

KOVALEV, V.F.; KOVAL'CHUK, A.I.; KOZLOV, A.V.

Some problems of the formation of the chemical composition of
underground waters in the Sibayevo pyritic copper deposit.
Geokhimiia no.4:367-371 '62. (MIRA 16:7)

1. Institute of Mining and Geology of the Ural Branch of the Academy
of Sciences U.S.S.R., Sverdlovsk.
(Ural Valley--Water, Underground--Composition)

KOZLOV, A.V.

Geology of the basement of the eastern part of the Russian
Platform. *Biul.MOIP.Otd.geol.* 37 no.5:172-173 S-0 '62.
(MIRA 15:12)
(Russian Platform--Geology)

KOVALEV, V.F.; KOVAL'CHUK, A.I.; KOZLOV, A.V.; SOKOLOVA, V.G.

Hydrochemical characteristics of natural waters in the greenstone belt of the Southern Urals and problems of the formation of hydrochemical halos of dispersion in pyritic copper deposits. Trudy Inst.geol. UFAN SSSR no.62. Gidrogeol. sbor. no.2:3-22 '63. (MIRA 16:5)

(Ural Mountains--Water, Underground--Analysis)

(Ural Mountains--Chalcopyrite)

(Geochemical prospecting)

PETROV, G.L.; KOZLOV, A.V.

Trajectory of the axis of a crystallite and the rate of crystal
growth during the solidification of a welding bath. Trudy LPI
no.229:83-90 '63. (MIRA 17:9)

KOVALEV, V.F.; KOZLOV, A.V.; SOKOLOVA, V.G.

Some data on the hydrochemical prospecting characteristics of
natural waters in the Tagil-Kushva region. Trudy Inst. geol.
UFAN SSSR no.69. Gidrogeol. sbor. no.3:3-21 '64.

(MIRA 17:11)

KOVALEV, V.F.; KOZLOV, A.V.; KRALIN, G.A.

Geochemical characteristics of natural waters in the western part of the Turgay trough. Trudy Inst. geol. UFAN SSSR no.69. Hidrogeol. sbor. no.3:37-48 '64.

Geochemistry of the natural waters and prospecting indications of rare-metal ore manifestation in the northwestern part of Kustanay Province. Ibid.:79-86

(MIRA 17:11)

KOZLOV, A.V.; AMINOVA, V.M.

Some results of the comparison of the theoretical and experimental characteristics of seismic waves. Trudy Inst. seism. stroi. i seism. 12:31-42 '64. (MIRA 18:5)

KUCHOTKOVA, I.V.; GABRIK, A.V.; ...
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... ..

Characteristics of the operation of telegraph stations of Central Asia. In:
... ..
... ..

KOZLOV, Aleksey Yefremovich; RATOVSKIY, Pinkhus Mondelevich;
KOKOSHEV, Vasiliiy Grigor'yevich; PETROV, Georgiy
Yefremovich; POSTERNYAK, Ye.F., inzh., red.; TELYASHOV,
R.Kh., red.izd-va; GVIRTS, V.L., tekhn. red.

[New cutting-tool holding heads for lathes] Novye reztse-
derzhatel'nye golovki k tokarnym stankam. Leningrad,
1963. 12 p. (Leningradskii dom nauchno-tekhnikeskoi pro-
pagandy. Obmen peredovym opytom. Seriya: Mekhanicheskaiia
obrabotka metallov, no.15) (MIRA 17:1)

KOZLOV, Aleksey Yefimovich; KOKOSHEV, Vasilii Grigor'yeovich;
PETROV, Georgiy Yefimovich; RATOVSKIY, Petr Mikhaylovich;
KOGAN, I.L., red.

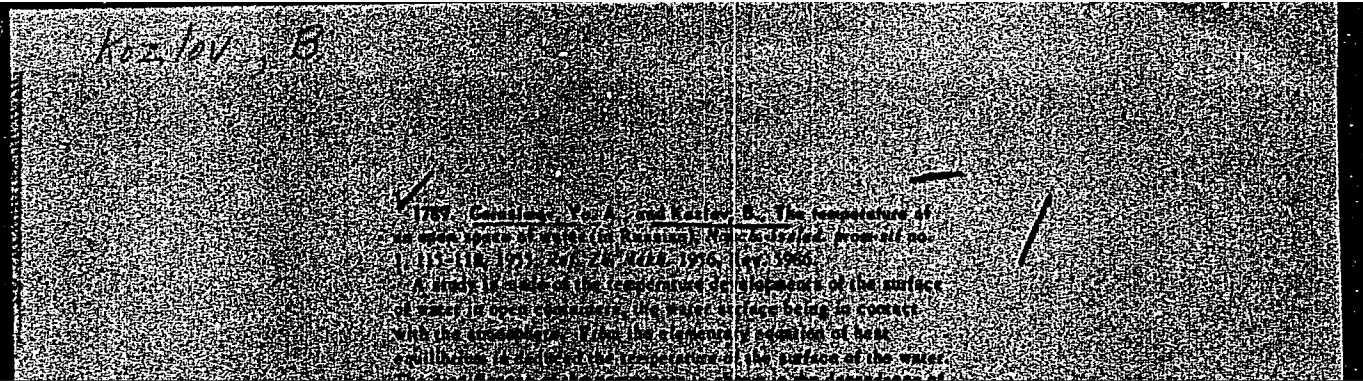
[Manufacture of diaphragms and bellows from beryllium
bronze] Izgotovleniia membran i sil'fonov iz berillievoi
bronzy. Leningrad, 1964. 17 p. (Leningradskii dom nauchno-
tekhnicheskoi propagandy. Obmen peredovym opytom. Seria:
Goriachaiia i kholodnaia obrabotka metallov davleniem, no.2)
(MIRA 17:7)

KRASOVSKIY, I.; KOZLOV, B., red.

[Television camera operator]Televizionnyi operator. Moskva,
Izdatel'skii otdel Gos. kom-ta po radioveshchaniiu i televi-
deniiu pri Sovete Ministrov SSSR, 1962. 79 p.

(MIRA 15:11)

(Television)



equilibrium is reached at the temperature of the surface of the water.
The coefficient of the permeability is shown in the dependence of
the development of the movement of the water - humidity (figure)
forming the moisture. Principles are clear of calculations for the
temperature of the water surface and the rate of evaporation.

E. M. Dobrynin
Country: Belorussia / Zhovni, USSR
Translation: Country: Ministry of Supply, England

KOZLOV, B.

Fund of an enterprise. Sots. trud 6 no.6:127-128 Je '61.
(MIRA 16:8)

ARKHIPOV, Nikolay Nikolayevich; KARPACHEV, Pavel Spiridonovich;
MAYZEL', Maks Mikhaylovich, doktor tekhn. nauk, prof.;
PLEVAKO, Nikolay Alekseyevich; ZAYONCHKOVSKIY, A.D., doktor
tekhn. nauk, prof., retsenzent; ZOLOTOV, V.I., inzh., retsen-
zent; ZYBIN, V.P., doktor tekhn. nauk, retsenzent; KAPUSTIN,
I.I., doktor tekhn. nauk, prof., retsenzent; KOZLOV, B.A.,
inzh., retsenzent; POPOV, S.M., doktor tekhn. nauk, prof.,
retsenzent; EPPEL', S.S., kand. tekhn.nauk, dots., retsen-
zent; MINAYEVA, T.M., red.; SHVETSOV, S.V., tekhn. red.

[Basic processes, machinery, and apparatus of light industry]
Osnovnye protsessy, mashiny i aparaty legkoi promyshlennosti.
[By] N.N.Arkipov i dr. Moskva, Izd-vo nauchno-tekhn. lit-ry
RSFSR, 1961. 491 p. (Industry) (MIRA 15:2)

24(7), 21(1)

SOV/51-6-5-2/51

AUTHORS: Korolev, F.A., Kozlov, B.A. and Odintsov, A.I.

TITLE: On the Shape of the Line Profile in an Atomic Beam (K voprosu o forme kontura linii v atomnom puzhke)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 5, pp 576-579 (USSR)

ABSTRACT: The spectral line profile produced by excitation (e.g. by electrons) of an atomic beam was discussed theoretically by Minkowski and Bruck (Ref 1). They obtained an expression for the intensity distribution in the line assuming that the exit slit of the furnace which produced the atomic beam was parallel to the line of observation and that the width of this slit was small. Odintsov showed recently (Ref 2) that in order to obtain intense atomic beams it is necessary to place the exit slit of the furnace at right-angles to the line of observation. The present paper follows up Odintsov's work by deriving an approximate equation (Eq 2) for the line shape produced in an excited atomic beam; it is assumed that $(a_1/2l)^2 \ll 1$, where a_1 is the dimension of the furnace slit in the direction at right-angles to the line of observation i.e. its length, and l is the distance from the furnace slit to the line of observation. Eq 2 involves a_1 and a_2 which are the dimensions of the furnace slit and the slit in a diaphragm outside the furnace

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SOV/51-6-5-2/34

On the Shape of the Line Profile in an Atomic Beam

respectively (these dimensions are taken at right-angles to the line of observation), h which is the distance between the two slits, \bar{v} which is the most probable velocity of atoms at the furnace temperature, c is the velocity of light and n_0 is the density of atoms in the furnace. Eq 2 reduces to Minkowski and Brack's formulae when $(a_1/2l) \rightarrow 0$. It is found that the value of a_1 does not affect greatly the line shape which is governed primarily by the values of a_1 , a_2 and h . The line becomes narrower at high values of a_1 ($a_1 \gg l$). There are 3 figures and 2 references, 1 of which is Soviet and 1 German.

SUBMITTED: June 8, 1958

Card 2/2

67149

207/51-7-6-1/36

5.5310
24.3400AUTHORS: Korolev, F.A., Kozlov, B.A. and Odintsov, A.I.

TITLE: Investigation of the Contour of the Cadmium Red Line, Using an Atomic Beam ↑

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, No 6, pp 721-724 (USSR)

ABSTRACT: The red line of cadmium at 6438 Å is used as a wavelength standard and consequently knowledge of its true contour is of great importance. In 1935 Minkowski and Bruck (Ref 4) used an atomic beam source to find that the half-width of the 6438 Å line was $16.4 \times 10^{-3} \text{cm}^{-1}$. This value is much greater than the sum of the apparatus and Doppler half-widths, i.e. the red line of cadmium has complex structure and a considerable width. The present authors used an improved version of Minkowski and Bruck's method to study further the contour of the 6438 Å line of naturally occurring cadmium (a mixture of Cd106, Cd108, Cd110-114, Cd116 isotopes). An atomic beam, described earlier by Odintsov (Ref 6) was used to excite the line. A Fabry-Perot etalon was used; it had 15 cm separation between the plates and the reflectivity of the dielectric mirrors was 90%. The apparatus half-width of the etalon was $1.5 \times 10^{-3} \text{cm}^{-1}$ (Minkowski and Bruck's etalon had a separation between plates of 11 cm and an apparatus half-width of $3 \times 10^{-3} \text{cm}^{-1}$). An ISP-51 spectrograph with a UF-84 camera ($f = 800 \text{mm}$) served as a

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SGW/51 T-11/38

Investigation of the Contour of the Cadmium Red Line, Using an Atomic Beam

monochromator. The interferograms were scanned with an MF-2 micro photometer; the contour of the 6438 Å line shown in Fig 1 is the mean of the results obtained from four interferograms. Fig 1 shows that the contour of the red line of cadmium is strongly asymmetric, indicating unresolved fine structure, and its half width is $(11.8 \pm 0.5) \times 10^{-3} \text{cm}^{-1}$. The latter value differs appreciably from $16.4 \times 10^{-3} \text{cm}^{-1}$, given by Minkowski and Bruck (Ref 4), the lower value reported above is due to the higher resolution of the apparatus used by the present authors. The empirical contour (continuous curve) is compared with a theoretical one in Fig 2. The theoretical (dashed) curve is the result of superposition of the isotopic components of the cadmium line, each of which has a natural half-width of $2.6 \times 10^{-3} \text{cm}^{-1}$; in derivation of the theoretical contour the apparatus and the Doppler half-widths were also allowed for. The theoretical contour agrees quite well with the empirical one and an even better coincidence can be obtained by displacing the center of gravity of the odd isotopic component towards lower frequencies by $\sim 0.7 \times 10^{-3} \text{cm}^{-1}$. The large natural width of the even isotopes of the 6438 Å line places a theoretical

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SOV/51-7-6-1/38

Investigation of the Contour of the Cadmium Red Line, Using an Atomic Beam

limit of $2.6 \times 10^{-3} \text{cm}^{-1}$ on resolution; this limit is only slightly less than the separation of the neighbouring even isotopic components ($3 \times 10^{-3} \text{cm}^{-1}$). It follows that a satisfactory resolution of the red line of natural cadmium is practically impossible. There are 2 figures, 1 table and 10 references, 4 of which are Soviet, 1 English, 1 Japanese, 1 French, 2 German and 1 translation from English into Russian. ✓

SUBMITTED: March 2, 1959

Card 3/3

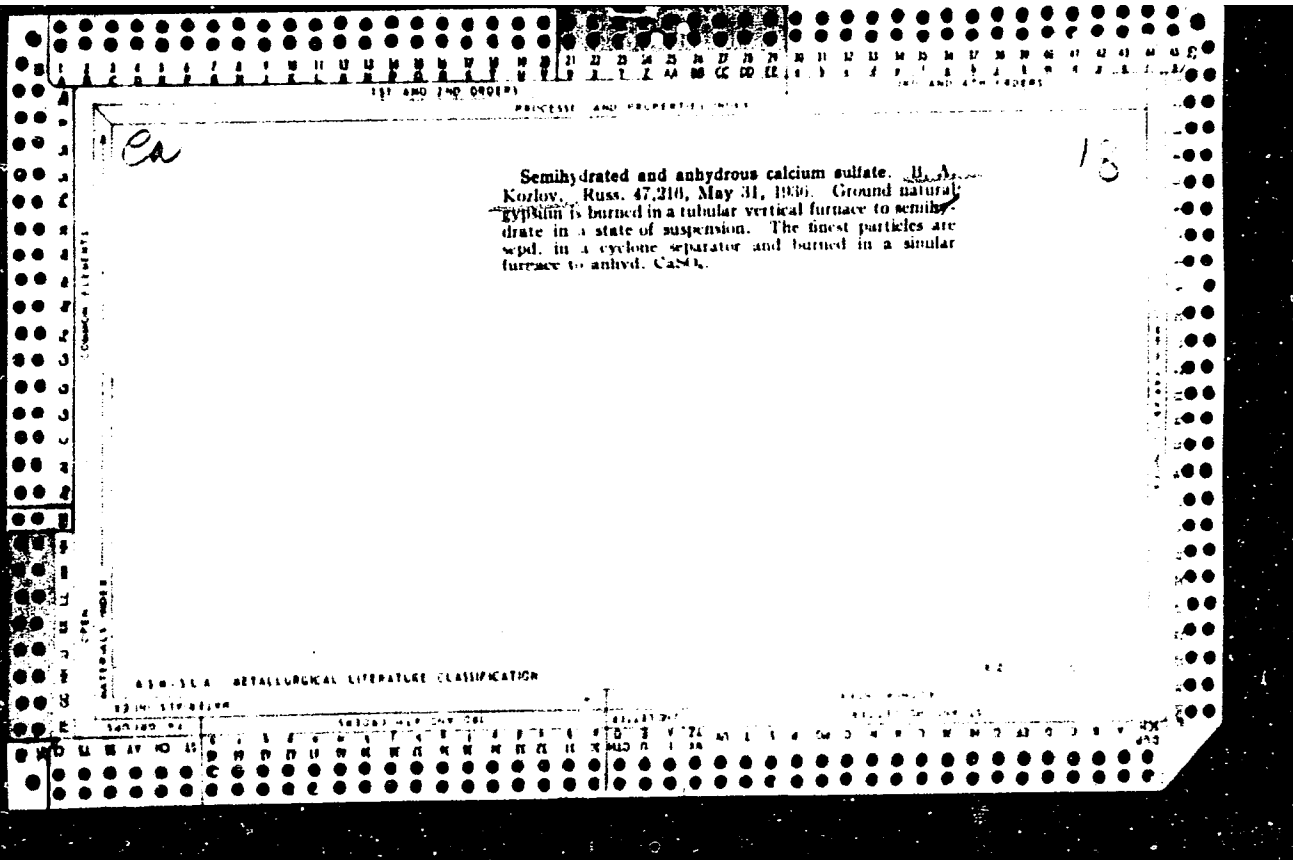
KOZLOV, B.A. (Moskva); REBANE, T.K. (Moskva)

Calculation of the π -electronic diamagnetic susceptibility of heteroatom-containing aromatic molecules using a one-dimensional model. Zhur. fiz. khim. 36 no.1:143-147 Ja '62. (MIRA 16:8)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova.
(Heterocyclic compounds)
(Diamagnetism)

VASIL'YEV, Boris Vasil'yevich; KOZLOV, Boris Anatol'yevich;
TKACHENKO, Leonid Grigor'yevich; ALEKSANDROVA, A.A.;
red.

[Reliability and efficiency of radio-electronic devices]
Nadezhnost' i effektivnost' radioelektronnykh ustroystv.
Moskva, Sovetskoe radio, 1964. 367 p. (MIRA 17:12)



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

101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

LIST AND INDEX ORDERS PROCESSES AND PROPERTIES INDEX LIST AND INDEX ORDERS

20

*During exposure in a suspended condition. B. A. Kozlov. *Stal'el. Materialy* 1937, No. 7, 37-44. An. E. F. S. captl. plant is described.*

ASD-55A METALLURGICAL LITERATURE CLASSIFICATION

101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

1ST AND 2ND CODES PROCESSES AND PROPERTIES INDEX 3RD AND 4TH CODES

Ca *18*

Burning gypsum in a suspended condition. B. A. Kozlov. *Soviet. Materialy* 1937, No. 12, 49-53; cf. C. A. 32, 1894. —Description of a plant at the Moscow alabaster works. E. E. Stefanowsky

COMMON ELEMENTS
COMMON VARIETIES INDEX

OPEN MATERIALS INDEX ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION E-Z INDEX

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

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KOZLOV, B. A.

PA 23T62

USSR/Engineering
Boilers
Lime, Slaked

Apr 1947

"Hydrator of a Steam Boiler," B. A. Kozlov, Candidate
in Technical Sciences, 1½ pp

"Promyshlennaya Energetika" Vol IV, No 4

Article discusses a simple horizontal hydrator-
boiler. This is said to overcome the difficulties of
the ordinary hydrators: The fact that the steam
did not essentially come in contact with the lime
and also the fact that there was no method for the
conduction of heat from the zone of slaking.

23T62

KOZLOV, B. A.

KOZLOV, B. A. "The mechanization of lime quenching using the heat of hydration", Vest. stroit. materialy, 1948, Issue 6, p. 11-17.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statay, No.7 1949).

KOZLOV, B. A.

Textile Finishing

Prerequisites for diminishing the steam discharge in vat agers. Tekst. prom.
12 No. 6 1952.

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

KOZLOV, E. A.,

"Continuous Method of Production of Hypsum Semi-hydrate."

Report submitted for the Conference on Heat and Mass Transfer,
Minsk, BSSR, June 1961.

L 3017-66

EWT(1)/EWA(h)

AM5013199

BOOK EXPLOITATION

UR/

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Vasil'yev, Boris Vasilyevich; Kozlov, Boris Anatolyevich; Tkachenko, Leonid /3
Grigor'yevich

11
B+1

Reliability²⁵ and efficiency of electronic devices (Nadezhuost' i effektivnost' radio-elektronnykh ustroystv). Moscow, Izd-vo "Sovetskoye radio", 1964. 367 p. illus., biblio. Errata slip inserted. 9300 copies printed.

TOPIC TAGS: electronic device, reliability, efficiency, random function, quality index, quality control, doubled system, standby system matrix test, matrix test equipment

PURPOSE AND COVERAGE: This book is intended for engineers engaged in the design, testing, and operation of radio and electronic equipment and for students in advanced courses in schools of higher technical education. The theoretical chapters of the book may also be useful to scientific workers and aspirants. The basic premises of reliability theory and of quality control are analyzed on the basis of random functions. Methods of studying the reliability and efficiency of electronic devices are described. Special attention is given to methods of physical modeling, especially the cut-off and matrix tests. An auto-

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matic machine for matrix testing is described and examples of its use for laboratory investigation of the reliability of transistorized circuits are given. Ch. I and sections 6-9 of Ch. II are written by B. V. Vasil'yev; Ch. IV and sections 1-5 of Ch. II by B. A. Kozlov; and Ch. III, V, and VI by L. G. Tkachenko. The authors thank V. S. Pugachev, Professor, Doctor of Technical Sciences, and I. N. Kovalenko, Doctor of Technical Sciences for their assistance.

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AUTHOR: Kozlov, B. A. (Moscow)

52
B

ORG: none

TITLE: ⁷⁵ Reliability of isolated subsystems in a repairable system with reserves

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 6, 1965, 23-27

TOPIC TAGS: automatic control, automatic control system, automatic control theory

ABSTRACT: A repairable system consisting of $n + m$ elements is considered where m elements are used as a sliding (common) reserve. The reliability of operation of one of the n working elements is determined under the condition that reserve elements are also used to replace any other faulty element; an analysis of just how the sliding-reserve system benefits one selected working element (an "isolated subsystem") is submitted. A general formula for the mean time between failures of the isolated subsystem is developed, and also the error associated with this formula is evaluated. The formulas may be used in such cases as a ^{1,44} communication over n separate channels with m reserve channels available. Orig. art. has: 3 figures and 26 formulas.

SUB CODE: 13 / SUBM DATE: 25Jan65 / ORIG REF: 003 / OTH REF: 001

PC 09/

Card 1/1

UDC:

KOZLOV, B.I., mashinist-instruktor

Advice dictated by practical experience. Elek.i tepl.tiaga 4
no.2:37-38 F '60. (MIRA 13:6)

1. Depo Leningrad-Passazhirskiy-Moskovskiy, Oktyabr'skaya doroga.
(Diesel locomotives--Maintenance and repair)

KOZLOV, B.I., mashinist-instruktor (g.Leningrad); ZHURAVKOV, N.S.,
mashinist (g.Leningrad)

Increase the reliability of the two-wire electropneumatic brake.
Elek. i tep^{l.}. tiaga 4 no. 12:7-8 D '60. (MIRA 14:1)
(Railroads--Brakes)

SLAVIN, S.V., doktor ekonom.nauk; GRANIK, G.I., kand.ekonom.nauk; KUZAKOV, K.G., kand.ekonom.nauk; MIKHAYLOV, S.V., kand.ekonom.nauk; SHAPALIN, B.F., kand.geograf.nauk; KAMENITSER, L.S., nauchnyy sotrudnik; MOSKVIN, D.D., nauchnyy sotrudnik; TYURDENEV, A.P., nauchnyy sotrudnik; LEDENTSOVA, N.A., inzh.; KOZLOV, B.K., kand.tekhn.nauk, starshiy nauchnyy sotrudnik; BRONSHTEYN, L.B., starshiy nauchnyy sotrudnik; BOVKUN, A.Ye.; VERSHININ, A.A., okhotoved; SERGEYEV, M.A., retsentsent; AGRANAT, G.A., kand.geograf.nauk, red.; PUZANOVA, V.F., kand.geograf.nauk; SHENKMAN, V.I., red.izd-va; BRUZGUL', V.V., tekhn.red.

[Problems in the development of the productive forces of Kamchatka Province] Problemy razvitiia proizvoditel'nykh sil Kamchatskoi oblasti. Moskva, 1960. 420 p. (MIRA 13:7)

1. Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil. Sektor prirodnykh resursov i ekonomiki Severa. 2. Zaveduyushchiy Sektor prirodnykh resursov i ekonomiki Severa Soveta po izucheniyu proizvoditel'nykh sil *IN* SSSR (for Slavin). 3. Institut energetiki AN SSSR (for Kozlov). 4. Tikhookeanskiy rybnyy institut (TINRO) (for Bronshhteyn). 5. Starshiy ekonomist Kamchatskogo oblplana (for Bovkun). 6. Kamchatskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zhirotnogo syr'ya i pushniny (for Vershinin).
(Kamchatka Province--Economic conditions)

20

Kozlov, B.K.

Flow Conditions and Heat Transfer in Tubular Air Preheaters. S. I. Kosterin and B. K. Kozlov. *Engineers' Digest*, v. 10, Apr. 1949, p. 125-128. Translated and condensed from *Izvestia Akademii Nauk SSSR, Otdelenie Tekhnicheskikh Nauk* (Bulletin of the Academy of Sciences of the USSR, Section of Technical Sciences), Sept. 1948, p. 1445-1455.

Previously abstracted from original under title: "Investigation of the Hydrodynamics and Heat Emission of a Tubular Air Preheater."

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

CLASSIFICATION	RECORDS	EXPLANATIONS
U D S C	I V U W X Y Z	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

KOZLOV, B. K.

9 -

Chemical Abst.
Vol. 48 No. 4
Feb. 25, 1954
Chemical Industry and Misc.
Industrial Products

Dowtherm as heat carrier. B. K. Kozlov and A. V. Chechetkin. *Izv. Akad. Nauk S.S.S.R. Otdel. Tekh. Nauk* 1949, 1094-1105.—Thermal data are compiled from the literature on Dowtherm A (73.5% diphenyl oxide, 26.5% biphenyl). The expansion occurring when solid Dowtherm melts can rupture the containing vessel. Other drawbacks to the use of Dowtherm are its high fluidity (tendency to leak through the ordinary types of couplings), combustibility, and decomposibility at high temps. However, it was thought possible to utilize Dowtherm for industrial power development under certain conditions. Arild I. Miller

Power Eng. Inst. in G.M. Krzhizhkovskiy, AS USSR

KOZLOV, B. K.

USSR/Engineering - Hydraulics

Aug 51

"On Lifting Velocity and Hydraulic Resistance of Gas-Air Bubbles in a Liquid," B. K. Kozlov, M. A. Mologin

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 8,
pp 1188-1197

Describes expts for detg velocities of air bubbles in water and their resistance coeffs in respect to dispersion of bubbles and diam of pipes. Three pipes of 25, 50 and 75 mm diam were used in expts. Rising height of bubbles varied from 0 to 2.5 m. Submitted by Acad M. V. Kirpichev 27 Jul 50.

205T19

KOMCOV, B. K.

calculation of heat transfer in multiserial smooth-
 pipe water economizer. Submitted by Acad M. V.
 Kirpichev, 20 Dec 51

244756

PA 244756

USSR/Engineering - Heat, Boilers

Mar 52

"Investigation of the Hydrodynamics and Heat Transfer of a Smooth-Tube Water Economizer," S. I. Kosterin, B. K. Kozlov

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 3, pp 374-383

Describes model study of boiler installation and suggests some design modifications in economizer. Establishes independence of resistance coefficients of tube bank and entire water economizer from Re number and gives numerical values of these coefficients. Suggests generalized formula for

244756

Kozlov, B. K.

7322 AEO-11-2258
FORMS OF FLOW OF GAS-LIQUID MIXTURES AND THEIR STABILITY LIMITS IN VERTICAL TUBES. B. K. Kozlov. ⁶²
Translated from Zhur. Tekh. Fiz. 24, 2285-8 (1964). 6p.
Available from Associated Technical Services (Trans. 13G7R),
East Orange, N. J.
An abstract of this paper appears in Nuclear Science
Abstracts as NSA 9-2234.

KOZLOV, B. K.

USSR/ Engineering - Hydrodynamics

Card 1/1 : Pub. 22 - 11/44

Authors : Kozlov, B. K.

Title : Relative velocities of gaseous liquid compounds in pipes

Periodical : Dok. AN SSSR 97/6, 987-990, Aug 21, 1954

Abstract : A theory and experiments for determining real specific weights of gaseous liquid mixtures in pipes are described. It is suggested that this determination be carried out through a calculation of the relative velocities of gases and liquids instead of a direct determination of their specific weights. Formulas expressing relative and reduced velocities, are presented. Graphs. Five references (1935-1950).

Institution :

Presented by : Academician M. V. Kirpichev, April 9, 1954

KOZLOV, B. K.
KOZLOV, B.K.

"Rezhimy i formy dvizheniya vozdukhovodyanoy smesi v vertikal'noy trube,"
Hydrodynamics and heat transfer during boiling in high pressure boilers.
(Gidrodinamika i teploobmen pri kipenii v kotlakh vysokogo davleniya). U.S.S.R.
Academy of Sciences (Moscow: The Academy, 1955, 250pp.; abstr. in
Teploenergetika (Heat Engng, Moscow), June 1956, (3)). A collection of
twelve papers describing experimental work on the movement of steam and water,
the formation of steam and heat transfer in boiler tubes.

KOZLOV, B.K.

KOZLOV, B.K.; BOGDANOV, F.F.; KOLOS, Ya.G.; MARKOV, G.I.

Thermotechnical investigation of a parabolic solar collector for
producing steam. Ispol'.soln.energ. no.1:110-117 '57. (MIRA 10:11)
(Solar energy)

Kozlov, B. K.

SEMICONDUCTORS

"Certain Possibilities of Employing the Diffusion Capacitance of Semiconductors", by B.K. Kozlov, Elektrosvyaz', No 1, January 1958, pp 22-25.

The distributed diffusion capacitance in the p-n junction of semiconductors has been getting considerable attention in recent times, and the author discusses the practical applications of this phenomenon, as applied to the automatic tuning of a heterodyne and to dielectric amplification.

Card 1/1

SOV/124-57-4-4456

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 84 (USSR)

AUTHOR: Kozlov, B. K.

TITLE: Conditions and Patterns of Motion of an Air-water Mixture in a Vertical Pipe (Rezhimy i formy dvizheniya vozdukhovodyanoy smesi v vertikal'noy trube)

PERIODICAL: V sb.: Gidrodinamika i teploobmen pri kipenii v kotlakh vysokogo davleniya. Moscow, AN SSSR, 1955, pp 11-20

ABSTRACT: In describing air-water lifts, the conditions characteristic of optimal performance and of maximum air supply are usually singled out. The author also singles out the conditions prevailing at the beginning and end of the process of air blowing; the definition of these conditions is purely formal, and the concepts introduced are not utilized by the author in the drawing of any conclusions. An example is given illustrating the relationship existing, under standard conditions, between the volumetric flow rate of the gas contained in the mixture and the Froude number; these relationships may be plotted upon an analysis of the results of measurements performed on a specific lift. A description of the structure of air-water mixtures passing through vertical

Card 1/2

SOV/124-57-4-4456

Conditions and Patterns of Motion of an Air-water Mixture in a Vertical Pipe

pipes is given together with empirical relationships determining the conditions under which various types of structures originate. Bibliography: 23 references.

V. A. Arkhangel'skiy

Card 2/2

POPKOV, V.I., otv. red.; VINTER, A.V., akademik, red. [deceased]; VEYTS, V.I., red.; PREDVODITELEV, A.S., red.; STYRIKOVICH, M.A., red.; CHUKHANOV, E.F., red.; BOGDANOVA, N.B., kand. tekhn. nauk, red.; KOZLOV, B.K., kand. tekhn. nauk, red.; LEBEDEV, M.M., kand. tekhn. nauk, red.; SUNDUKOV, I.N., kand. tekhn. nauk, red.; ANTRUSHIN, B.D., red. izd-va; DUBKOV, P.V., red. izd-va; ZUBKOV, P.I., red. izd-va; MOYZHES, S.M., red. izd-va; PRUSAKOVA, T.A., tekhn. red.

[Problems of power engineering; symposium dedicated to Academician G.M. Krzhizhanovskii] Problemy energetiki; sbornik posviashchaetsia akademiku G.M. Krzhizhanovskomu. Moskva, 1959. 851 p.

(MIRA 12:12)

1. Akademiya nauk SSSR. Energeticheskii institut. 2. Chleny-korrespondenty AN SSSR (for Popkov, Veyts, Predvoditelev, Styrikovich, Chukhanov).

(Power engineering)

PLAZA I BOOK EXPLANATION 507/3407

Abstrakts nauki SSSR. Energeticheskiy Institut im. G.M. Krzhizhanovskogo
Problemy energetiki: sbornik posvyashchennykh akademiku G.M. Krzhizhanovskomu
(Problems of Power Engineering: Collection of Articles Dedicated to Academician G.M. Krzhizhanovskiy) Moscow, 1959. 551 p. Krists slip izbratno. 2,500 copies printed.

Eds. of Publishing House: B.D. Astrukhin, P.Y. Dobrov, P.I. Zubkov, and S.M. Neyzhas (successors of G.M. Krzhizhanovskiy); Editorial Board: A.V. Vinzer, A.S. Kuznetsov, V.I. Kuznetsov (Exec. Ed.), Corresponding Member, Academy of Sciences of the USSR, V.I. Korot, A.S. Prudnikovskiy, M.A. Styrkovskiy, B.S. Shumakov, M.B. Fedanovskiy, Candidate of Technical Sciences, B.E. Kravtsov, Candidate of Technical Sciences, M.M. Lebedev, Candidate of Technical Sciences, and I.S. Semakov.

NOTES: This collection of articles is intended as a tribute to the memory of Academician G.M. Krzhizhanovskiy.

COVERAGE: The collection contains sixty articles by former students and coworkers of the deceased Academician. The authors deal with problems of a wide range of subjects in the field of power engineering: problems of the regional development of electrical and thermal power engineering, power engineering technology and the physics of conduction. No personalilities are mentioned. References are given to most articles.

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Kozlov

PHASE I BOOK IMPLICATION 507/642

Academy of Sciences, Energeticheskii Institut
Technicheskaya, v. p. 21. Ispol'zovaniya sciencely energii (Heat Power
Engineering, No. 21. Use of Solar Energy) Moscow, 1969. 142 p. Strata
slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR, Energeticheskii Institut (Inst)
G.M. Krzhizhanovskogo.

Resp. Ed.: V.A. Baum, Doctor of Technical Sciences, Professor; Ed. of
Publishing House: G.B. Gorbunov; Tech. Ed.: I.M. Derzhakina.

PROPOSE: The publication is intended for power engineers and economists
interested in the industrial utilization of solar energy.

COVERAGE: This collection of 19 articles is a continuation of an earlier
work published under the same title in 1957. The articles present results
of investigations conducted in the USSR during the last three years at
the Laboratory on the Use of Solar Energy and Wind in the Energeticheskii
Institut AN SSSR (Power Engineering Institute of the AN SSSR). Problems
in determining the technical conditions of solar engines, depending upon
the amount of solar energy received, are analyzed. No personalities
are mentioned. References follow each article.

1. Shchegolev, P.M., and V.I. Shchegolev. Research and Development of the
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3. Furmanov, I.Kh. Some Problems in the Economics of Solar Power
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4. Shchegolev, P.M., and I.M. Maslitskiy. Investigation of Semiconductor
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5. Khrist, R.D., and D.I. Teplyakov. Optimum Geometry of Solar Semi-
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6. Khrist, R.D. Investigation of the Thermal Conductivity of Tellurides 96

7. Khrist, R.D., and D.I. Teplyakov. Determination of the Size of Thermal Storage Battery
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uation of the Efficiency of Optical Systems in Solar Power Plants 142

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Utilization of Installations Using Solar Energy 170

14. Khrist, R.D. Energy Bases of Solar Thermal Power Stations 178

WILLIAMS Library of Congress

Card 3/4

14/000/02
2/6/61

KAZLOV, B.K.

POPOV, R.A., inzh.; KOZLOV, B.K., kand. tekhn. nauk

Choice of efficient municipal heat distribution networks. Prom.
energ. 20 no.6:30-33 Je '65. (MIRA 18:6)

L 15963-66

ACC NR:

AP6004174

(N)

SOURCE CODE: UR/0096/66/000/002/0079/0083

AUTHOR: Zhukov, V.S. (Engineer, Dissertant); Kozlov, B.K. (Candidate of technical sciences) 47
B

ORG: Energetics Institute im. G. M. Krzhizhanovskiy (Energeticheskiy institut)

TITLE: The efficiency of using gas turbine installations with free piston gas generators in heat and electric power plants

SOURCE: Teploenergetika, no. 2, 1966, 79-83

TOPIC TAGS: turbine design, gas turbine engine, electric power production, thermodynamic theory

ABSTRACT: The article is devoted to a consideration of the economic factors involved in heat and power plants, with and without free piston generators. It presents a series of charts illustrating such factors as capital and operating expenditures and the cost of power production as functions of the power of power plants. The construction and thermodynamic characteristics of a gas turbine installation with free piston gas generators assures a rapid and significant power supply, not accompanied by unfavorable factors characteristic of plants

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UDC: 621.438.004.15

L 15963-66

ACC NR:

AP6004174

without these generators, such as pressure drop in boilers and ahead of the turbine. Depending on the power of the installation, it requires from 5 to 25 minutes to reach a full load from the cold state. Orig. art. has: 10 formulas, 7 figures, and 2 tables.

SUB CODE: 13/^{10/} SUBM DATE: 00/ ORIG REF: 000/ SOV REF: 000/ OTH REF: 000

bvk

Card

2/2

ACC No: AP6030146

SOURCE CODE: UR/0120/66/000/034/0118/0153

AUTHORS: Kozlov, B. L.; Kaminir, G. I.; Kuniskiy, A. S.

ORG: Institute for Biophysics, AN SSSR, Moscow (Institut biologicheskoy fiziki AN SSSR)

TITLE: Television microscope for investigating biological structures in the region of 248 - 700 nanometers

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1966, 148-153

TOPIC TAGS: microscope, tv photography, tv camera, tv equipment

ABSTRACT: A television microscope for investigating in vivo biological structures by means of white or monochromatic light in the region of 248--700 nanometers was developed. The instrument has a magnification of 2000, a scanning area of 0.2--0.4 micrometers, and degree of detail corresponding to 256 lines. The light source used in the instrument is described by L. S. Agroskin (Biofizika, 1957, 2, 4, 518). Block diagrams of the various components of the instrument, viz.: synchrogenerator, line scanning, picture scanning, etc are presented. Two photographs taken with the instrument are also included (see Fig. 1). It is concluded that this apparatus affords a simultaneous determination of the fraction of light absorbed by the specimen

UDC: 621.397.9:578

Card 1/2

ACC NR: AP6030146



Fig. 1. Chicken red blood corpuscles in white light

and the linear size of the latter. Orig. art. has: 7 graphs.

SUB CODE: 14, 09, 06, 20/ SUBM DATE: 30Jun65/ ORIG REF: 002/ OTH REF: 003

Card 2/2

Kozlov B.L.

KOZLOV, B.L.

Certain possibilities for utilizing the diffusion capacitance of
semiconductor devices. Elektrosviaz' 12 no.1:22-25 Ja '58.
(Semiconductors) (Radio circuits) (MIRA 11:1)

PROBATOY, A.N.; KOZLOV, B.M.

Autumn movement of De-Kastri herring toward the shores of northern
Tatar Strait. Vop.ikht. no.2:21-24 '54. (MIRA 8:5)

1. Sakhalinskoye otdeleniye Tikhookeanskogo nauchno-issledovatel'skogo instituta rybnogo khozyaystva i okeanografii.
(Tatar Strait--Herring)

KOZLOV, B.N., aspirant

Losses due to the failure of electric power supply systems.
Vest. TSNII MPS 24 no.2:13-15 '65. (MIRA 18:5)

24.2120

77244
SOV/89-8-2-9/30

AUTHOR: Kozlov, B. N.
 TITLE: Self-Modeling Solutions of Plasma Equations. Letter to the Editor
 PERIODICAL: Atomnaya energiya, 1960, Vol 8, Nr 2, pp 135-137 (USSR)
 ABSTRACT: Electromagnetic confinement of a fully ionized monocharged neutral plasma may be described using:

$$\left. \begin{aligned} \text{rot } E &= -\frac{\partial H}{\partial t}, \quad \text{div } D = 0, \quad D = \epsilon_0 E, \\ \text{rot } H &= J, \quad \text{div } H = 0, \quad B = \mu_0 H, \\ i &= \frac{1}{H^2} [H \nabla P], \quad \text{div } J + \frac{\partial N}{\partial t} = 0, \\ J &= N \frac{[E H]}{H^2} + \frac{N}{m \omega^2} \nabla P, \\ P &= 2NkT, \quad \nabla T = 0, \quad H \nabla P = 0. \end{aligned} \right\} (1)$$

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Self-Modeling Solutions of Plasma
Equations. Letter to the Editor

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where

$$\omega = \frac{e}{m} H, \quad v = \frac{e^2 a}{m \mu_0 T^2} N,$$

$$\epsilon = \frac{4\sqrt{2\pi}}{3} \frac{m^{1/2} \mu_0}{e^2 k^2} \left(\frac{e^2}{4\pi\epsilon_0} \right)^2 \Lambda, \quad \Lambda = \ln \frac{\rho_{max}}{\rho_{min}} \approx 20.$$

together with the boundary conditions on the plasma
surface:

$$N|_x=0, \quad H|_x = H_1(t). \quad (2)$$

Temperature of the plasma $T(t)$ is a given function of
time. System of Eqs. (1) and (2) does not have a
stationary set of solutions, nor solution with a
stationary density distribution; but there exist
self-modeling solutions for a cylindrical plasma twine.
The most interesting appears to be the case where the
field is restricted to a surface layer of the plasma
much thinner than the radius of the twine. The field
curvature is then negligible, and the problem can be
formulated for a plasma half-space $x \leq 1$ bordering on

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vacuum at $x = 1$ and confined by a magnetic field which partially enters the plasma surface and vanishes inside the plasma at $-\infty$. All quantities depend only on the x coordinate, and the pertinent equation to solve, according to the author, is:

$$\left[\left(\frac{u}{r^2} \frac{\Psi''}{\Psi'} - \frac{\Psi'''}{\Psi'} \right) (H_1 - \Psi'^2) \right]' + r \left(\frac{H_1 - \Psi'^2}{r} \right)' = 0 \quad (4)$$

with boundary conditions:

$$\Psi(-\infty, t) = 0, \quad \Psi'(-\infty, t) = 0, \quad \Psi'(1, t) = H_1(t) \quad (5)$$

H_1 is the given value of the magnetic field H on the surface of the plasma. Utilizing the "quasi-potential" of the field $\psi = \int_{-\infty}^x H(x, t) dx$, one can express all quantities characterizing the plasma and the field:

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Self-Modeling Solutions of Plasma
Equations. Letter to the Editor

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$$\left. \begin{aligned} H_y &= h_y(t) \psi'(x, t), \quad H_x = h_x(t) \psi'(x, t), \\ E_y &= -(h_x(t) \psi(x, t))', \\ E_x &= (h_y(t) \psi(x, t))', \quad h_y^2(t) + h_x^2(t) = 1, \\ E_z &= -\psi', \quad S = -\mu_0 \psi' \psi'', \quad i = \mu_0 \psi'' \end{aligned} \right\} \quad (6)$$

Primes denote differentiation with respect to x ; the dots, with respect to t ; S is component of the Umov-Pointing vector. The author finds the solution of Eq. (4) in the form:

$$\psi(x, t) = f(t) \varphi\left(\frac{x}{l(t)}\right) \equiv f(t) \varphi(\xi).$$

where $\xi = \frac{x}{l(t)}$; $l(t)$ is time-dependent coordinate

of the plasma boundary. There exist self-modeling solutions if the temperature T of the plasma and the magnetic field H on its surface vary according to a step or an exponential law (e. 1.):

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$$\begin{aligned} T &= C_T t^{\gamma_T}, & H_I &= C_{HI} t^{\gamma_{HI}}, & (\text{power law}) \\ T &= C_T e^{\lambda_T t}, & H_I &= C_{HI} e^{\lambda_{HI} t}, & (\text{exponential law}) \end{aligned} \quad (7)$$

The time dependence of \mathcal{L} and f are given by:

$$\left. \begin{aligned} l &= C_l t^{\gamma_l}, & f &= C_f C_{HI} t^{\gamma_f}, & (\text{power law}) & & l &= C_l e^{\lambda_l t}, & f &= C_f C_{HI} e^{\lambda_f t}, & (\text{exponential law}) \\ \gamma_l &= \frac{1}{2} - \frac{3}{4} \gamma_T, & \gamma_f &= \frac{1}{2} - \frac{3}{4} \gamma_T + \gamma_{HI}, & & & \lambda_l &= -\frac{3}{4} \lambda_T, & \lambda_f &= -\frac{3}{4} \lambda_T + \lambda_{HI}. \end{aligned} \right\} \quad (8)$$

and the function $\varphi(\xi)$ is the solution of the equation:

$$(1 - \varphi'^2) \varphi' \varphi'' - (1 + \varphi'^2) \varphi \varphi'' + b(1 - \varphi'^2) \varphi'^2 + c(1 + \varphi'^2) \varphi \varphi' = 0, \quad (9)$$

where

$$\left. \begin{aligned} b &= (\gamma_{HI} - \gamma_T) \frac{C_T^{\gamma_T} C_I^{\gamma_I}}{a}, & (\text{power law}) & & b &= (\lambda_{HI} - \lambda_T) \frac{C_T^{\gamma_T} C_I^{\gamma_I}}{a}, & (\text{exponential law}) \\ c &= \left(\frac{1}{2} - \frac{3}{4} \gamma_T + \gamma_{HI} \right) \frac{C_T^{\gamma_T} C_I^{\gamma_I}}{a}, & & & c &= \left(-\frac{3}{4} \lambda_T + \lambda_{HI} \right) \frac{C_T^{\gamma_T} C_I^{\gamma_I}}{a}. \end{aligned} \right\} \quad (10)$$

with the boundary conditions:

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$$\left. \begin{aligned} \varphi_0 &= \varphi(-\infty) = 0, \quad \varphi_1 = \varphi(1) = a, \\ \varphi'_0 &= \varphi'(-\infty) = 0, \quad \varphi'_1 = \varphi'(1) = 1. \end{aligned} \right\} (11)$$

Here, subscript "0" denotes values of quantities inside the plasma with $\xi = \xi_0 = -\infty$; and "1", their values on the plasma surface where $\xi = \xi_1 = 1$. The general solutions for the physical quantities are obtained from expressions:

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$$\left. \begin{aligned} H &= C_H t^{Y_H} e, \quad E_{\perp} = C_E C_H t^{Y_E - 1} (\gamma_i \xi e - \gamma_j \varphi), \\ i &= \mu_0 \frac{C_H}{C_i} t^{Y_H - Y_i} e', \quad (\rho_{\text{over}} / a \omega) \\ S &= \mu_0 C_i C_H^2 t^{Y_H + Y_j - 1} (\gamma_i \xi e - \gamma_j \varphi) e, \\ P &= \frac{1}{2} \mu_0 C_H^2 t^{2Y_H} (1 - e^2), \\ N &= \frac{1}{4} \mu_0 \frac{C_H^2}{C_T} t^{2Y_H - Y_T} (1 - e^2), \\ J &= \frac{1}{4} \mu_0 a \frac{C_H^2}{C_i C_T^{3/2}} t^{2Y_H - \frac{7}{4} Y_T - \frac{1}{2}} \\ &= \left[\frac{e'}{e} + \left(\gamma_i \xi - \gamma_j \frac{\varphi}{e} \right) \frac{C_i^2 C_T^{3/2}}{a} \right] (1 - e^2); \end{aligned} \right\} (12)$$

$$\left. \begin{aligned} H &= C_H e^{\lambda_H t} e, \quad E_{\perp} = C_E C_H e^{\lambda_E t} (\lambda_i \xi e - \lambda_j \varphi), \\ i &= \mu_0 \frac{C_H}{C_i} e^{(\lambda_H - \lambda_i) t} e', \\ S &= \mu_0 C_i C_H^2 e^{(\lambda_H + \lambda_j) t} (\lambda_i \xi e - \lambda_j \varphi) e, \\ P &= \frac{1}{2} \mu_0 C_H^2 e^{2\lambda_H t} (1 - e^2), \\ N &= \frac{1}{4} \mu_0 \frac{C_H^2}{C_T} e^{(2\lambda_H - \lambda_T) t} (1 - e^2), \\ J &= \frac{1}{4} \mu_0 a \frac{C_H^2}{C_i C_T^{3/2}} e^{(2\lambda_H - \frac{7}{4} \lambda_T) t} \\ &\times \left[\frac{e'}{e} + \left(\lambda_i \xi - \lambda_j \frac{\varphi}{e} \right) \frac{C_i^2 C_T^{3/2}}{a} \right] (1 - e^2). \end{aligned} \right\} (12) \quad \text{(exponential law)}$$

where

$$e(\xi) = \psi'(\xi). \quad (13)$$

Near $\xi = 1$ there exists a unique regular solution of Eq. (9):

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$$\begin{aligned} \eta = & a - (1-\xi) + \frac{1}{2} ac(1-\xi)^2 + \frac{1}{12} (b-c)(1-\xi)^3 - \\ & - \frac{1}{288} \frac{b^2 - c^2 + 2a^2c^3(5b-c)}{ac} (1-\xi)^4 + \dots \end{aligned} \quad (14a)$$

for $c \neq 0$, and

$$\begin{aligned} \eta = & a - (1-\xi) + \frac{1}{18} b(1-\xi)^3 - \\ & - \frac{b^2}{340} (1-\xi)^5 + \dots \end{aligned} \quad (14b)$$

for $c = 0$. Equation (14a) gives fair approximations to the exact solutions of Eq. (9) up to $\rho = 0.5$. The particular class of solutions (Eq. 14b) may be solved exactly in the form of quadratures. If condition:

$$r = \frac{1}{\mu_0} \frac{S_1}{H_1^2}, \quad (15)$$

is satisfied, these solutions describe the expansion of the plasma. This condition indicates that the particles on the plasma surface move with the velocity

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Equations. Letter to the Editor

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of the electromagnetic drift. At $c = 0$ Eq. (9) goes over into:

$$(1 - e^2) e e^2 + (1 + e^2) e^2 + b(1 - e^2) e^2 = 0. \quad (16)$$

with

$$\left. \begin{aligned} b &= \frac{1}{3} (\gamma - 2) \frac{C_i^2 C_T^{3/2}}{a} \quad (\text{power law}) \\ b &= \frac{1}{3} \lambda_i \frac{C_i^2 C_T^{3/2}}{a} \quad (\text{exponential law}) \end{aligned} \right\} \quad (17)$$

This leads after further transformation to the solution:

$$\xi = 1 - \frac{1}{\sqrt{b}} I(\eta). \quad (21)$$

$$I(\eta) =$$

$$= \frac{1}{2} \int_0^{1-\eta^2} \frac{x dx}{(1-x) \sqrt{-\ln(1-x) - x - \frac{1}{2} x^2}}. \quad (22)$$

Values of the integral are tabulated in Table A.

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Table A. Values of function $I(\rho)$.

ρ	1	0.9	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10
$I(\rho)$	0	0.70	1.02	1.26	1.53	1.76	2.00	2.25	2.55	2.96

For calculations up to $\rho = 0.5$ the integral may be approximated by:

$$I(\rho) \sim \sqrt{6(1-\rho)}$$

V. N. Klimov discussed many aspects of the paper, and N. I. Kozlova helped during mathematical computations. There is 1 table.

SUBMITTED: June 4, 1959

Card 10/10

KOZLOV, B.N.

Thermonuclear reaction rates. Atom. energ. 12 no.3:238-240

Mr '62.

(MIRA 15:2)

(Thermonuclear reactions)

KOZLOV, B. N., Eng.

Vulcanization

Steam vulcanizer for gluing together conveyer belts. Elek. sta. 23, No. 2, 1953.

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

KOZLOV, B.N., inzhener.

Reducing dust along a fuel line. Elek.sta. 25 no.10:51 0 '54.
(Furnaces) (MLRA 7:11)

KOZLOV, B.N.

AID P - 2418

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 17/33

Author : Kozlov, B. N., Eng.

Title : ~~Stationary vacuum-cleaning installation for cleaning the working area~~
Stationary vacuum-cleaning installation for cleaning the working area

Periodical : Elek sta 5, 49, My 1955

Abstract : A large vacuum-cleaner installed at one of the power plants is described. One diagram.

Institution: None

Submitted : No date

KOZLOV, B.N.

SHOR, E¹manuil Romanovich. Prinimali uchastiye: GRANOVSKIY, S.P., kand.tekhn.nauk; SON'KIN, M.A., kand.tekhn.nauk; SOLODUKHO, Ya.Yu., inzh.; KOZLOV, B.N.; POLUKHIN, P.I., prof., doktor tekhn.nauk, retsenzent; KOROLEV, A.A., red.; OZERETSKAYA, A.L., red.izd-va; ISLENT'YEV, P.G., tekhn.red.

[New rolling mill processes] Novye protsessy prokatki. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1960. 385 p. (MIRA 13:1)

1. Gosudarstvennyy proyektnyy institut Tyazhpromelektroproyekt (for Solodukho).
(Rolling (Metalwork))

KOZLOV, B.P.; FEDOROVA, Ye.O.

Effect of the resolving power of a spectrometer on the accuracy of
measuring the integral transmission. Opt.1 spektr. 10 no.5:663-666
My '61. (MIRA 14:8)

(Spectrometer)

KOZLOV, B.P.

Culture of *Rhaponticum carthamoides* (L.) Iljin in the Karelian Isthmus. Trudy Len. khim.-farm. inst. 12:319-321 '61. (MIRA 15:3)

1. Kafedra farmakognozii i botaniki Leningradskogo khimiko-farmatsevticheskogo instituta.
(KARELIAN ISTHMUS—CENTAUREA)

KOZLOV, B.P. (Moscow)

Present state and perspectives for the development of automatic
electric equipment in the consumers' goods industries. Avtom. i
telem. 15 no.5:449-456 S-0 '54. (MIRA 8:1)
(Russia--Manufactures) (Textile industry)

KOZLOV, B.P., kandidat tekhnicheskikh nauk; LESHCHENKO, V.G., inzhener.

Electropneumatic controllers for caprone hosiery stabilizing machines.
Leg.prom.15 no.2:22-26 F '55. (MIRA 8:4)
(Electric controllers) (Hosiery industry)

MEYZEL', Maks Mikhaylovich, professor, doktor tekhnicheskikh nauk;
RAKOVSKIY, M.Ye., kandidat tekhnicheskikh nauk, retsenzent; ~~KOZLOV,~~
B.P., kandidat tekhnicheskikh nauk, retsenzent; VARSHAVSKAYA, L.S.,
redaktor; MEDVEDEV, L.Ya., tekhnicheskiiy redaktor

[Principles of automatic and remote control] Osnovy avtomatiki i
telemekhaniki. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva legkoi
promyshlennosti SSSR, 1956. 402 p. (MLRA 9:12)
(Automatic control) (Remote control)

KOZLOV, B.P., kandidat tekhnicheskikh nauk.

Modern means of automatizing the regulation and control of
technological processes. Tekst. prom. 17 no.5:8-11 My '57.
(Automatic control) (MLRA 10:6)
(Textile industry--Equipment and supplies)

KOZLOV, B. P., kand.tekhn.nauk

Prospects of automation in the textile industry. Mekh.i avtom.
proizv. 14 no.8:6-10 Ag '60. (MIRA 13:8)
(Textile industry) (Automation)

AVAYEV, Sergey Aleksandrovich; ZINGMAN, Aleksandr Abramovich; KOZLOV, B.P.,
retsenzent; ROZANOV, S.P., retsenzent; BELOV, V.P., retsenzent;
SHTEYNGART, M.D., red.; SHVETSOV, S.V., tekhn. red.

[Fundamentals of the automation of technological processes in the
textile and other light industries] Osnovy avtomatizatsii tekhn-
logicheskikh protsessov v tekstil'noi i legkoi promyshlennosti.
Moskva, Izd-vo nauchno-tekhn.lit-ry RSFSR, 1961. 378 p.

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(Automatic control) (Factories—Equipment and supplies)

BELOV, V.P.; KOZLOV, B.P.; LESHCHENKO, V.G.; SHMELEV, A.N., kand.
tekhn. nauk, retsenzent; VLASKO, Yu.M., red.; TAIROVA, A.L.,
red. izd-va; EL'KIND, V.D., tekhn. red.; DEMKINA, N.F.,
tekhn. red.

[Automatically controlled electric drives of textile machinery]
Avtomatizirovannyi elektroprivod tekstil'nykh mashin. Moskva,
Mashgiz, 1962. 371 p. (MIRA 16:2)
(Textile machinery--Electric driving)
(Automatic control)

GARTUNG , Sergey Vasil'yevich; DUBKOV, Dmitriy Mikhaylovich;
GORODOV, K.I., retsenzent; KLYUYEV, S.A., retsenzent;
KOCZLOV, B.P., retsenzent; SHTEYNGART, M.D., red.; BATYREVA,
G.G., tekhn. red.; PYATNITSKIY, V.N., tekhn. red.

[Handbook for power engineering workers of the textile industry]
Spravochnik energetika tekstil'noi promyshlennosti. [By]S.V.
Gartung, D.M.Dubkov. Moskva, Rostekhizdat. Vol.1. [Electrical
engineering]Elektrotehnika. 1962. 759 p. (MIRA 16:2)
(Electric power distribution--Handbooks, manuals, etc.)
(Textile industry--Electric equipment)

KOZLOV, B.V.

Uroprecipitation reaction in the diagnosis of rheumatism in
children. *Pediatrics* 4 no.7:56-59 J1'63 (MIRA 16:12)

1. Iz kafedry fakul'tetskoy pediatrii (zav. - prof. P.A.
Ponomareva) Moskovskogo meditsinskogo instituta imeni N.I.
Pirogova.

KOZLOV, D., polkovnik

Utilization of the PS-55 sighting device in training. Voen. vest. 43
no.12:96-99 D '63. (MIRA 17:2)

Kozlov, D. A.

110-4-20/25

AUTHORS: Dasoyan, M.A., Candidate of Technical Sciences, Ratner, M.L.,
and Kozlov, D.A., Engineers

TITLE: The Coating of Freshly Cast Accumulator Grids of Lead-
antimony Alloy and their Disperse Hardening (Namazka svezh-
eotlitykh akkumulyatornykh reshetok iz svintsovo-sur'myanykh
splavov i ikh dispersionnoye tverdeniye)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, No. 4,
pp. 66 - 70 (USSR).

ABSTRACT: At present, grids of acid accumulators cast from 6 - 8%
lead-antimony alloy are stored in the foundry for at least three
days before being coated, so that they may harden. This article
describes laboratory investigations and factory tests on accumu-
lator grids carried out by staff of the Scientific Research
Accumulator Institute and of the accumulator works. Members of
the Institute's staff that participated in the work are Engineers
V.S. Grigor'yeva, Ye.I. Smushkovich, Senior Technicians N.I.
Vasil'yeva and V.I. Andriyash and of the accumulator works -
chief of laboratory v.A. Menchugin, Engineer N.S. Mamulova,
shop technologist R.G. Konchan and head of the chemical laboratory
Ye.T. Vil'yamovich.

Until quite recently, it was supposed that lead-antimony forms
a first-order diagram and that both components are of unlimited

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110-4-20/25

The Coating of Freshly Cast Accumulator Grids of Lead-antimony Alloy
and Their Disperse Hardening

solubility in the liquid condition and constitute a simple mechanical mixture in the solid condition. Later, it was found that antimony and lead could form solid solutions, so that alloys of this metal could age. Published data on the rate of ageing of lead-antimony alloys is briefly reviewed. Ageing is most marked in alloys containing 0.5 - 3% of antimony, but even for these alloys it is not very great. Alloys containing up to 8% antimony age much less. To increase the hardness of lead-antimony alloys for accumulator manufacture, use should be made of alloying substances, such as copper or arsenic, to the extent of 0.01%. It was established that ageing of lead-antimony alloys is accompanied by the separation of very dispersed antimony. The influence of copper and arsenic is probably associated with changing the form and rate of formation of antimony from super-saturated solutions.

Tests were made under laboratory and production conditions using accumulator plates of 6 - 7.5% lead-antimony alloy. The effects of ageing were observed by periodic measurements of hardness, tensile strength, elongation and other properties. Various test procedures are described and results are given in Tables 1 and 2.

It will be seen from Table 1 that if the hardness and tensile

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110-4-20/25

The Coating of Freshly Cast Accumulator Grids of Lead-antimony Alloy
and Their Disperse Hardening

strength of freshly-cast specimens are taken as 100%, then three days ageing increases the tensile strength to 103.5% and the hardness to 111%. These changes are small. The results in Table 2 show that heat treatment at 60 and 100 °C scarcely changes the hardness. The remaining tests also showed that alloys containing 6.5 - 7.5% antimony are almost unaffected by ageing. To study the rate of ageing, grids were tested in bending at various intervals from zero to 72 hours after casting. The results are plotted and show that any change takes place in the first hour or hour-and-a-half. Hence if conveyor production of grids is employed, forced cooling may be necessary. The laboratory tests suggest that accumulator grids could be coated on the conveyor immediately after casting. The results of works' tests on this point are given in Tables 3, 4 and 5 and demonstrate that except for one batch of grids whose antimony content was too low, those which were coated without the three days storage period behaved quite normally; in no case was the rate of scrap higher than usual. Table 5 gives the equally satisfactory results of experimental coatings of negative plates. There are 1 figure and 5 tables.

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110-4-20/25

The Coating of Freshly Cast Accumulator Grids of Lead-antimony Alloy
and Their Disperse Hardening

ASSOCIATION: Scientific Research Accumulator Institute
(nauchno-issledovatel'skiy akkumulyatornyy institut)

AVAILABLE: Library of Congress
Card 4/4

KOZLOV, Dmitriy Andreyevich; VANCHUK, L., red.; STEPANOVA, N.,
tekhn.red.

[Maintenance and repair of metal-cutting tools] Remont i mesh-
remontnoe obsluzhivanie metalloreshushchikh stankov. Minsk,
Gos.izd-vo BSSR. Red.nauchno-tekhn.lit-ry, 1961. 341 p.
(MIRA 14:6)
(Metal-cutting tools—Maintenance and repair).

KOZLOV, D.A.

Economical use of raw materials and supplies is an important potential for the reduction of the costs of production in shoe manufacture. Kozh.-obuv. prom. 6 no.4:8-10 Ap'64.

(MIRA 17:5)

VAZSCANT, N.I., inzh.; KOZLOV, D.A., inzh.

Formation of storage battery plates by means of an asymmetric current. Elektrotehnika 36 no.11:49-50 N '65.
(MIRA 18:11)

L 06197-67 FSS-2/EWT(1)/EMP(v)/EMP(t)/ETI/EMP(k) DS/JD/HM
ACC NR: AP6032489 SOURCE CODE: UR/0413/66/000/017/0030/0030

INVENTOR: Alekseyev, F. A.; Balashov, V. A.; Gershonok, M. I.; Grachev, I. M.;
Yegorov, B. A.; Kobyl'nitskaya, M. I.; Kozlov, D. A.; Lifshits, A. I.; Mondrus, D. B.;
Parshin, N. A.; Rashevskiy, A. L.; Rivkin, A. E.; Tal'gren, A. A.; Khansuvarov, A. A.

ORG: none

TITLE: Device for high frequency soldering of lead-acid storage batteries. Class 21,
No. 185368

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 30

TOPIC TAGS: metal soldering, storage battery

ABSTRACT: An Author Certificate has been issued for a device for high-frequency soldering of lead-acid storage batteries. The device contains an h-f generator with an external tank circuit, a multiloop inductor with open ferrite magnetic circuits, a conveyor with a lifting table, a control desk, and an assembling-soldering former equipped with a magnetic screen fastened on a non-magnetic base. Orig. art. has: 1 figure.

Card 1/2

UDC: 621.352.2:621. 791.357:621.3. 029.5

I. 06197-67
ACC NR: XP6032489

0

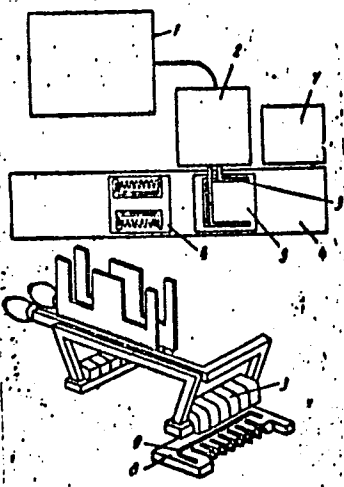


Fig. 1. 1 - H-f generator; 2 - external tank circuit;
3 - inductor; 4 - conveyor; 5 - lifting table;
6 - control desk; 7 - former; 8 - screen; 9 - base.

SUB CODE: 10,13 / SUBM DATE: 24 Mar 65

Card 2/2 afa

L 22955-66 EWP(k)/EWT(m)/T/EWA(d)/EWP(y)/EWP(t) LJP(c) JD/HM

ACC NR: AP6006406

SOURCE CODE: UR/0413/66/000/002/0146/0147

AUTHOR: Filin, N. A.; Kozlov, D. A.; Serebryakov, V. F.; Rusin, A. I.; Batin, A. P.

ORG: none

TITLE: Thermal diffusion method of lead coating of aluminum and its alloys. Class 48, No. 178259 ²⁷ ²⁷ ⁵⁵
_B

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 146-147

TOPIC TAGS: metal diffusion plating, aluminum, metal coating, thermal diffusion, lead

ABSTRACT: An Author Certificate was issued for the lead coating of aluminum and its alloys in molten lead, treated with flux. To obtain a uniform diffusion layer with a strong metal-to-base bond, the aluminum surface is cleared from the oxide film in flux containing 81% lead, 10% potassium chloride, and 9% lithium chloride. The aluminum is then saturated with lead containing 0.08 -- 0.1 calcium at 420C and a minimum holding time of 3 minutes. [LD]

SUB CODE: 11/ SUBM DATE: 11Apr64

Card 1/1 *Jo*

UDC: 621.793.6 ₂

...KOZLOV, D.D.

Ways of lowering the costs of the construction of gas pipelines
for residential areas. Gaz. prom. 4 no.12:26-28 D '59.
(MIRA 13:3)

(Gas, Natural--Pipelines)

KOZLOV, D.

KOZLOV, D., podpolkovnik; SHIPOV, S., inzhener-mayor; DOBROV, V., mayor.

Facts about a shot. Voen.vest. 33 no.16:85-90 N '53. (MIRA 10:10)
(Ballistics)