sensitivity S is defined by $S = \Delta R/R_0$, where

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Investigation of ...

25027

S/139/61/000/003/007/013
E073/E335

ΔR is the increase in resistance during strain by pure tension or compression, R is the initial resistance and ϵ the relative strain. In view of the fact that the strain sensitivity of wire strain gauges is of the order of about 2, it can be anticipated that semiconductor strain gauges will yield a signal which may be higher by two orders of magnitude (Ref. 11: W. P. Mason, Bell Laboratories Record, January, 1959). In this paper the results are given of systematic investigations which were aimed at determining the possibility of producing semiconductor strain gauges with a high signal output. Data are given on the strain-gauge properties of germanium films deposited in vacuum on a neutral base and of single crystal germanium specimens. The germanium films, $4 \times 20 \text{ mm}^2$ or $2.5 \times 14 \text{ mm}^2$, were deposited through a stencil onto glass, which was subsequently strained by tension, compression and bending. Metallic spots were also vacuum-deposited onto the condensed germanium layers to serve as leads. During deposition the vacuum was between the limits 1×10^{-4} to 5×10^{-5} mm Hg. The conductivity of all the films was of the hole type. The single crystals of electron germanium were in the form of rectangular

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Investigation of 26027

S/139/61/000/003/007/013
E073/E335

strips, 3-5 mm wide, 10-12 mm long and about 0.25 mm thick with specific resistivities of 3 and 30 Ω cm. Current-conducting leads were soldered-on after etching, using tin of 99.999% purity with zinc chloride as a flux. The single crystals were glued-on to the glass beams. The strain was determined from the sag by means of a thickness-metering instrument with an accuracy of 1 μ . The resistance was measured with an accuracy of $\pm 0.5\%$. In the case of films, S values up to 100 were obtained, whilst in the case of N-type low-resistance germanium single crystals S values of up to about 150 were obtained. In both cases, the increase in resistance proved to be a linear function of the strain for ϵ values of up to 6.65×10^{-4} in the case of germanium films and 3.2×10^{-4} in the case of single crystals. The S values dropped sharply with increasing temperature. The basic characteristics of the investigated specimens were found to be stable, provided the temperature was maintained constant. It is concluded that both vacuum-deposited films and single crystals are suitable for use as strain gauges with a high signal output. There are 9 figures and 11 references: 5 Soviet

Card 3/4

Investigation of 26027

3/139/61/000/003/007/013
E073/E335

and 6 non-Soviet. The three English-language references quoted are: Ref.5 - C. Herring - Bell Syst. Techn. Journ., Vol.34, 237, 1955; Ref.6 - C. Herring, E. Vogt - Phys. Rev., 101, No.3 944, 1956; Ref.11 - W. P. Mason (quoted in text).

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut
(Novosibirsk Electrotechnical Institute)

SUBMITTED: May 9, 1960

Card 4/4

BARANOVSKIY, S.N.

Tensiometric properties of acicular crystals of gallium
arsenide. Izv. vys. ucheb. zav.; fiz. no.5:124-127 '62.
(MIRA 15:12)

1. Novosibirskiy elektrotekhnicheskiy institut.
(Gallium arsenide crystals)

L 1113-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD/EM/GG/GS

ACCESSION NR: AT5020495

UR/0000/64/000/000/0471/0475

AUTHOR: Baranovskiy, S. N. 44

TITLE: Strain-gauge sensing elements on the basis of acicular crystals of gallium arsenide 21, 44, 55 42 341 35, 27

SOURCE: Mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya po fizike poluprovodnikov (poverkhnostnyye i kontaknyye yavleniya). Tomsk, 1962. III 44/55
Poverkhnostnyye i kontaknyye yavleniya v poluprovodnikakh (Surface and contact phenomena in semiconductors). Tomsk, izd-vo Tomskogo univ., 1964, 471-475

TOPIC TAGS: gallium arsenide, acicular crystal, strain gage, measuring instrument/
BF 2 cement, VL 7 lacquer 44, 55

ABSTRACT: Strain-gauge sensing elements that use acicular crystals of gallium arsenide are described. These devices were developed to overcome some of the disadvantages of existing wire and semiconductor strain-gauge sensing elements. Acicular GaAs crystals with a length of 1.5 to 10 mm and a thickness of 15 to 40 μ were used. The crystals were coated with a thin film of polymerized BF-2 cement or VL-7 lacquer. One of a series of sensing elements made is shown in Fig. 1 on the Enclosure, where: 1- crystal; 2- 50- μ copper wires; 3- lacquer; 4- reinforcing projections; C, A, B, D- contacts. The devices are distinguished by high mechanical Card 1/3

L 1113-66

ACCESSION NR: AT5020495

strength, a high coefficient of strain sensitivity (about 40), good temperature characteristics, a linear dependence between the variation in resistance and the measured strain (for small strains), low weight, and high stability of resistance and strain sensitivity with respect to time. Orig. art. has: 1 diagram, 3 graphs, and 1 formula.

ASSOCIATION: none

SUBMITTED: 06Oct64

ENCL: 01

SUB CODE: IE,
SS

NO REF SOV: 002

OTHER: 001

Card 2/3

L 1113-66

ACCESSION NR: AT5020495

ENCLOSURE: 01

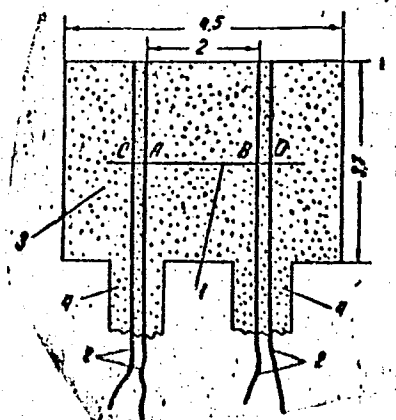


Fig. 1. Schematic view of strain-gauge sensing element.

Card ^{KA} 3/3

L 47214-66 EWT(1)/EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/JG/EM/GG
ACC NR: AR6017158 SOURCE CODE: UR/0275/66/000/001/B035/B035

AUTHOR: Baranovskiy, S. N.

REF SOURCE: Sb. Poverkhnostn. i kontaktn. yavleniya v poluprovodnikakh. Tomsk, Tomskiy un-t, 1964, 471-475

54
B

TITLE: Strain gages based on a gallium arsenide whisker crystal

90 27 27 10 2

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 1B278

TOPIC TAGS: gallium arsenide, metal whisker, strain gage

TRANSLATION: The design and technique of manufacturing strain gages are briefly described. Technical characteristics of a strain gage based on a GaAs whisker crystal are described. This kind of strain gage has a large coefficient of strain sensitivity (240), good temperature characteristics, good linear relation between the magnitude of resistance variation and the magnitude of deformation (in the case of slight deformations). It is also light and can use a very small probe (down to tenths of a mm). Yu. V.

SUB CODE: 62,14/ ~~SUBM DATE: none~~

UDC: 621.382.9:531

Card 1/1 fv

ACC NR:

AR6034973

SOURCE CODE: UR/0272/66/000/008/0039/0039

AUTHOR: Baranovskiy, S. N.

TITLE: Resistance strain gage in the form of an acicular crystal of gallium arsenide

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 8. 42. 322

REF SOURCE: Tr. Novosib. elektrotekhn. in-t svyazi, vyp. 1, 1965, 86-89

TOPIC TAGS: gallium arsenide, acicular crystal, strain gage, resistance strain gage

ABSTRACT: A description is given of a strain gage based on a gallium arsenide acicular crystal with a linearly dependent sensitivity coefficient of about 40. The gage manufacture technology and its technical characteristics are analyzed. There are 4 illustrations. P. Agaletskiy. [Translation of abstract]

SUB CODE: 09, 11/

Card 1/1

UDC:681.2.083.8:531.787.913

GODOVIKOV, A.A.; BARANOVSKIY, S.N.; SENDEROVA, V.M.

Some electric properties of the cosalite of the Kara-Oba deposit.
Dokl. AN SSSR 163 no.1:186-188 J1 '65. (MIRA 18:7)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR i
Novosibirskiy elektrotekhnicheskii institut.

L 10772-66 EWI(d)/EWI(m)/EWP(c)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWP(l)/EWA(h)/
ACC NR: AP5026217 EWA(c)/ETC(m) IJP(c) SOURCE CODE: UR/0381/65/000/004/0060/0065
JD/WH

AUTHOR: Baranovskiy, S. N.; Sheloput, D. V.; Berezikov, D. D.

ORG: Novosibirsk Electrical Engineering Institute (Novosibirskiy elektrotekhnicheskiy institut)

TITLE: Study of the inhomogeneity of the crystal structure of Ge and Si from the speed of ultrasound in different portions of the crystal

SOURCE: Defektoskopiya, no. 4, 1965, 60-65

TOPIC TAGS: ultrasonic inspection, semiconductor crystal, crystal structure, crystal defect

ABSTRACT: Experimental data from measurements of the relative variations in the velocity of ultrasound in different parts of single crystals of germanium and silicon and the elastic stresses in them are utilized to study the distribution of structural defects. The procedure for observing small relative variations in the velocity is based on the probing of different parts of the crystal by a narrow ultrasonic beam. Such ultrasonic methods of crystal study are derived from the dependence of the modulus of elasticity and internal friction on the real crystal structure. The impulse ultrasonic apparatus used in the experiments consists of the following: modulator and synchronizer (video-impulse generator G5-15); high frequency signal

Card 1/2

UDC: 620.179.16 : 620.18

L 10772-66

ACC NR: AP5026217

generator (generator of standard signals G4-7A); piezoquartz converter-transducers (between which the specimen is placed, in distilled water); amplifier (series connected of type UZ-3); oscillograph (impulse type SI-31). The apparatus, described in detail in the report, was used to conduct measurements on three samples of single crystal silicon and two of germanium, with an ultrasonic beam of 2.5 millimeter diameter along different crystallographic directions (the three mutually perpendicular faces of the rectangular parallelepiped crystals coincided with the planes (111), (110), (211); crystal sizes 20 to 50 millimeters along the long edge). Frequencies used were 21 to 10⁴ megahertz at temperatures from 16 to 80°C. The silicon (n-type, doped with phosphorus) had specific resistivities from 10 to 45 ohm-cm; the germanium (n-type, doped with antimony), 26 to 40 ohm-cm. The density of the dislocations varied from 10² to 10⁴ cm⁻². The elastic stresses were studied by means of the polariscope PIK-1 at the Institute of Crystallography, Academy of Sciences SSSR. The greatest stresses were found to occur in those portions adjoining the angles (vertices, edges). It is concluded that a definite correlation exists between the velocity of propagation of ultrasound and the internal stresses in a given region or a crystal. Differences in the velocities of ultrasound along different directions amount to a maximum of 10 millipercents, which is sufficient to permit the observation of structural inhomogeneities in germanium and silicon single crystals. It is recommended that future investigations study crystals with known defects and their distribution. Orig. art. has: 4 figures, 3 tables.

SUB CODE: 14,20/

SUBM DATE: 26May65/

ORIG REF: 003/

OTH REF: 001

OC
Card 2/2

ultrasonic inspection 14

BARANOVSKIY, V., inzh.

Contribution of radio amateurs to motion picture projection. Radio
no. 8: 52-54 Ag 1964. (MIRA 17:21)

BARANOVSKIY, V., zaveduyushchiy.

Make wider use of progressive methods in construction. Sov.profsoiuzy
1 no.4:41-45 D '53. (MLRA 6:12)

1. Otdel proizvodstvenno-massovoy raboty Tsentralnogo komiteta profes-
sional'nogo soveta rabochikh kommunal'no-zhilishchnogo stroitel'stva.
(Construction industry)

BARANOVSKIY, V., inzhener-polkovnik; KARAKUL'KO, I., inzhener-podpolkovnik

From tank ovens to reliable preheaters. Starsh.-serzh. no.1:32
Ja '61. (MIRA 14:7)
(Tanks (Military science)--Cold weather operation)

BARANOVSKIY, V.

AID P - 3099

Subject : USSR/Aeronautics
Card 1/1 Pub. 58 - 4/19
Author : Baranovskiy, V.
Title : Our strength lies in our active membership
Periodical : Kryl. rod., 8, 3-4, Ag 1955
Abstract : The author describes in detail one of the DOSAAF organizations. He mentions a number of names. Photo.
Institutions: 1. Ovruchskiy Mining Center, 2. DOSAAF, 3. PVKhO (Aircraft and Chemical Warfare Defense).
Submitted : No date

NIKIFOROV, I.; MAKAROV, A.; SMOLYAKOV, N.; SIPER, E.; MOGILA, V.; LARIN, M.;
FILIPPOV, K.; TOKMAKOV, V.; BARANOVSKIY, V.; CHETVERIKOV, K.;
POZNANSKIY, A.; SHUTOV, M.; ROZENFEL'D, L.; RUD', A.

Mechanization of waterproofing operations. Stroitel' 8 no.11:
15-20 N '62. (MIRA 16:1)
(Waterproofing--Equipment and supplies)

BARANOVSKIY, V., inzh.

Contribution of radio amateurs to motion-picture projection techniques.
Radio no.8:52-54 Ag '65. (MIRA 18:7)

BARANOVSKIY, V. G.

PA 34/49T91

USSR/Medicine - Societies, Medical
Medicine - Venereal Diseases

Jul/Aug 48

"Brief Notes on the Activity of the Minsk Dermato-
Venereological Society for 1945 - 1947," A. Prokop-
chuk, V. Baranovskiy, 3/4 p

"Vest Venerol i Dermatol" No 4

Lists officers of Society. Gives titles of 28 papers
read.

34/49T91

VETOKHIN, I.A., prof., BARANOVSKIY, V.G.

Skin temperature in various manifestation of syphilis. Sbor.
nauch.rab.Bel.nauch.-issl.kozhno-ven.inst. 4:231-235 '54 (MIRA 11:7)
(SYPHILIS)
(BODY TEMPERATURE)

BARANOVSKIY, V. I.

Dissertation defended for the degree of Candidate of Chemical Sciences at the Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy in 1962:

"Radiochemical Investigation of Reactions of Intense Cleavage and Fission of Tantalum by Protons of 680 Mev Energy."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

ACCESSION NR: AT4035419

S/0000/63/000/000/0298/0312

AUTHOR: Baranovskiy, V. G.; Petrusenko, I. A.

TITLE: A two-cycle magnetic bridge amplifier with a positive even-harmonics feedback circuit

SOURCE: Vsesoyuznoye soveshchaniye po ferritam i po beskontaknyim magnitnyim elementam avtomatiki. 3d, Minsk. Ferrity* i beskontaknyye elementy* (Ferrites and non-contact elements); doklady* soveshchaniya. Minsk, Izd-vo AN BSSR, 1963, 298-312

TOPIC TAGS: automation, control system, automatic control, feedback, positive feedback, amplifier, magnetic amplifier, two-cycle bridge amplifier

ABSTRACT: The article reports a detailed study of a new circuit, developed by the authors (Author certificate No. 127702) and intended for use as the output cascade in automatic control systems to replace the less advantageous differential, transformer or bridge circuits currently in use. Essentially, the authors' new bridge circuit differs from that commonly used in that two, rather than one, identical coils are used in the magnetic amplifier core and connected to the opposite bridge ends, each of which is formed by two coils, connected in succession and located in different cores, thus constituting a positive feedback loop. The

ACCESSION NR: AT4035419

authors tested the stability of the new bridge amplifier to changes in voltage, frequency and ambient temperature, determined its power characteristics and examined the transient processes involved. Compared to those in use, the new amplifier showed greater reliability, response, amplification coefficient, and stability of static characteristics, with higher power characteristics and smaller overall size and weight. Its principal technical data are: $D = 45$, $d = 32$, and $h = 5$ mm, $w = 750$ turns; feedback rectifiers of the D7Zh type; circuit feed voltage 220 v, 427 cps. Orig. art. has: 7 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 04Dec63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: 1E

NO REF SOV: 003

OTHER: 000

Card 2/2

BARANOVSKIY, V. I.

TERPIGOREV, A. M., Academician, SUDOPLATOV, A. P., BARANOVSKIY, V. I.

"Exploitation of Wide Steeply Sloping Beds by Horizontal Layers,"
Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 2, 1940.

Report U-1530, 25 Oct 1951

TERPIGOREV, A. M., Academician, SUDOPLATOV, A. P., BARANOVSKIY, V. I.

"Exploitation of Wide Steeply Sloping Coal Strata by Inclined Layers,"
Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 5, 1940

Report U-1530, 25 Oct 1951

BARANOVSKIY, V. I.

TERPICOREV, A. M., Academician,

SUDOPLATOV, A. P., BARANOVSKIY, V. I.

"Exploitation of Thick Steeply Sloping Coal Beds with Shafts on the Slope under the Protection of Shield Bracing," Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 2, 1941.
Submitted 24 Oct 1940.

Report U-1530, 25 Oct 1951

BARANOVSKIY, V. I., Engr. Cand. Tech. Sci.

Dissertation: "Concerning Exploitation of Thin Coal Seams." Inst of Mining, Acad Sci USSR, 25 Apr 47.

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

BARANOVSKIY, V. []

Baranovskiy, V. and Naumenko, P. "Restoration of the Donetz Basin," Plan. khoz-vo, 1948, No. 5, p. 29-41

SO: U-3264, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 4, 1949).

BARANOVSKIY, V. I. Eng.

"Progress of Soviet Mining Engineering," Gor. zhur., No.5, 1952

BARANOVSKIY, V. I.
SUDOPLATOV, A. P.; BARANOVSKIY, V. I.

Mining Research

Development of scientific studies in the field of coal mining methods. Ugol' 23,
No. 4, 1953.

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

BARANOVSKIY, V.I.; SUIOPLATOV, A.P.; GENDEL', K.K.; SHMYKOV, I.P.

Preparation and order of development in steeply pitching seams
at great depths in the Donets Basin. Trudy Inst.gor.dela 1:
31-46 '54. (MLRA 7:12)
(Donets Basin--Coal mines and mining)

BARANOVSKIY, V.I.

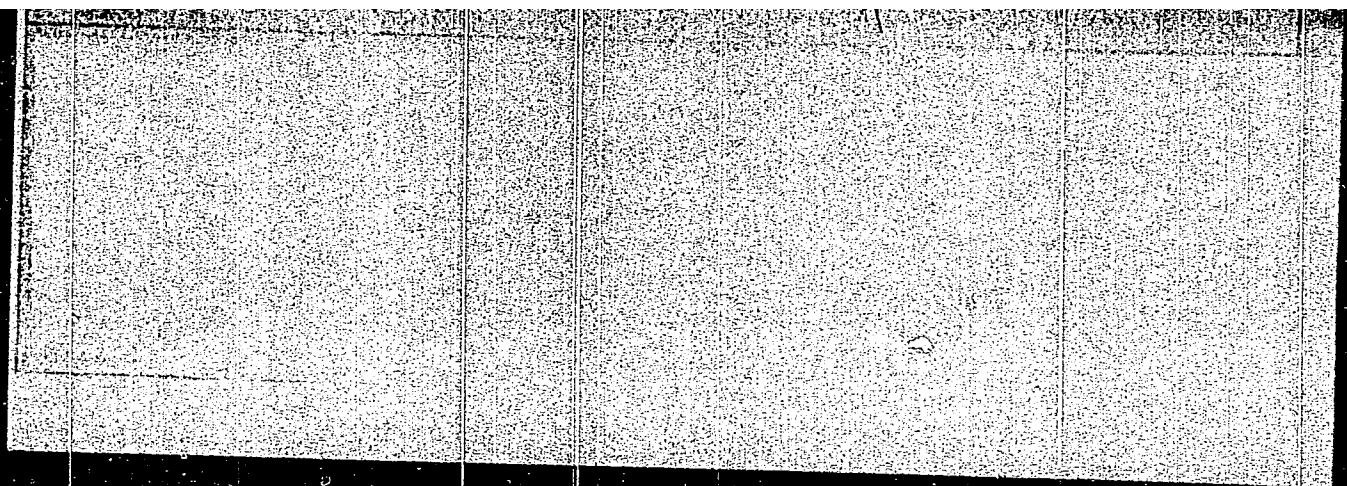
99. METHOD OF PREVENTING BURDEN ERUPTIONS OF COAL AND GAS.
Baranovskii, V.I. and Tepeliev, N.V. (Ugol (Coal, Russia), Aug. 1955, 57-59). Vol 50, No 8.
The commission appointed have found these eruptions to be due to rock pressure.

gas in the coal seams, structure of the coal and the seams, and the forces due to the weight of the coal. They occur in the steeply dipping seams of Donbass. The method of prevention proposed consists in undercutting the seam with a "cable saw" which is threaded through two holes drilled 30-50 m apart up through the lower side of the seam from the working drift at the bottom to the ventilation drift at the top. Gas is drained off from the top of these holes, then a driving mechanism in the working drift is used to impart a reciprocating motion to the cable saw, and a thin slice is removed from the underside of the seam. This relieves the seam of rock pressure and renders it safe for mining. The cable saw has been tested on an artificial block made of anthracite and cement. Of the two types of saw tested, a cable carrying a series of cylindrical cutters and another carrying a series of wire bars, the latter was the more effective. (L).

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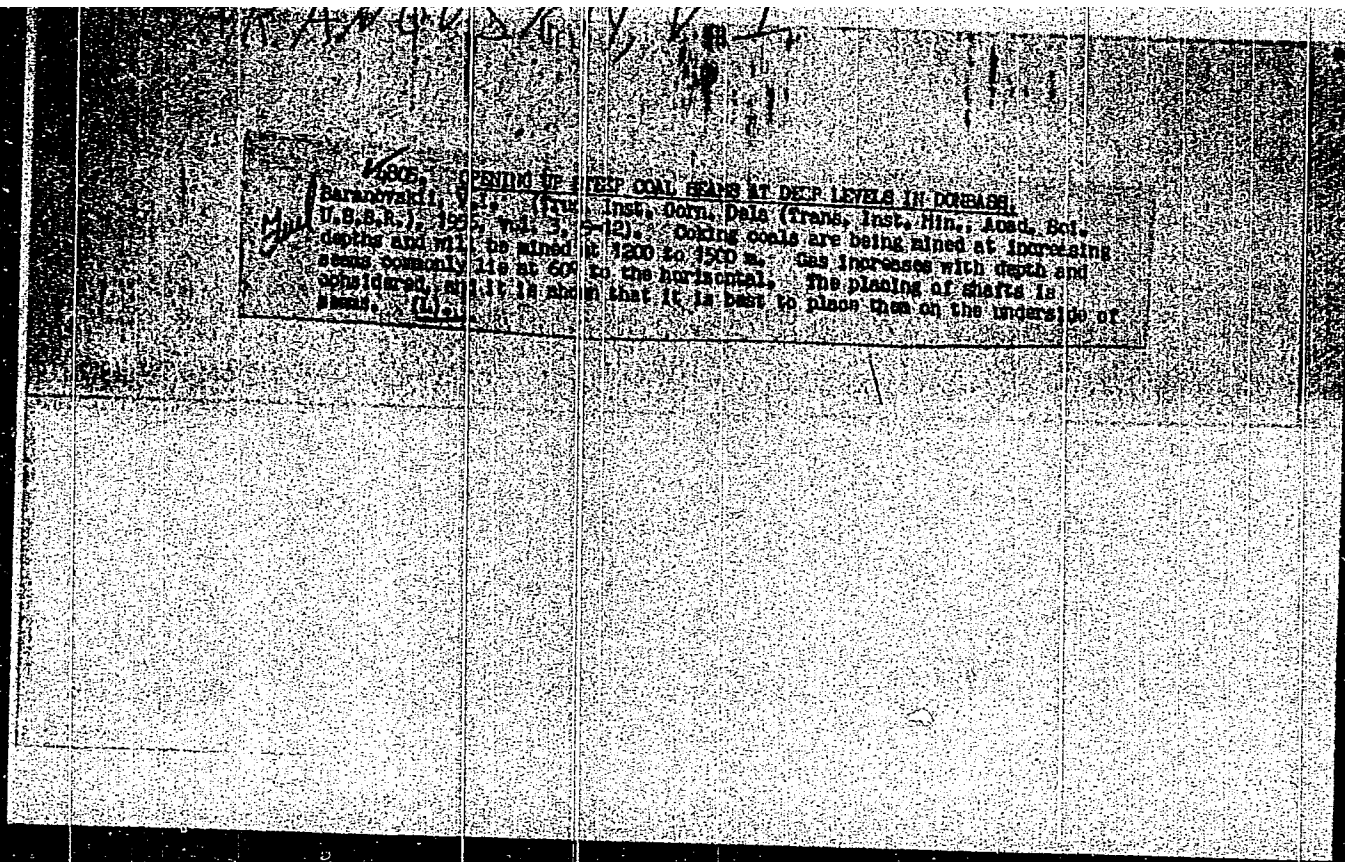
"APPROVED FOR RELEASE: 06/06/2000

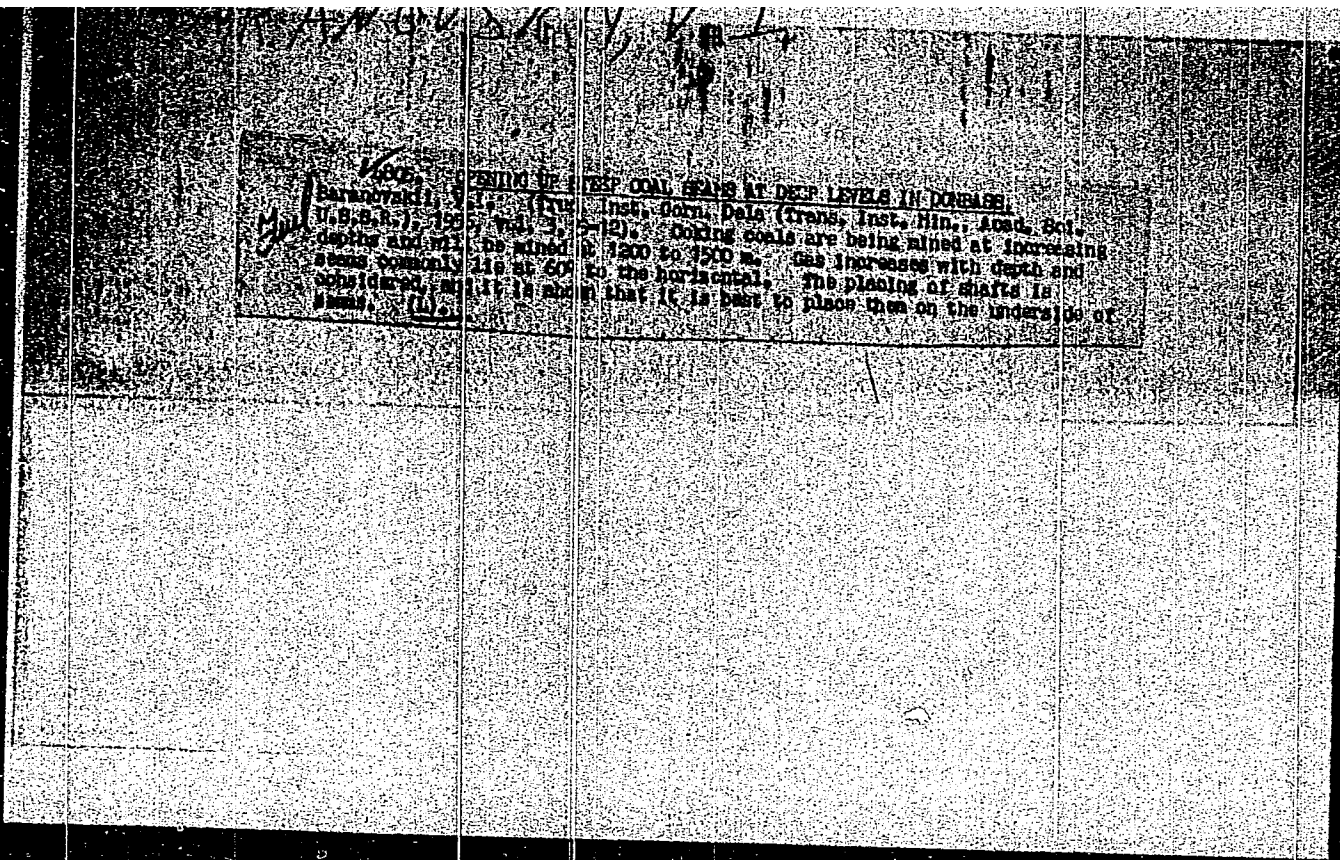
CIA-RDP86-00513R000103520009-1



APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103520009-1"





ANK ANOV 3/10/4, K/L

Jul
VSCS. OPENING UP DEEP COAL SEAMS AT DEEP LEVELS IN DGBASS.
Baranovskii, V. I. (Trans. Inst. Geogr. Data (Trans. Inst. Min., Acad. Sci.
U.S.S.R.), 1955, vol. 3, p. 12). Coking coals are being mined at increasing
depths and will be mined at 1200 to 1500 m. Gas increases with depth and
seams commonly lie at 60° to the horizontal. The placing of shafts is
considered, and it is shown that it is best to place them on the underside of
seams. (L)

222. PREVENTION OF OUTBURSTS OF COAL AND GAS. Baranovskii, V.I.
(Vestn. Akad. Nauk SSSR (Bull. Acad. Sci. U.S.S.R.), Sept. 1956, vol. 26,
51-54). The causes of this phenomenon are discussed and a method worked out
by the author and L.A. Topchey for preventing it, in the thin steep seams of
good caking coal in central Donbass, is described with diagrams. The
ventilation road at the top and the haulage road at the bottom of the portion
of seam being worked are driven so as always to be 100 m or more in advance of
the working face. Drainage holes 30 to 40 m long and 200 to 300 mm in diameter
are bored sloping slightly upward from the haulage road, and saw cuts are made
through the coal to be worked. There are two ways of making the saw cut:
either large holes are bored at 30 to 50 m intervals between the ventilation
and haulage roads and a cable saw taken up one and down the next, or both
leaves of the cable saw are made to cut straight into the seam from the
working face. Preparations are in hand for commercial trials.

BARANOVSKIY, V.I.; SUDOPLATOV, A.P.; SHMYKOV, I.P.

Influence of natural factors on selecting development methods
for flat lying orebeds at deep levels in the Donets Basin. Trudy
Inst. gor. dela 4:5-19 '57. (MLRA 10:6)
(Donets Basin--Coal mines and mining)

BARANOVSKIY, V. I.

Problems in the Exploitation of Mineral DRE DEPOSITS, Moscow, Izd-vo AN SSSR, (Cont.)x 879: 1956, 251pp.

BARANOVSKIY, V. I., Cand. Tech. Sci., "Development
Openings in Unstable Rocks Subject to Heaving in Moderately Pitching
Coal Seams in the Donbass 197

The author reviews the problem of controlling heaving, which increases with depth, and the flaking and disintegration of roofs. The technical and economic indices of a coal mine, such as labor and transportation, are unfavorably affected by such factors. The problem is how to reduce these factors to a practical minimum. There are 15 figures. There are no references.

PART IV. OPEN-CUT MINING

Krasnikov, A.S., Candidate of Technical Sciences. Selecting the Best Width for Excavator Operations in Stationary Excavation Systems 217

A theoretical treatment of factors affecting the productivity of stationary excavators and a selection of the best parameters for shovel width and revolving angles are presented by the author. There are 6 figures and 2 tables. There are no references.

~~Card 10/11~~

SUDOPLATOV, Aleksey P. and BARANOVSKIY, V. I. (Moscow)

BARANOVSKIY, V.I.

"The Effect of Rock Pressures on the Stability of Installations in Working Weakly Supported Veins in the Donetz Basin."

papers submitted at Intl. Cong. on Rock Pressures in Mining, Leipzig, GDR, 14-16 Oct 58.

BARANOVSKIY, V. I.

The International Rock Pressures in Mining was held in Leipzig, 14-16 Oct. 1958.
Soviet delegates were:

AYERCHIN, S. G. (Leningrad)
"Experience in Rock Pressure Research."

PANOV, A. D. and RUPPENYI, K. V. (Moscow)
"Questions of Rock Pressure."

SUDOPLATOV, A. P. and BARANOVSKIY, V. I. (Moscow)
"Influence of Rock Pressure on the Strength of Mining Construction in the Donets Basin."

OO: Bergakademie, July 1958, Uncl.

BARANOVSKIY, V. I., kand. tekhn. nauk

Effect of rock pressure on the efficiency of methods used for mining
flat seams in the Donets Basin. Ugol' 33 no:4:3-8 Ap '58.
(Donets Basin--Coal mines and mining) (MIRA 11:4)
(Subsidence (Earth movements))

BARANOVSKIY, V.I.; BRONNIKOV, D.M.; KORSHUNOV, S.I.; KULIKOV, A.P.; PARUSIMOV, V.F.; ROZENTRETER, B.A.; RUSHCHINSKIY, M.V.; SUDOPLATOV, A.P.; TERPOGOSOV, Z.A.; SHEVYAKOV, L.D., akademik, otv.red.; GUS'KOVA, O.M., tekhn.red.

[Terminology connected with underground mining systems in solid mineral deposits] Terminologiya sistem razrabotki mestorozhdenii tverdykh poleznykh iskopaemykh podzemnykh sposobom. Moskva, 1959. 13 p. (Sbornik rekomenduemykh terminov, no.51) (MIRA 13:1)

1. Akademiya nauk SSSR. Komitet tekhnicheskoy terminologii.
2. Nauchnaya komissiya Komiteta tekhnicheskoy terminologii AN SSSR (for all except Shevyakov, Gus'kov).
(Mining engineering--Terminology)

BARANOVSKIY, V.I., inzh.

Utilizing underground pressure in securing safe working conditions in adjacent seams. Bezop.truda v prom. 3 no.5:9-12
My '59. (MIRA 12:8)

(Coal mines and mining--Safety measures)

BARANOVSKIY, V.I.; SARATOVSKIY, E.G.

Methods and techniques for measuring rock pressure on models
made of similar materials. Ugol' 34 no.7:37-38 J1 '59.

(MIRA 12:10)

(Subsidence (Earth movements)--Electromechanical analogies)

BARANOVSKIY, V.I., inzh.; POLUEKTCV, V.M., inzh.

Preventing coal and gas outbursts in mines of the Donets
Basin. Bezop.truda v prom. 4 no.8:4-5 Ag '60.

(MIRA 13:8)

(Donets Basin--Coal mines and mining--Safety measures)

BARAKOVSKIY, V. I., kand. tekhn. nauk

Some features of rock movement and rock pressure redistribution
in working vertical layers. Nauch. soob. Inst. gor. dela 7:84-87
'61. (MIRA 15:1)

(Rock pressure)

BARANOVSKIY, V.I.

Efficient means of working flat seams of the Donets Basin under
conditions of intensive rock heaving in the mines. Gor. i ekon.
vop. razrab. ugol'. i rud. mest. no.1:16-23 '62. (MIRA 16:7)
(Donets Basin--Coal mines and mining)