NEBYKOV, F., BARINOV, V., (Rostovskaya oblast')

When a building committee stands aside. Sov. profsoiuzy 6 no.15: 31-33 N '58. (MIRA 11:12)

1.Brigadiry stroitel'stva Volgodonskogo kombinata sinteticheskikh zhirozamenitelev.
(Volgodonsk--Construction industry)

BOLOTTSEV, P.; BARINOV, V.

The bad and the good. Za bezop. dvizh. 5 no.4:15 Ap '62.
(MIRA 16:4)

1. Operativnyye upolnomochennyye 22-go otdeleniya Otdela regulirovaniya ulichnogo dvizheniya Gosudarstvennoy avtomobil'noy inspektsii.
(Moscow—Traffic accidents)

BARINOV, V.A.

History of the origin and development of the Jäderin base-line measurement method in the U.S.S.R. Izv.AN Kazakh.SSR.Ser.geog. no.2:78-92 '48. (Base measuring) (MIRA 9:6)

LESOKHIN, A.F.; SAVERIN, M.A., professor, doktor tekhnicheskikh nauk, retsenzent; BARINOV, V.A., professor, doktor tekhnicheskikh nauk, retsenzent; GORODETSKIY, I.Ye., professor, doktor tekhnicheskikh nauk, redaktor; BEYSEL'MAN, R.D., inzhener, redaktor; TIKHONOV, A.Ya., tekhnicheskiy redaktor.

[Tolerance and technical measurements] Dopuski i tekhnicheskie izmereniia. Izd.2-e, perer. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1951. 456 p. (MLRA 8:11)
(Measuring instruments) (Tolerance(Engineering)

BARINOV, V. A.

KONDRASHKOV, Aleksey Vasil'yevich; BARINOV, V.A., professor, redaktor; INOZEMTSEVA, A.I., redaktor izdatel'stva; KUZ'MIN, G.M., tekhnicheskiy redaktor

[Light interference and its use in geodezy] Interferentsiia sveta i ee primenenie v geodezii. Pod obshchei red. V.A.Barinova. Moskva, Izd-vo geodezicheskoi lit-ry, 1956. 193 p. (MLRA 9:7)
(Interference (Light)) (Distances--Measurement)

KHRENOV, Leonid Sergeyevich, prof.; BARINOV, V.A., red.; SVETLAYEVA, A.S., red.izd-va; BACHURINA, A.M., tekhn.red.

[Tables for barometric leveling] Tablitsy dlia barometricheskogo nivelirovaniia. Izd.2-oe, perer. Moskva, Goslesbumizdat, 1957. 27 p. (MIRA 11:1)

(Leveling--Tables, etc.)

YEFIMOV, Petr Ivanovich; BARINOV, V.A., red.; KOMAR'KOVA, L.M., red. izd-va; ROMANOVA, V.V., tekhn. red.

[Measurement of degrees by Russians at Spitsbergen from 1899 through 1901] Russkoe gradusnoe izmerenie na Shpitsbergene v 1899-1901 gg. Moskva, Izd-vo geodez. lit-ry, 1958. 83 p. (Spitsbergen--Arc measures) (MIRA 11:9)

GAN'SHIN, Vladimir Nikolayevich; KHRENOV, Leonid Sergeyevich; BARINOV, V.A., red.; FUKS, Ye.A., red.izd-va; SHITS, V.P., tekhn.red.

[Tables for laying out circular curves] Tablitsy dlia razbivki krugovykh krivykh. Moskva, Goslesbumizdat, 1958. 258 p. (MIRA 13:1)

(Surveying--Tables, etc.)

GUL', Sergey Mikhaylovich; KAMENEV, Nikolay Pavlovich; KOPYLOV, Boris Mikhaylovich; KRUKOVSKIY, Ignatiy Vladislavovich; NEDOSEKIN, Dmitriy Fedorovich; SEMERIKOV, Ivan Vasil'yevich; BARINOV, V.A., prof., doktor, retsenzent; KHRENOV, L.S., prof., doktor, retsenzent; KRASNOSHCHEKOV, A.N., prepodavatel', retsenzent; POLUNICHEV, I.A., red. izd-va; BACHURINA, A.M., tekhn. red.

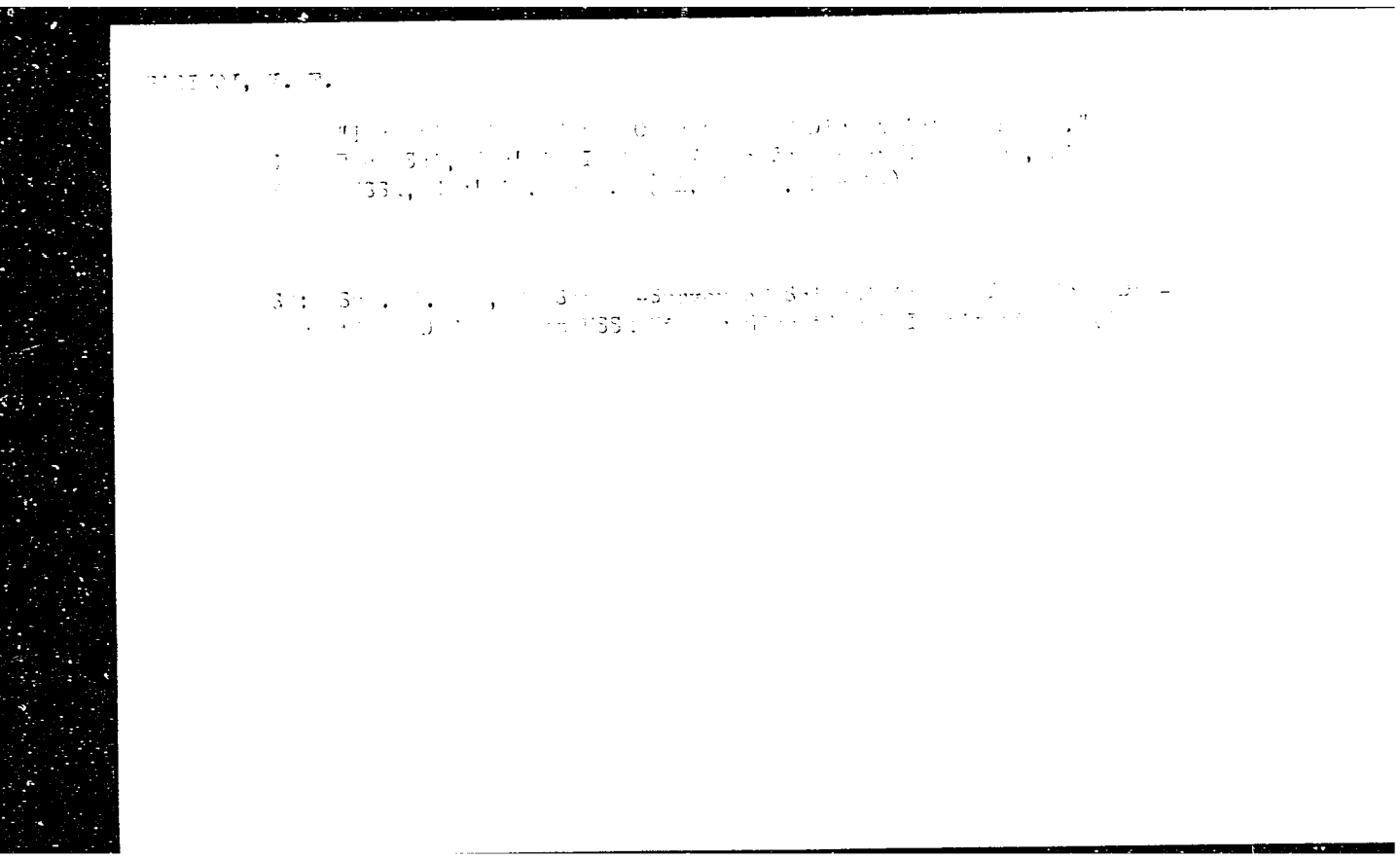
[Laboratory manual of geodesy] Rukovodstvo dlia prakticheskikh zaniatii po geodezii. Moskva, Goslesbumizdat, 1960. 266 p. (MIRA 14:7)

1. Moskovskiy lesotekhnicheskiy institut (for Barinov). 2. Moskovskiy institut inzhenerov vodnogo khozyaystva imeni Ye.R.Vil'yamsa (for Khrenov). 3. TSentral'nyy zaochnyy lesotekhnicheskiy tekhnikum (for Krasnoshchekov)

(Surveying--Handbooks, manuals, etc.)

BATARCHUKOVA, Natal'ya Romanovna; BARINOV, V.A., prof., doktor tekhn. nauk, red.; RYSKO, S.Ya., red.

[New definition of the meter] Novoe opredelenie metra. Pod red. V.A.Barinova. Moskva, Izd-vo standartov, 1964. 77 p. (MIRA 17:10)



BARINOV, V.F., kand.tekhn.nauk; KRAKOVSKIY, I.I., prof., red.; VOLCHOK, K.M., tekhn.red.

[Problems in heating viscous petroleum products] Voprosy podogreva viazkikh nefteproduktov. Leningrad, Izd-vo "Rechnoi transport," Leningr. otd-nie, 1960. 63 p. (Gorkiy, Institut inzhenerov vodnogo transporta. Trudy, no.29). (MIRA 16:5)

(Petroleum, Heating of)

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 717 - X

BOOK Call No.: AF645594

Author: BARINOV, V. G.
Full Title: OPERATOR AND ASSISTANT OPERATOR OF A GAS-FRACTIONAL DISTILLATING INSTALLATION
Transliterated Title: Operator i pomoshchnik operatora gazofraktsioni-ruyushchey ustanovki

PUBLISHING DATA
Originating Agency: None
Publishing House: State Scientific and Technical Publishing House for Petroleum and Mineral Fuel Literature (Gostoptekhizdat)
Date: 1954 No. pp.: 151 No. of copies: 3,000
Editorial Staff: None

PURPOSE AND EVALUATION: This book is approved by the Labor Personnel Administration of the Ministry of the Petroleum Industry as a textbook in courses for training operators and assistant operators of gas-fractional installations. The subject of petroleum refining is covered only in its first phase, i.e., the distillation of fractions from the crude by various processes. The further chemical treating of these fractions is not covered. In its limited field this is a very clear and well-written textbook, emphasizing mainly a practical approach to the problem of refining.

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Operator i pomoshchnik operatora gazofraktsioni- AID 717 - X
ruyushchey ustanovki

TEXT DATA

Coverage: This book conveys elementary information on the composition of petroleum and petroleum gases and outlines briefly petroleum refining processes, fractional distillation and methods of separating gaseous mixtures. Described are technological schemes of gas-fractional installations and the construction and operation of various apparatus. Questions relating to the control and automatic regulation of gas-fractional processes are presented, as well as safety control engineering and some new methods of "socialist" competition.

Table of Contents

No. of References: 9 Russian (1946-1953)
Facilities: None

BARINOV, V.I., inzh.

Addressing machine for 100 addresses. Mekh.i avtom. proizv. 17 no.2: 51 F '63. (MIRA 16:2)

(Letter services)

BARINOV, V.I.; SHAVKUN, B.I.

The PKSM drilling machine. Nauch.-tekh.-ekon.inform.Gos.nauch.-issl. inst.nauch.i tekh.inform. 18 no.3:19-20 Ja '65.

(MIRA 18:4)

RUDNEVSKIY, N.K.; GOLITSYN, G.I.; OBUKHOVA, Ye.S.; BARINOV, V.M.

Studying the supply of matter from certain copper-based alloys into the discharge of a rectified a.c. arc. Izv. AN SSSR. Ser. fiz. 26 no.7:881-884 Jl '62. (MIRA 15:8)
(Electric arc)

BARINOV, V. N. (Veterinary Surgeon, Saratov Inter-Raion Veterinary Bacteriological Laboratory).

"Trichomoniasis of ducks."

Veterinariya, Vol. 38, No. 4, 1961, p. 56.

BARINOV, V. N. (Veterinary Surgeon, Atkarsk Veterinary Bacteriological Laboratory, Saratov Oblast)

"Candidamycosis in chickens"

Veterinariya, vol. 39, no. 4, April 1962 p. 49

MARINOV, V. P., KUPPUL, V. K., BUSHINSKAYA, A. V., and GUL'DIN, I. G.

"Electrolytic Production of Lead by Electrolysis of Pure Salts"

Gintsvetmet

report submitted at a conference on new methods of lead production from concentrates, Gintsvetmet (State Inst. Non-Ferrous Metallurgy), Moscow 22-25 June 1958.

(for entire conf. see card for LIDOV, V. P.)

L 25614-65
EWI(m)/EWP(b)/EWA(d)/EWP(t) MJW/JD

ACCESSION NR: AR5003993 S/0277/64/000/010/0021/0021

28
12
B

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruktsii i raschet detaley mashin, Gidroprivod. Otd. vyp., Abs. 10.48.128

AUTHOR: Smirnov, F. F.; Fal'kovskiy, V. A.; Barinov, V. P.

TITLE: New brands of hard alloys, their designations and industrial properties 16

CITED SOURCE: Sb. tr. Vses. n.-i. in-t tverdykh splavov, no. 5, 1964, 5-13

TOPIC TAGS: metal ceramic material, metal physical property, metal mechanical property/ TS metal ceramic, GOST 3882-61, GOST 3882-53

TRANSLATION: Fields of application, designations, and industrial and physico-mechanical properties are described for the TS metallocceramic hard alloys coming under GOST-3882-61, which went into effect July 1, 1962. Reasons are given for the elimination of certain TS brands specified under GOST-3882-53, and new improved TS

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L 25614-65

ACCESSION NR: AR5003993

10

brands are introduced. Data are presented on the properties of extra fine grained TS - VK3M and VK6V, coarse grained - VK4K, VK6V and VK8V, high cobalt TS with improved ductility - VK20, VK25, and VK30 designed for stamping tools, and titanium-tungsten TS - T5K12V and tantalum-containing TS - TT7K12 designed for heavy work in cutting steel. 8 literature titles. I. Brokhin.

SUB CODE: MM ENCL: 00

Card 2/2

PRITUZHALOV, V.Ya., inzh.; BARINOV, V.S., inzh.

Electrode-type water-level indicator for steam boilers. Bezop.truda v prom. 4 no.4:30 Ap '60. (MIRA 13:9)
(Boilers--Safety appliances)

L 63571-65 EWG(v)/EWP(k)/EWT(d)/EWT(l)/EWP(k)/T-2/EWA(d)/EWP(l)/EWP(v) Pe-5/

ACCESSION NR: AP5015544 Pf-4 UR/0286/65/000/008/0082/0083
621.646
629.13.01/.06

AUTHOR: Barinov, V. S.; Voronin, G. I.; Vzorov, M. I. Perepletchikov, L. Ya.; Romanov, A. S.

TITLE: Safety valve for hermetically sealed aircraft cockpits. Class 47, No. 170256

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 82-83

TOPIC TAGS: pressure valve, safety valve, cockpit pressurization rate control, pressurized cockpit, aircraft cockpit, pressure rate transducer

ABSTRACT: An Author Certificate has been issued for a safety valve for a hermetically sealed aircraft cockpit. The valve consists of a casing, a cover having a spray nozzle, a basic valve mounted on the rigid center of a spring-loaded diaphragm, and an excess-pressure unit. To limit the pressure-increase rate in the cockpit, the safety valve is equipped with a pressure-increase-rate transducer whose interior is divided into two cavities by a spring-loaded diaphragm with a push rod mounted on it. One of the cavities connects to the cockpit through a calibrated hole, while

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L 63571-65

ACCESSION NR: AP5015544

the other cavity, containing a contact pair, connects to the cockpit through a regulated needle valve, Closure of the contact pair is performed by the push rod when pressure on the transducer's spring-loaded diaphragm decreases to a certain point. (See Fig. 1 of Enclosure.) Orig. art. has: 1 figure. [LB]

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po aviatsionnoy tekhnike SSSR (Organization of the State Committee on Aviation Technology SSSR)

SUBMITTED: 20Aug64 ENCL: 01 SUB CODE: AC, IE

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4020

Card 2/3

L 63571-65

ACCESSION NR: AP5015544

ENCLOSURE: 01

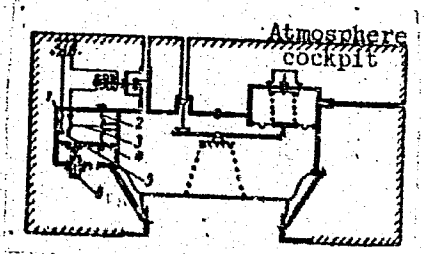

Fig. 1. Safety Valve

1 - Pressure-increase-rate transducer; 2 - spring-loaded diaphragm; 3 - push rod; 4 - calibrated hole; 5 - contact pair; 6 - regulated needle valve.

Card 3/3

ACC NR: AP6035922 SOURCE CODE: UR/0413/66/000/020/0174/0174

INVENTOR: Barinov, V. S.; Vzorov, M. I.; Perepletchikov, L. Ya.; Terenin, A. P.

ORG: none

TITLE: Regulator for build-up of pressure in an aircraft's pressurized cabin. Class 47, No. 187466

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 174

TOPIC TAGS: pressure, gas pressure, pressure compensator, pressure regulator

ABSTRACT: An Author Certificate has been issued for a device for limiting pressure build-up in a pressurized aircraft cabin, which contains a throttle and a spring-supported piston with a primary valve attached to it. To avoid a pressure surge in the pressurized cabin and eliminate autovibration of the primary valve, it is equipped with a unidirectional-motion damper, the spring-loaded rod of which is pressed to the primary valve. The inner space of the piston is connected through the throttle with the pressurization circuit, on which the regulator is mounted before the pressurized cabin. Orig. art. has: 1 figure. [WA-98]

SUB CODE: 01, 14/ SUBM DATE: 01Feb65/

Card 1/1 UDC: 621.646;629.13.01/06

BOGDANOV, I.Ye., kand.tekhn.nauk; BARINOV, V.V., inzh.

Automatic conveying of spools to weft winders. Mekh. i avtom. proizv. 15 no.7:19-22 Jl '61. (MIRA 14:6)
(Automatic control) (Reels (Textile machinery)

BARINOV, Valerian Yegorovich; LEVINA, Ye.S., ved. red.;
BASHMAKOV, G.M., tekhn. red.

[Gas fractionating units] Gazofraktsioniruiushchie ustanovki. Moskva, Gostoptekhizdat, 1962. 167 p. (MIRA 15:7)
(Petroleum--Refining) (Gases)
(Chemical engineering--Equipment and supplies)

L 34183-65 EWT(m)/EPF(c)/T Pr-4 DJ/WE
ACCESSION NR: AT5006944 S/2982/64/000/051/0199/0206

AUTHOR: Gurevich, I. L.; Smidovich, Ye. V.; Barinov, V. Ye.; L'vova, A. I.; Khavkina, O. D.; Kiselev, B. D.; Mukharemov, A. M.; Melkumova, N. A.; Shcherbakova, V. A.

TITLE: An efficient process for the complex refining of Turkmen petroleum

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy, no. 51, 1964. Neftekhimiya, neftekhimicheskiye protsessy i neftepererabotka (Petroleum chemistry, petrochemical processes and oil refining), 199-206

TOPIC TAGS: petroleum refining, deasphalting, mazout, catalytic cracking, deparaffinization, petrolatum, ceresin

ABSTRACT: The authors studied the deasphalting of mazout and residues from petroleum refining above 500C, and attempted to determine the possibility of broadening the raw material base of catalytic cracking. The main feature of the proposed complex process of refining Turkmen petroleums for use at the Krasnovodsk refinery is the construction of a deasphalting unit and the use of the deasphaltate as the raw material for catalytic cracking. Purification by adsorption followed by deparaffinization of the deasphaltate can produce high-grade residual oils of types MS-20

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L 34183-65
ACCESSION NR: AT5006944

and MS-24 whose properties are equal to those of the same type of oils obtained from Azerbaijan petroleums. The adsorption purification and deparaffinization of oil distillates by methylethylketone - toluene mixtures can produce high-grade transformer, industrial, and automobile motor oils. The use of petrolatum as a raw material for the preparation of high-melting ceresins is highly recommended. A complete flow sheet of the proposed process is given. Orig. art. has: 5 tables and 1 flow sheet.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow (Petrochemical and gas industry institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: FP

NO REF SOV: 000 OTHER: 000

Card 2/2

BARINOV, V.Ye.

Electrocracking of natural gas to obtain acetylene. Trudy MINKHiGP no.44:193-196 '63. (MIRA 18:5)

BARINOV, Ya., mayor

Organizing clothing and shoe repair. Tyl i snab. Sov. Voor. Sil 21 no.12:64-67 D '61. (MIRA 15:1)
(Boots and shoes--Repairing)
(Uniforms, Military--Repairing)

S/169/62/000/008/002/090
E202/E192

AUTHORS: Barinov, Ye.A., and Zhogolev, L.P.

TITLE: Instrument for measuring residual magnetisation of rock samples

PERIODICAL: Referativnyy zhurnal, Geofizika, no.8, 1962, 9, abstract 8 A 42. (Tr. Vses. n.-i. in-ta metodiki i tekhn. razvedki, no.3, 1961, 268-275)

TEXT: An instrument for measuring residual magnetisation of samples in irregular forms is described. It comprises a magnetic system suspended on vertical tungsten filament and placed within the Helmholtz coil which serves as a compensator of the horizontal component of the Earth field. The instrument contains an optical metering system and the control desk. The working principle is identical with that used in operating the astatic magnetometer of B.M. Yanovskiy and B.T. Chernysheva. The sensitivity of the instrument is 2×10^{-6} CGSM. The calculation of error due to the shift of the magnetic centre of the sample is given.

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The instrument is designated for work in middle latitudes, where there are small variations of horizontal component of the geomagnetic field, since this instrument is sensitive to heterogeneities in magnetic fields and variations in declination.

[Abstractor's note: Complete translation.]

Card 2/2

BELYAYEV, G.I., doktor tekhn.nauk; BARINOV, Yu.D., inzh.; TOVARENKO-KLIMEN-KO, N.N., inzh.

Heat resistance of protective enamel coatings. Mashinostroenie no. 4:79-81 Jl-Ag '63. (MIRA 17:2)

S/072/63/000/003/003/004
B101/B186

AUTHORS: Belyayev, G. I., Doctor of Technical Sciences, Barinov, Yu.N., Engineer

TITLE: Effect of the composition of zirconium enamels on their whiteness and water resistance

PERIODICAL: Steklo i keramika, no. 3, 1963, 20-23

TEXT: The way in which the composition of glasses of the $Na_2O - B_2O_3 - SiO_2 - ZrO_2$ system affects the opacity, water resistance and viscosity was studied. The first series of glasses examined had the composition $Na_2O \cdot B_2O_3 \cdot (2-x)SiO_2 \cdot xZrO_2$ where x = 0 - 0.7, Na_2O = 25 mole%, B_2O_3 = 25 mole%. The glasses were melted at 1180 - 1200°C. Results: (1) the water resistance of the glass increased with increasing ZrO_2 content. (2) Glasses containing 15 or more mole% ZrO_2 were opaque. Frits containing less ZrO_2 were transparent and gave only slightly opaque enamels on steel. Conclusion: in glass of the given composition ZrO_2 is soluble

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Effect of the composition of ...

up to 15 mole%. In the second series of glasses the Na_2O content was varied from 10 to 40 mole%, and the Ba_2O_3 content from 40 to 10 mole%; the SiO_2 content was kept constant at 35 mole%, and the ZrO_2 content at 15 mole%. Results: (3) the viscosity of the melt decreased with increasing basicity. (4) Raising the B_2O_3 content and lowering the Na_2O content reduced the solubility of ZrO_2 and increased the opacity. (5) The water resistance increased between 10 and 30 mole% Na_2O; at higher Na_2O content it decreased rapidly. In the third series of experiments the following substances were added to glass of composition $Na_2O \cdot B_2O_3 \cdot 1.4SiO_2 \cdot 0.58ZrO_2$: 0.1 - 0.8 mole% BeO, MgO, CaO, SrO, BaO, ZnO or CdO. Results:(6) Each of the group II metal oxides increased the opacity. 0.1-0.2mole% BeO, MgO, ZnO, or CdO produced particularly intensive effects. The opacifying effect decreases in the following order: BeO, ZnO, MgO, CdO, CaO, SrO, BaO. (7) The water resistance of the frits was higher after adding the oxides than before, except after the addition of ZnO. The most significant increase in chemical stability was produced by 0.8mole% CaO or

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Effect of the composition of ...

0.4mole% SrO. In the last series of experiments the effect of Al_2O_3 was tested. Results:(8) The most intense increase in opacity and water resistance due to Al_2O_3 occured in the zirconium frits. There are 5 figures and 2 tables.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. F.E. Dzerzhinskogo (Dnepropetrovsk Physicotechnical Institute imeni F.E. Dzerzhinskiy)

Card 3/3

BARINOV, Yu. D.

15(2)

AUTHOR: Vargin, V.V. SOV/72-58-12-22/23

TITLE: Conference on Enamels and Metal Enameling (Soveshchaniye po emalyam i emalirovaniyu metallov)

PERIODICAL: Steklo i keramika, 1958, Nr 12, pp 47-48 (USSR)

ABSTRACT: The organizers of the conference were: Leningradskoye oblastnoye nauchno-tekhnicheskoye obshchestvo promyshlennosti stroitel'nykh materialov (Leningrad Oblast Scientific and Technical Society of the Industry of Building Materials); Leningradskiy sovnarkhoz (Leningrad Council of National Economy) and Leningradskiy tekhnologicheskiy institut imeni Lensoveta (LTI) (Leningrad Technological Institute imeni Lensovet (LTI). The program of the conference included: the most important problems of enamel synthesis, enameling of metal products and industrial apparatus. About 250 experts took part in the conference: representatives from works in the UkrSSR, Ural, Novosibirsk, Ulan-Ude, Kuznetsk, Dzerzhinsk, as well as functionaries of the universities, of the scientific research and design institutes in Leningrad, Moscow, Novocherkassk, Dnepropetrovsk, Sverdlovsk, Riga, Khar'kov, and other towns. More than 40 reports were given and discussed. Professor K.S. Yevstrop'yev, director of the LTI imeni Lensovet, in his opening speech stressed the great economic importance of the problem of enameling metal products and apparatus.

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Ye.I. Litvinova (LTI imeni Lensovet) reported on the influence of metal quality on the formation of "fish-scales" in enameling.
A.A. Appen, Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry of the AS USSR), spoke on the present stage of the problems of calculating the properties of glass and enamels according to their composition.
M.V. Serebryakova (LTI imeni Lensovet) gave a survey of foreign literature on enamels and metal enameling.
M.N. Lifshits, Nauchno-issledovatel'skiy institut sanitarnoy tekhniki (Scientific Research Institute of Sanitary Engineering) reported on the enameling of products in the electric field of a corona discharge.
I.G. Petrunya, Luganskiy zavod imeni Artema (Luganskiy Works imeni Artema)

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spoke of new types of enameled steel products made in this factory.
Yu.P. Nikitin, Ural'skiy politekhnicheskiy institut (Ural'skiy Polytechnical Institute) reported on the character of interaction between metals and melted enamels.
N.S. Smirnov, Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (Ural'skiy Scientific Research Institute of Ferrous Metals) reported on the influence of the condition of the steel surface on the formation of the enamel coat.
A.I. Borisenko, Institute of Silicate Chemistry of the AS USSR, spoke on the new method of obtaining thin silicate coats of semi-colloid solutions.
Ye.N. Podkletnov spoke on a new enameling method with heating of the products by high-frequency currents.
P.A. Rozhdestvenskiy, Lys'venskiy metallurgicheskiy zavod (Lys'venskiy Metallurgic Works) gave informations on new enamels used by the factory.
T.I. Polyutash, Novosibirskiy metallurgicheskiy zavod (Novosibirskiy Metallurgic Works) reported on the dependence of the moistening angle and the enamel deliquescence on the correlation of boric and non-boric salts.

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P.G. Paukah, Latviyskiy gosudarstvennyy universitet (Latvian State University) reported on the investigation of fritted prime enamels for coating cast iron.
V.Ya. Lokshin, Scientific Research Institute of Sanitary Engineering, spoke on the influence of chemical composition on some properties of easily fusible powder enamels.
By the LTI imeni Lensovet the following reports were given:
L.L. Ogtorova on prime-less steel and aluminum enameling.
M.V. Serebryakova on non-plumbic silicate enamels for aluminum.
G.A. Kudryavtseva on slightly colored antimony enamels.
Yu.V. Mazurek on the investigation of a systematic series of oxides for obtaining blue and brown pigments.
The Novocherkassk Polytechnical Institute gave the following reports:
K.P. Asarov on new methods of enamel testing, and on the influence of iron oxide on the physico-chemical properties of the prime coat.
V.G. Zerin on the importance of the gas phase in the burning process of the prime coat.
Ye.M. Chistova on phosphate enamels.
Ye.I. Podroykina on prime-less coats.
Collaborators of the Dnepropetrovsk Chemical-Technological Institute reported:
G.I. Belyayev on the acid content and basicity of enamels, and on

the influence of the composition on some properties of prime enamels.
Yu.D. Baringt on the damping of enamels by antimony.
L.V. Furin, Leningradskiy khimiko-pishchevoy kombinat (Leningrad Chemical Foodstuff Kombinat) and S.I. Solyanik (NIIKhIMMASh) on the experiment of manufacturing enameled chemical apparatus of steel.
A.M. Semenova spoke on the causes of blistering of prime enamels at the Zaporozhskiy "metiznyy" zavod (Zaporozh'ye "Metiznyy" Works) and the methods of preventing this fault.
V.I. Savchenko, Luganskiy Works imeni Artem, reported on the successful application of vibration grinding for crushing sand and non-boric enamel layers, as well as on the experiment of using white titanium enamels.
V.G. Zuyev reported on the improvement in the burning technology of enamel coats in connection with the change-over of furnaces to gas, as well as on prospects of muffle-less burning.
V.A. Oborin reported on the work of the design office of the enamel manufacture at the Lys'venskiy Metallurgic Works.
D.I. Yegorov, representative of the State Office for Planned Economy, on the planned production volume for the next years, as well as on the standard specifications of borax consumption provided.

The members of the conference passed resolutions for obtaining an improvement in the quality of enameled products, as well as for increasing their production and creating a new technology and new production methods.

BELYAYEV, G.I., kand.tekhn.nauk; BARINOV, Yu.D., inzh.

Wear resistance of enamel coatings. Mashinostroenie no.1:67-70 Ja-F '62. (MIRA 15:2)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.
(Enamel and enameling)

BELYAYEV, G.I.; BARINOV, Yu.D.

Effect of the composition of metal and frit on the swelling of enamels. Stek. i ker. 19 no.1:26-30 Ja '62. (MIRA 15:3)
(Enamel and enameling)

BELYAYEV, G. I., doktor tekhn. nauk; BARINOV, Yu. D., inzh.

Effect of the composition of zirconium enamels on their whiteness and water-resistance. Stek. i ker. 20 no.3:20-23 Mr '63. (MIRA 16:4)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. Dzerzhinskogo.

(Zirconium) (Enamel and enameling)

ACCESSION NR: AT4030807 S/0000/63/000/000/0262/0272

AUTHOR: Belyayev, G. I.; Smakota, N. F.; Verbitskiy, P. G.; Barinov, Yu. D.

TITLE: On the interaction of borosilicate melts with certain metals and oxides

SOURCE: AN UkrSSR. Institut metallokeramiki i spetsial'ny*kh splavov. Poverkhnostny*ye yavleniya v rasplavakh i protsessakh poroshkovoy metallurgii (surface phenomena in liquid metals and processes in powder metallurgy), Kiev, Izd-vo AN UkrSSR, 1963, 262-272

TOPIC TAGS: borosilicate, oxide, vitreous covering, metal ceramic material, silicate, steel, sodium borosilicate glass

ABSTRACT: In this paper the authors studied the process of the reaction of steel with sodium borosilicate glasses of different acidity. It was shown that in compositions of metal glass at high temperatures, a chemical reaction of phases occurs which is accompanied by the solution of the metal, the enrichment of the alloy by its oxides, and a separation of gases which leads to the expansion and formation of a foamy structure near the interphase boundary. It was established that the nature of the silicate melt has a considerable effect on the speed of dissolution of the steel samples; the solubility of steel increases with an increase in the alkalinity

Card 1/2

ACCESSION NR: AT4030807

of the glass. The intensity of the expansion of the borosilicate alloy rises with the increase of the glass alkalinity. Metals have a great effect on the expansion. An insignificant expansion of the alloy was observed in the reaction with nickel, copper, and molybdenum; compositions consisting of glass with powdered iron, cobalt, or chromium additives, expand strongly. It was shown that the solubility of the iron oxides decreases with an increase in the acidity of the glass. In pure boron anhydride, ferric oxide practically does not dissolve. Orig. art. has: 11 figures and 1 table.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut (Dnepropetrovsk Chemical Engineering Institute)

SUBMITTED: 23Nov63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: ML NO REF SOV: 004 OTHER: 004

Card 2/2

BELYAYEV, G.I., doktor tekhn. nauk (deceased); YESIKOV, A.F., inzh.; BARINOV, Yu.D., kand. tekhn. nauk

Capacity of titanium, titanous-vanadium and manganese steels for enameling. Mashinostroenie no.3:83-85 My-Je '65. (MIRA 18:7)

L 52121-65 EPA(s)-2/EPA(w)-2/EWT(m)/EWP(i)/EWP(b)/EWP(e) Pt-7/Pab-10 WH

ACCESSION NR: AP5015359 UR/0286/65/000/009/0111/0111
666.29

37
B

AUTHOR: Belyayev, G. I.; Barinov, Yu. D.; Belyy, Ya. I.; Ponomarchuk, S. M.

TITLE: Silicate low-boron enamel. Class 48, No. 170814

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 111

TOPIC TAGS: enamel, boron, borax

ABSTRACT: This Author's Certificate introduces a silicate low-boron enamel which is made up of quartz sand, feldspar, soda ash, sodium nitrate, cryolite, titanium dioxide, cobaltic oxide, nickel oxide and a substance which contains boron anhydride. Since borax is not easy to obtain, datolite concentrate is used as the substance which contains boron anhydride.

ASSOCIATION: none

SUBMITTED: 11May63 ENCL: 00 SUB CODE: MT

NO REF SOV: 000 OTHER: 000

Card 1/1

ACC NR: AP7005801 SOURCE CODE: UR/0418/66/000/006/0081/0084

AUTHOR: Ponomarchuk, S. M. (Engineer); Barinov, Yu. D. (Candidate of technical sciences); Tovarenko-Klimenko, N. N. (Engineer)

ORG: None

TITLE: Investigation of boron-containing priming enamels

SOURCE: Tekhnologiya i organizatsiya proizvodstva, no. 6, 1966, 81-84

TOPIC TAGS: corrosion protection, boron, metal coating, ceramic to metal seal, silicate

ABSTRACT: The article is a report on comparative studies of a number of properties of silicate enamels used for protecting steel parts from corrosion. A high-quality glass-metal composition was produced by adding boron oxide to the enamel coatings in the form of borax, calcium borate, concentrated danburite (30% CaO, 20% B_2O_3, 39% SiO_2, 1.7% Al_2O_3, 2.4% Fe_2O_3, 6.9% calcination loss), and concentrated datolite (39.5% CaO, 17.5% B_2O_3, 27.5% SiO_2, 1.1% Al_2O_3, 2.3% Fe_2O_3, 12.1% water plus calcination loss). It was found that prime enamels containing a high concentration of calcium are extremely resistant to water. This may interfere with normal aging of the slip which sometimes has a detrimental effect on the stability of its working parameters. For this reason, complete melting is preferable when founding prime enamels based on danburite and datolite concentrates. This assures proper lixivation of the frits and stabilizes

 UDC: 666.293

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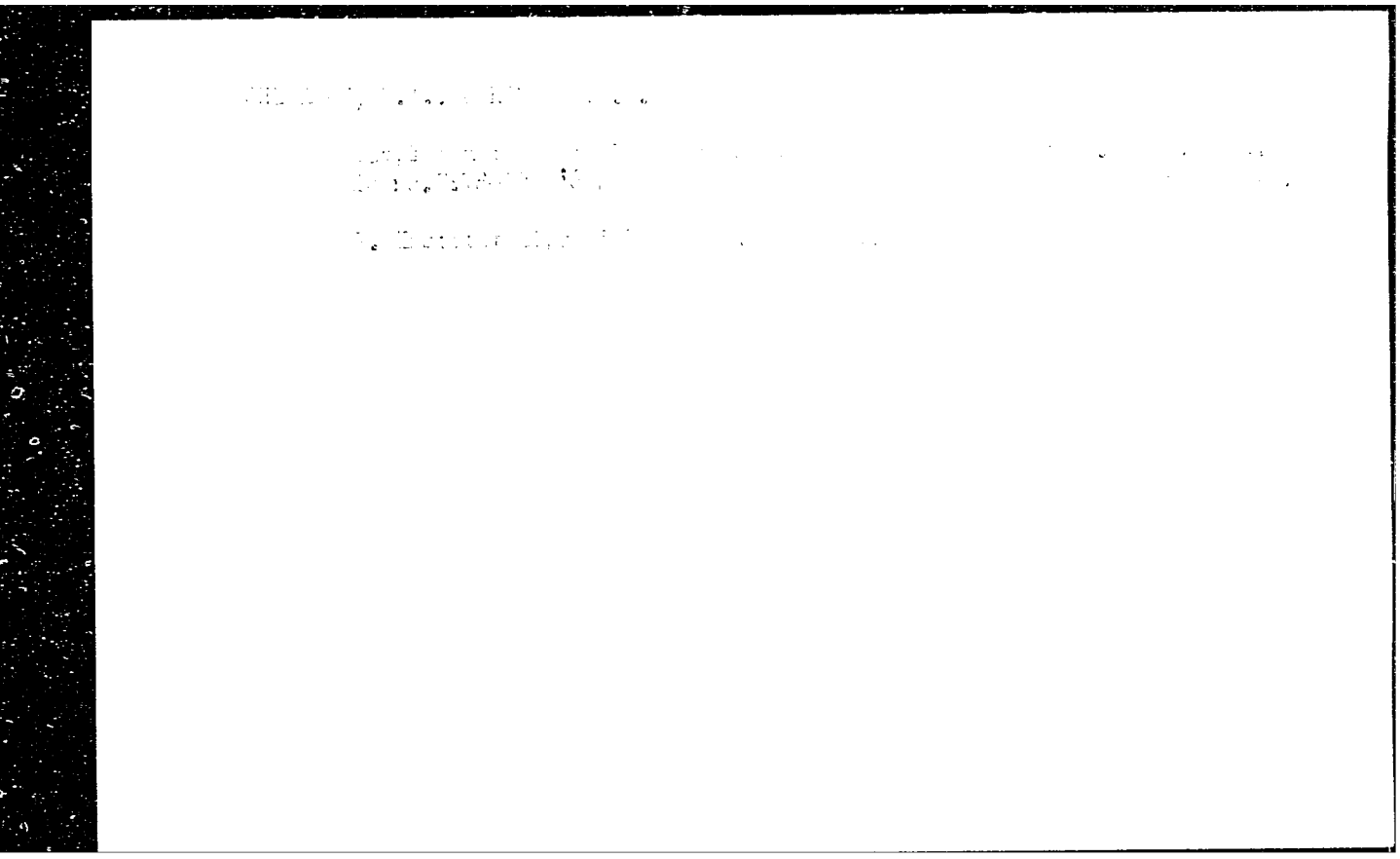
ACC NR: AP7006801

the properties of the slip. In order to study coating quality, steel oxidizability, adhesion between prime coats and metal, and tendency to "fish scaling", frits were pulverized with additions of 6 parts by weight of clay, 45 parts by weight of water and 0.5, 0.6, 0.7 and 0.8 parts by weight of borax for prime coats based on borax, calcium borate, danburite and datolite respectively. The results are tabulated for 11 types of enamel. The results show that Soviet boron-containing materials may be used in priming enamels to replace borax which is relatively scarce. Orig. art. has: 4 tables.

13/

SUB CODE: 11/ SUBM DATE: None

Card 2/2



APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000203620007-1"

KITAYGORODSKIY, I.I., doktor tekhn. nauk, prof.; ZHITOMIRSKAYA, E.Z.; ARCHAKOVA, R.A.; MIKHAYLOVA-BOGDANSKAYA, Z.A.; BARINOVA, A.F.

Investigating methods of reducing the volumetric weight of foam glass. Trudy VNIIStekla no.37:3-11 '57. (MIRA 11:1)
(Glass, Cellular)

BARINOVA, A. G.

27180. BARINOVA, A. G., KOMLEV, K. V. - Prigotovlenie krymykh krasiteley v vechati. Tekstil. Prom-st', 1949, No. 3, s. 22-24

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949

BARINOVA, A. G.

3

Chemical Abstracts
May 25, 1954
Dyes and Textile Chemistry

Aniline black in printing. A. G. Barinova and K. V. Komlev. *Tekstil. Prom.* 10, No. 1, 33-4(1950).—With *p*-$NH_2C_6H_4NH_2$ as catalyst instead of ferrocyanides, dyeing with aniline black became satisfactory and the printing paste stable. To decrease the acidity of the paste and subsequently to weaken of the fiber, org. acid (lactic or acetic) and $Zn(OH)_2$ were added to the dye bath. L. H.

12-13-54

STEPANOV, A.S.; BARINOVA A.G.

Using ammonium carboxymethylcellulose for pigment printing. Tekst. prom. 20 no.9:47-49 S '60. (MIRA 13:10)
(Pigments)

FRASE I BOOK EXPLOITATION SOV/3604

Akademiya nauk SSSR. Institut mashinovedeniya

Povysheniye effektivnosti tormozhyth ustroystv. Sbornik statey (Increasing the Efficiency of Braking Devices. Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 183 p. Errata slip inserted. 1,500 copies printed.

Resp. Ed.: V.S. Zozulya, Doctor of Technical Sciences, Professor; Ed. of Publishing House: P.N. Belyanin; Tech. Ed.: T.V. Polyakova.

PURPOSE: This collection of articles is intended for engineers and scientific workers specializing in brakes and friction materials.

COVERAGE: The first group of articles deals with brake design, measures for increasing the life and efficiency of brakes, the second group with problems related to the development and fields of application of new friction materials, the third group with testing methods and the results of investigations of friction pairs and brakes, and the fourth group with the design of brakes and calculation data. No personalities are mentioned. References accompany each of the articles.

TABLE OF CONTENTS:

Y Synthesis of vinyl esters. E. N. Rostovskii and A. N. Baranova. *Zhur. Prikhl. Khim.* 27, 1101–5(1954).—Passage of RCO_2H over a catalyst composed of the corresponding Zn salt on C, was exaind. in the interval of 200–240°. The butyrate can be formed in good yield (80–91%) at a 9:1 molar ratio of the reactants. The benzoate forms in a lower yield, the best being 70% at 250–60° (entry temp.; 300° in the middle of the catalyst), while higher temps. lower the conversion; $BzOH$ alone is severely decompd. over the catalyst, some 85% being destroyed in 20 sec. Conditions which retard the addn. reaction aid decompn. of the org. acid. A 90% yield of $BzOCH:CH_2$ was obtained with 3 sec. contact and 250° entry temp. (280–90° in the middle of the catalyst). AcOH and C_2H_2 over $C-(AcO)_2Zn$ catalyst at 300–20° yield appreciable amts. of Ac_2O, which forms from decompn. of ethylidene acetate.

G. M. Kosolapoff

(1)

BARINOVA, A. N.

3030

Synthesis of vinyl esters. B. N. Rostovskii and A. N. Barinova. *J. Appl. Chem. U.S.S.R.* 27, 1037-41(1954) (Engl. translation).—See *C.A.* 49, 13101d. B. M. R.

(1)

Barinova, N. N.

AUTHORS: Rostovskiy, Ye. N., Barinova, A. N., Volkova, A. I. 62-11-13/29

TITLE: On the Synthesis of Vinyl Ester of the Isobutyric-, Isovaleric- and Caproic Acid (O sinteze vinilovykh efirov izomaslyanoy, izovalerianovoy i kapronovoy kislot).

PERIODICAL: Izvestiya AN SSSR, Otdelenie Khimicheskikh Nauk, 1957, Nr 11, pp. 1379-1386 (USSR)

ABSTRACT: From acetylene and the corresponding acids vinylisobutyrate, vinylisovalerate and vinylcapronate were produced synthetically according to the heterogeneous-catalystic vapour-phase method. On this occasion it was ascertained that the useful acid-transformation can amount to 90 - 95 % of the theoretical value with regard to the consumed and 70 - 90 % with regard to the acid introduced into the reaction. For the first time the vinyl ester of the isovaleric acid is described in this paper. It is shown that the vinylisobutyrate can be obtained according to the vapour-phase method and also according to the method of acidolysis of the vinylacetate. It was here explained that for the synthesis of the vinyl ester of the caproic acid as well as

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On the Synthesis of Vinyl Ester of the Isobutyric-, Isovaleric- and Caproic Acid. 62-11-13/29

probably its next homologous compounds with a higher number of carbon atoms it is most suitable to obtain them according to the heterogeneous-catalytic method. For this one permits to avoid the presence of aetylidene-ester-admixtures, which make the purification of the vinylcapronate very difficult. The experiments when treating the vinylacetate with acetic acid under presence of a mercury-catalyst showed that the compound reaction can take place here with considerably lower velocity. Considerations on side-processes, which determine the suitability of a method-application according to the degree of useful transformation and the possibility of an elimination of the complicated vinyl ester in pure form, are brought. There are 2 figures, 3 tables, and 21 references, 10 of which are Slavic.

ASSOCIATION: Institute for High - Molecular Compounds of the AN USSR (Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR).

SUBMITTED: June 18, 1956.

AVAILABLE: Library of Congress

Card 2/2

BARINOVA A.N.

AUTHORS: Rostovskiy, Ye. N., Lebedev, B. V., Barinova, A.... 63-1-10/23

TITLE: On the Properties of a Series of Complex Vinyl Ethers (O svoystvakh ryada slozhnykh vinilovykh efirov)
Report 1: On the Polymerization and Velocity of the Saponification of the Monomers (Soobshcheniye 1. O polimerizatsii i skorosti omyleniya monomerov)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 1, pp 59 - 63 (USSR)

ABSTRACT: In the hitherto published reports one was restricted to mainly the data about the boiling temperatures and some other physical constants of the monomers. Only in some papers (ref. 1,3,4) the properties of the polymers of complex vinyl ethers were investigated more precisely. The present report deals with the kinetics of the polymerization of a series of complex vinyl ethers, as well as with the detection of their saponification velocity, and with the temperatures of the vitrification of polymers (tables 1,2). The polymerization in the mass as well as the velocity of the saponification of several complex vinyl ethers, and the temperature of the vitrification of polymers were investigated. Furthermore, the structure of the acyl radicals and their influence on the initial velocity of the polymerization and kinetics of

Card 1/2

On the Properties of a Series of Complex Vinyl Ethers 62-1-1c/2,
Report 1: On the Polymerization and Velocity of the Saponification of the Monomers

the hydrolysis of these ethers were precisely detected. It was also explained that the influence of the size and the structure of the necessary groups of the polymers on the temperatures of the vitrification has a similar character in the series of complex vinyl ethers, acrylates, and metacrylates. There are 2 figures, 2 tables, 23 references, 11 of which are Slavic.

ASSOCIATION: Institute of High-Molecular Compounds, AS USSR (Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR).

SUBMITTED: August 25, 1956

AVAILABLE: Library of Congress

1. Comples vinyl ethers-Properties 2. Complex vinyl ethers-Polymerization 3. Complex vinyl ethers-Saponification-Velocity

Card 2/2

ROSTOVSKIY, Ye.N.; BARINOVA, A.N.

Vinyl crotonate and its polymer. Vysokom.soed. 1 no.11:1707-1712 N '59. (MIRA 13:5)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Crotonic acid) (Polymers)

ROSTOVSKIY, Ye.N.; BARINOVA, A.N.

Vinyl formate and ethylidene diformate. Zhur.ob.khim. 33 no.3:828-830 Mr '63. (MIRA 16:3)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Formic acid) (Ethanediol)

S/169/61/000/009/013/056
D228/D304

AUTHORS: Kukhtikova, T. I., and Barinova, A. Ya.

TITLE: Mechanism of focal movements during the Shurobsk earthquake and its recurrent shocks

PERIODICAL: Referativnyy zhurnal. Geofizika, no. 9, 1961, 16, abstract 9A133 (Tr. In-ta seysmostoyk. str-va i seysmol. AN TadzhSSR, v. 7, 1960, 97-102)

TEXT: The mechanism of the Shurobsk earthquake (0042 hr. on July 21, 1955, $E = 10^{12}$ j, $\varphi = 38^{\circ}56'$ N, $\lambda = 69^{\circ}40'$ E, H = 20 km) and its recurrent shocks is determined by the Keylis-Borok method. The following conclusions are drawn from comparing the results for the main tremor and the 12 strongest recurrent shocks: (1) The mechanism of the focal movement of the recurrent shocks repeats the basic features of the mechanism of the strong earthquake. (2) The dislocations found for the trend of the rupture planes differ within the limits of 20°. (3) At the foci,

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the rupture surfaces are steeply inclined (39 - 58°) to the horizontal. (4) The relative rupture displacement at the 12 foci is associated with the uplift of the eastern block and with the subsidence of the northwestern block. (5) Most of the dislocations at the Shurobsk foci are regarded as combinations of overthrusts and faults (in the geologic sense). (6) Despite the similarity of the movement mechanism of the foci under consideration, the first arrivals of longitudinal waves at certain stations have different directions; this is due to the small slewing of the planes or direction of the movements. [Abstracter's note: Complete translation.]

KUKHTIKOVA, T.I.; BARINOVA, A.Ye.

Mechanism of focal motions and repeated shocks during the Shurob earthquake. Trudy Inst. seism. stroi. i seism. 7:97-102 '60.
(MIRA 15:1)
(Shurob--Earthquake, 1955)

L 29959-66 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) AT/JD

ACC NR: AP6012492 SOURCE CODE: UR/0181/66/008/004/1246/1249

AUTHORS: Geytsi, I. I.; Nesterov, A. A.; Barinova, E. Yu.; Smirnov, L. S.

ORG: Institute of Semiconductors, SO AN SSSR, Novosibirsk (Institut poluprovodnikov SO AN SSSR)

TITLE: Temperature dependence of the average ionization energy in germanium and silicon

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1246-1249

TOPIC TAGS: germanium, silicon, ionization, temperature dependence, electron bombardment, x ray irradiation, photoelectric property, physical diffusion, minority carrier, forbidden band, GERMANIUM SEMICONDUCTOR, SILICON SEMICONDUCTOR

ABSTRACT: To obtain additional data on ionization occurring in semiconductors irradiated with electrons and x rays, the authors measured the temperature dependence of the average ionization in Ge and Si. The relative change of the ionization energy with temperature was determined by two procedures. X rays were used for uniform generation of carriers in the volume of the semiconductor and to avoid the influence of irradiation on its surface properties. The x rays range in energy from 30 to 50 kev. The x ray pulses ranged in duration from 10 to 500 μsec, with

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L 29959-66

ACC NR: AP6012492

rise times not worse than 1.5 -- 2.5 μsec. One was based on observing the amplitude and the decrease of the induced conductivity in the sample when it's irradiated with rectangular pulses of x irradiation. In the case of germanium, a second procedure was also used, wherein a Ge crystal with p-n junction was exposed to the ionizing action of an electron beam with energy 1 Mev. The geometry of the sample was such that the diffusion of the minority carriers could be determined following the illumination of the sample with short-wave light. The results obtained with both methods were identical and showed that as the temperature drops from 300 to 77K the average ionization energy in Ge and Si changes little The change can be attributed to changes in the width of the forbidden band. The change does not exceed 10%. Orig. art. has: 2 figures and 6 formulas.

SUB CODE: 20/ SUBM DATE: 12Jul65/ ORIG REF: 008/ OTH REF: 004

Card 2/2

KARYAKIN, A.V.; LAZAREV, D.N.; BARINOVA, G.A.

Fluorescent analysis of the viability of agricultural plant seeds. Dokl.AN SSSR 106 no.4:739-742 F '56. (MIRA 9:6)

1.Predstavleno akademikom A.L.Kursanovym.
(Seeds)

ANIN, Yu.L.; BARINOVA, I.F.

Diagnostic meaning of the reducing ability of blood srum (Blake's reaction). Lab.delo 7 no.11:38-40 N '61. (MIRA 14:10)

1. Terapevticheskoye otdeleniye Khersonskoy lineynoy bol'nitsy vodnikov.

(SERUM DIAGNOSIS)

KATAYEV, Ye.G.; BARINOVA, L.K.

Addition of thiourea and selenurea to undaturated electrophilic reagents. Dokl. AN SSSR 141 no.6:1373-1375 D '61. (MIRA 14:12)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina. Predstavleno akademikom B.A.Arbuzovym.
(Urea--Spectra) (Addition reactions)

ACCESSION NR: AP4005071 S/0191/63/000/012/0018/0021

AUTHORS: Korablina, T. P.; Barinova, M. V.; Kurakina, A. I.; Ryabova, G. I.

TITLE: Liquid-vapor equilibrium in the binary systems silicontetrachloride-trimethylchlorosilane, trimethylchlorosilane-acetonitrile, and silicon tetrachloride-acetonitrile

SOURCE: Plasticheskiye massy*, no. 12, 1963, 18-21

TOPIC TAGS: binary system, binary liquid system, liquid vapor equilibrium, silicon tetrachloride, acetonitrile, silane.chlorotrimethyl-, organosilicon compound, organosilicon compound synthesis, silane.chlorotrimethyl-,synthesis

ABSTRACT: To obtain data for calculating azeotropic rectification of the ternary system silicon tetrachloride--trimethylchlorosilane-acetonitrile in silane production, phase equilibria of the 3 corresponding binary systems were determined at 760 mm. Hg. The phase equilibria curves and the activity coefficients are shown in the enclosure (calculations were made according to Marguless equations,

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ACCESSION NR: AP4005071

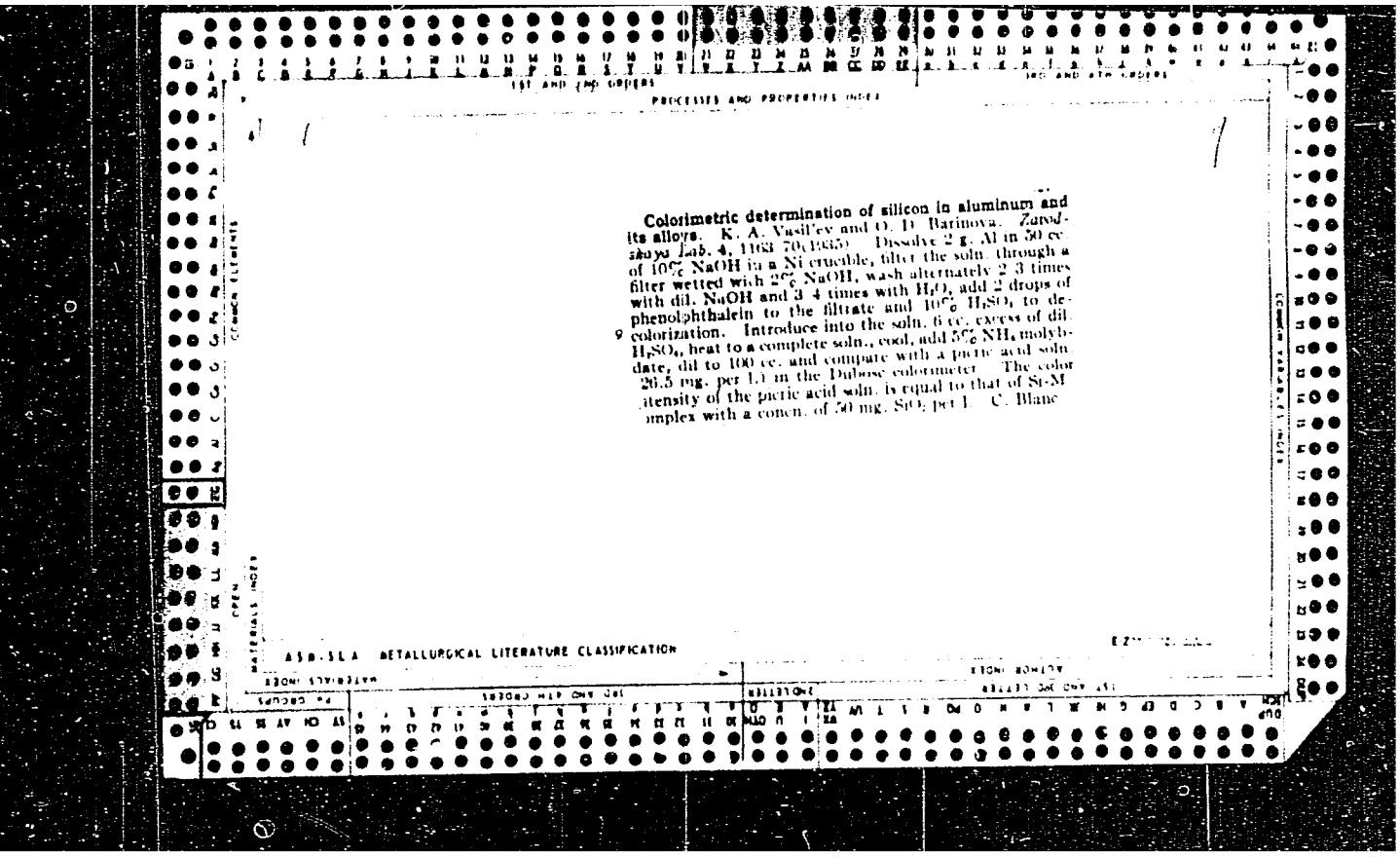
$\lg \gamma_1 = x_2^2(2B_{12} - A_{12}) + 2x_2^3(A_{12} - B_{12})$ and $\lg \gamma_2 = x_1^2(2A_{12} - B_{12}) + 2x_1^3(B_{12} - A_{12})$, for example, for the silicon tetrachloride-trimethylchlorosilane system; gamma$_1$ and gamma$_2$ are the activity coefficients for silicon tetrachloride and trimethylchlorosilane and x_1 and x_2 are the molar fraction concentrations of silicon tetrachloride and trimethylchlorosilane in the liquid phase, and A_{12} and B_{12} are constants.) Orig. art. has: 2 tables, 5 figures and 6 equations

ASSOCIATION: None

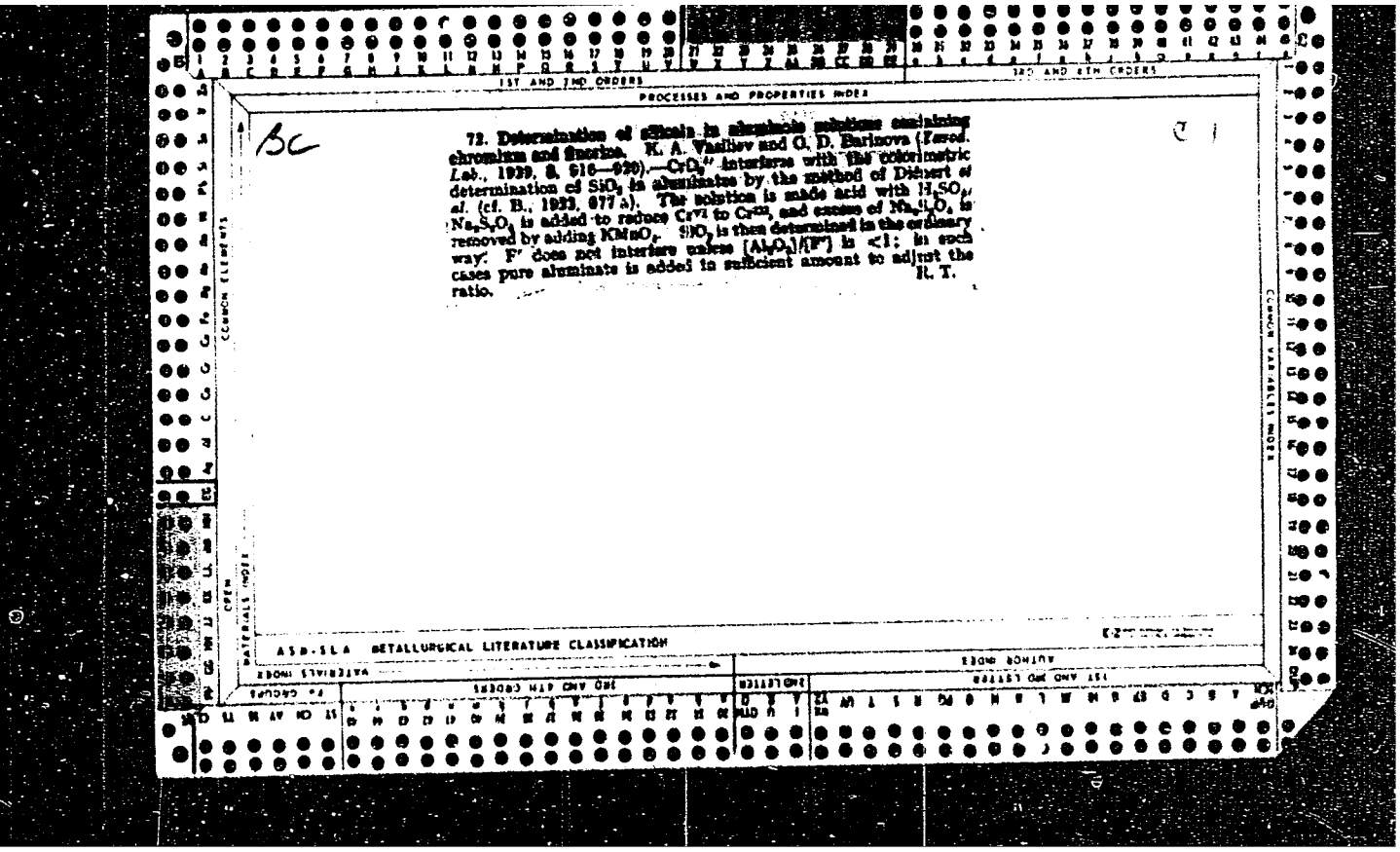
SUBMITTED: 00 DATE ACQ: 07Jan64 ENCL: 03

SUB CODE: CH NR REF SOV: 008 OTHER: 014

Card 2/5



Colorimetric determination of silicon in aluminum and its alloys. K. A. Vasil'ev and O. D. Barinova. *Zavodskaya Lab.* 4, 1163-70(1935). Dissolve 2 g. Al in 50 cc. of 10% NaOH in a Ni crucible, filter the soln. through a filter wetted with 2% NaOH, wash alternately 2-3 times with dil. NaOH and 3-4 times with H_2O, add 2 drops of phenolphthalein to the filtrate and 10% H_2SO_4 to decolorization. Introduce into the soln. 6 cc. excess of dil. H_2SO_4, heat to a complete soln., cool, add 5% NH_4 molybdate, dil. to 100 cc. and compare with a picric acid soln. 26.5 mg. per l. in the Dubosc colorimeter. The color intensity of the picric acid soln. is equal to that of Si-Mo complex with a concn. of 50 mg. SiO_2 per l. C. Blanc



PROCESSES AND PROPERTIES INDEX

Bc

72. **Determination of silicate in aluminate solutions containing chromium and fluorine.** K. A. Vasiliev and O. D. Barinova (*Zavod. Lab.*, 1939, 8, 916—920).—CrO_4'' interferes with the colorimetric determination of SiO_2 in aluminate by the method of Diehart *et al.* (cf. B., 1933, 977 a). The solution is made acid with H_2SO_4, $Na_2S_2O_3$ is added to reduce Cr^{VI} to Cr^{III}, and excess of $Na_2S_2O_3$ is removed by adding $KMnO_4$. SiO_2 is then determined in the ordinary way. F′ does not interfere unless $[Al_2O_3]/[F']$ is <1; in such cases pure aluminate is added in sufficient amount to adjust the ratio. H. T.

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

Determination of silicic acid in aluminate solutions containing chromium and fluorine. K. A. VASIL'EV AND O. D. BARNOVA. *Zavodskaya Lab.*, **8**, 918-20 (1939); *Chem. Abs.*, **34**, 1590 (1940).—Acidify the sample with 20% H_2SO_4, heat to dissolution, and cool. If Cr is present, it should be reduced. Then add 20 to 40 ml. ammonium molybdate, dilute to 300 ml., stir, and let stand for 15 min. Add 40 ml. HCl (1:1) and an excess of a titrated 1.2% solution of 8-hydroxyquinoline, stopper, and heat for 10 min. at 60° to 70° with periodic shaking. Cool, dilute to 500 ml., and stir. Filter, discard the first portions, then to a 100-ml. portion add 50 ml. H_2O, 60 ml. HCl (1:1), and 30 ml. of 80% oxalic acid, and titrate with 0.1 *N* bromide-bromate solution in the presence of methyl red. See *Ceram. Abs.*, **22** [3] 50 (1943).

BELYAKOV, I.S.; KREPS, S.Ye.; SURIN, P.D.; BARINOVA, O.N., red.; GORBATKIN, B.G., tekhn. red.

[Clock and watch repairing]Remont chasov. Moskva, Gosmestpromizdat, 1962. 240 p. (MIRA 16:3)
(Clocks and watches--Repairing and adjusting)

FOLTAVTSEV, Yu.P.; LYUBARSKIY, M.R.; ARONOV, Yu.M.; BARINOVA, O.N., red.; TRUSOV, N.S., tekhn. red.

[Manufacturing boehmite roofing] Proizvodstvo bemitnoi krovli. Moskva, Gostytizdat, 1963. 98 p. (MIRA 17:3)

VEL'YASHEV, Lev Nikolayevich; KRAVCHENKO, Semen Mikhaylovich; BARINOVA, O.N., red.; TRUSOV, N.S., tekhn. red.

[Design and repair of office typewriters] Konstruktsiia i remont kantseliarskikh pishushchikh mashin. Moskva, Gosbytizdat, 1963. 198 p. (MIRA 16:11)
(Typewriters)

VISHNEVSKIY, Z.A.; BARINOVA, O.N., red.; TRUKOV, N.I., tekhn. red.

[Repair of cameras] Remont fotoapparatov. Moskva, Goskinoizdat, 1963. 205 p. (MIRA 16:12)
(Cameras—Maintenance and repair)

LAKHTIN, Aleksandr Leonidovich, kand. tekhn. nauk; VOLKOVA, Anastasiya Nikitichna, kand. tekhn. nauk; KARINOVA, O.N., red.; ZAV'YALOV, S.N., tekhn. red.

[Chemical cleaning of artificial fur] Khimicheskaia chistka iskusstvennogo mekha. Moskva, Gosbytizdat, 1963. 19 p. (MIRA 17:2)

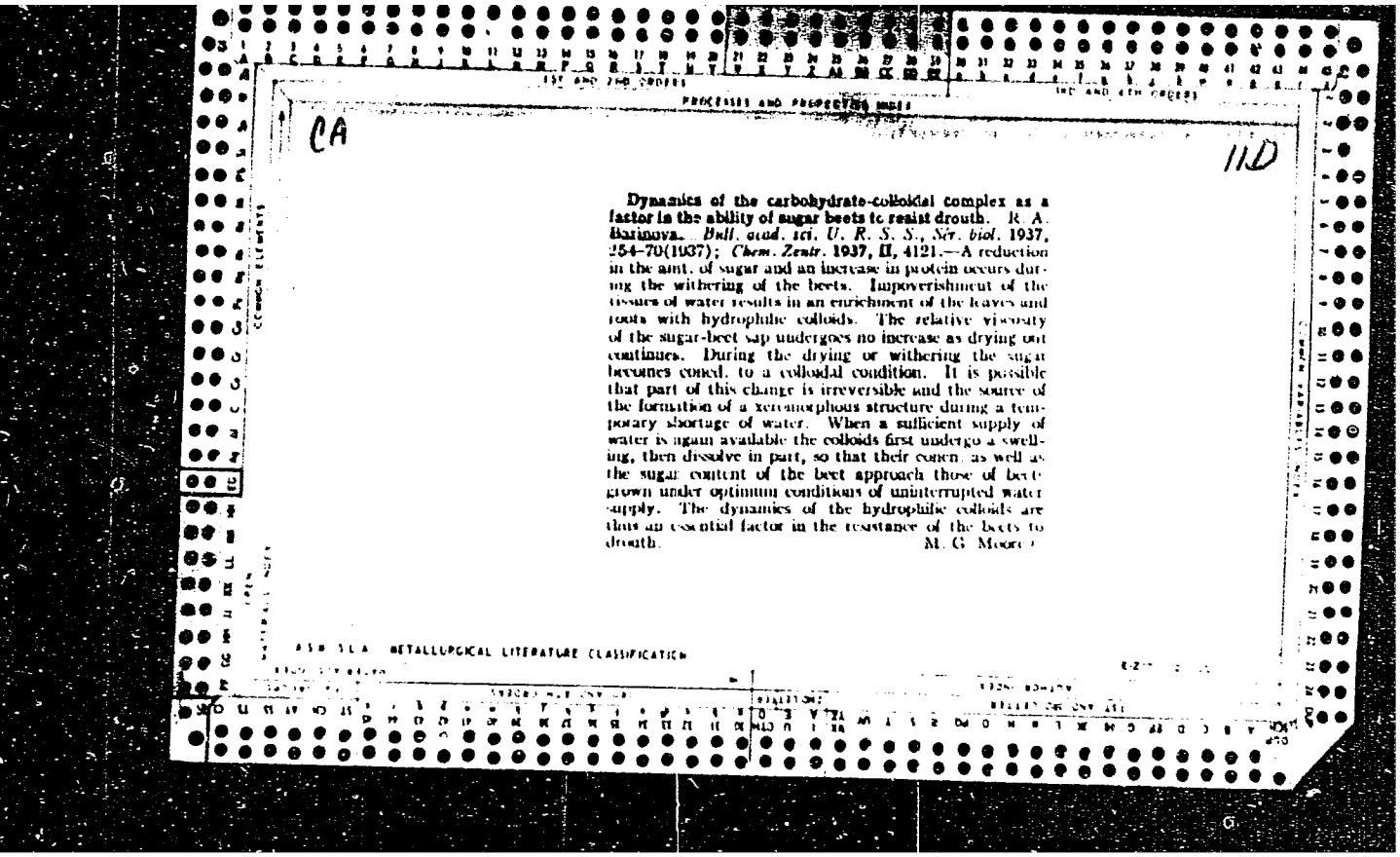
BARINOVA, P. N.

"History of the Development of Drawing Apparatus in Cotton Spinning." Cand Tech Sci, Inst of History of Natural Science and Technology, Acad Sci USSR, Moscow, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

BARINOVA, P.N.

Development of the drawing device in cotton spinning. Trudy Inst. ist.est.i tekh. 29:328-351 '60. (MIRA 13:6)
(Cotton spinning)

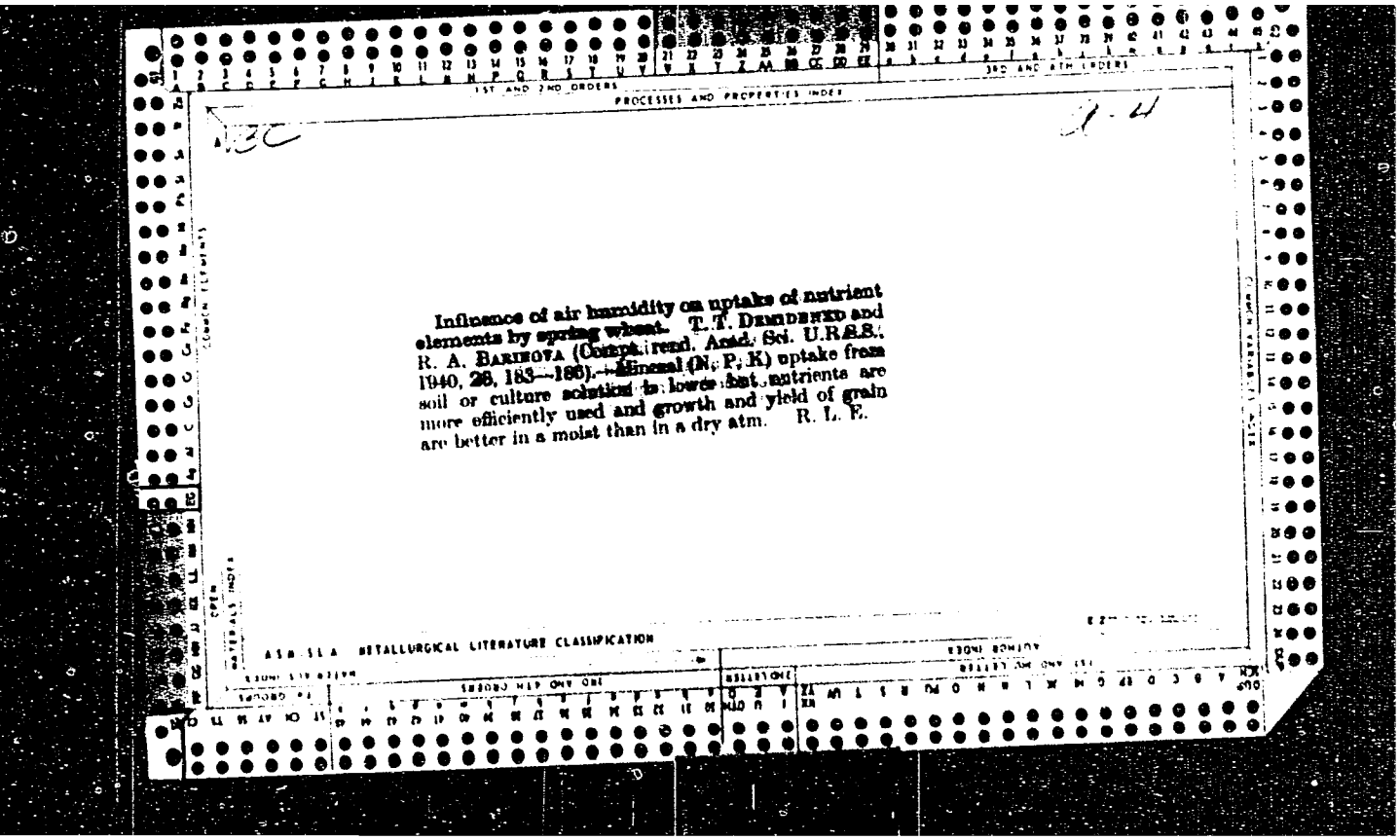


CA

11D

Dynamics of the carbohydrate-colloidal complex as a factor in the ability of sugar beets to resist drouth. R. A. Barinova. *Bull. acad. sci. U. R. S. S., Sér. biol.* 1937, 254–70(1937); *Chem. Zentr.* 1937, II, 4121.—A reduction in the amt. of sugar and an increase in protein occurs during the withering of the beets. Impoverishment of the tissues of water results in an enrichment of the leaves and roots with hydrophilic colloids. The relative viscosity of the sugar-beet sap undergoes no increase as drying out continues. During the drying or withering the sugar becomes concd. to a colloidal condition. It is possible that part of this change is irreversible and the source of the formation of a xeroamorphous structure during a temporary shortage of water. When a sufficient supply of water is again available the colloids first undergo a swelling, then dissolve in part, so that their concn. as well as the sugar content of the beet approach those of beets grown under optimum conditions of uninterrupted water supply. The dynamics of the hydrophilic colloids are thus an essential factor in the resistance of the beets to drouth. M. G. Moore

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

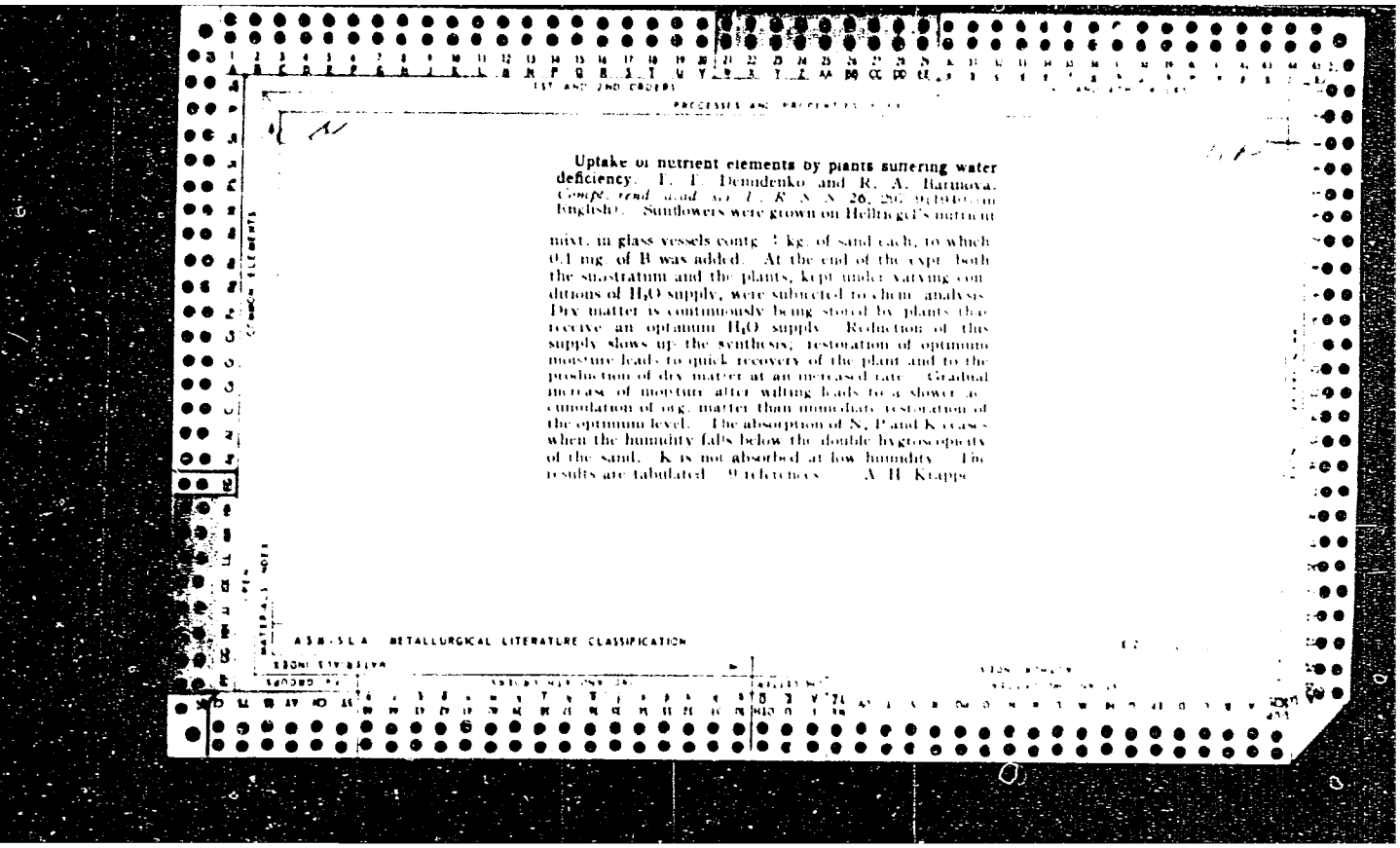


Influence of air humidity on uptake of nutrient elements by spring wheat. T. T. Denisenko and R. A. Barinova (Compt. rend. Acad. Sci. U.R.S.S., 1940, 28, 183—186).—Mineral (N, P, K) uptake from soil or culture solution is lower but nutrients are more efficiently used and growth and yield of grain are better in a moist than in a dry atm. R. L. E.

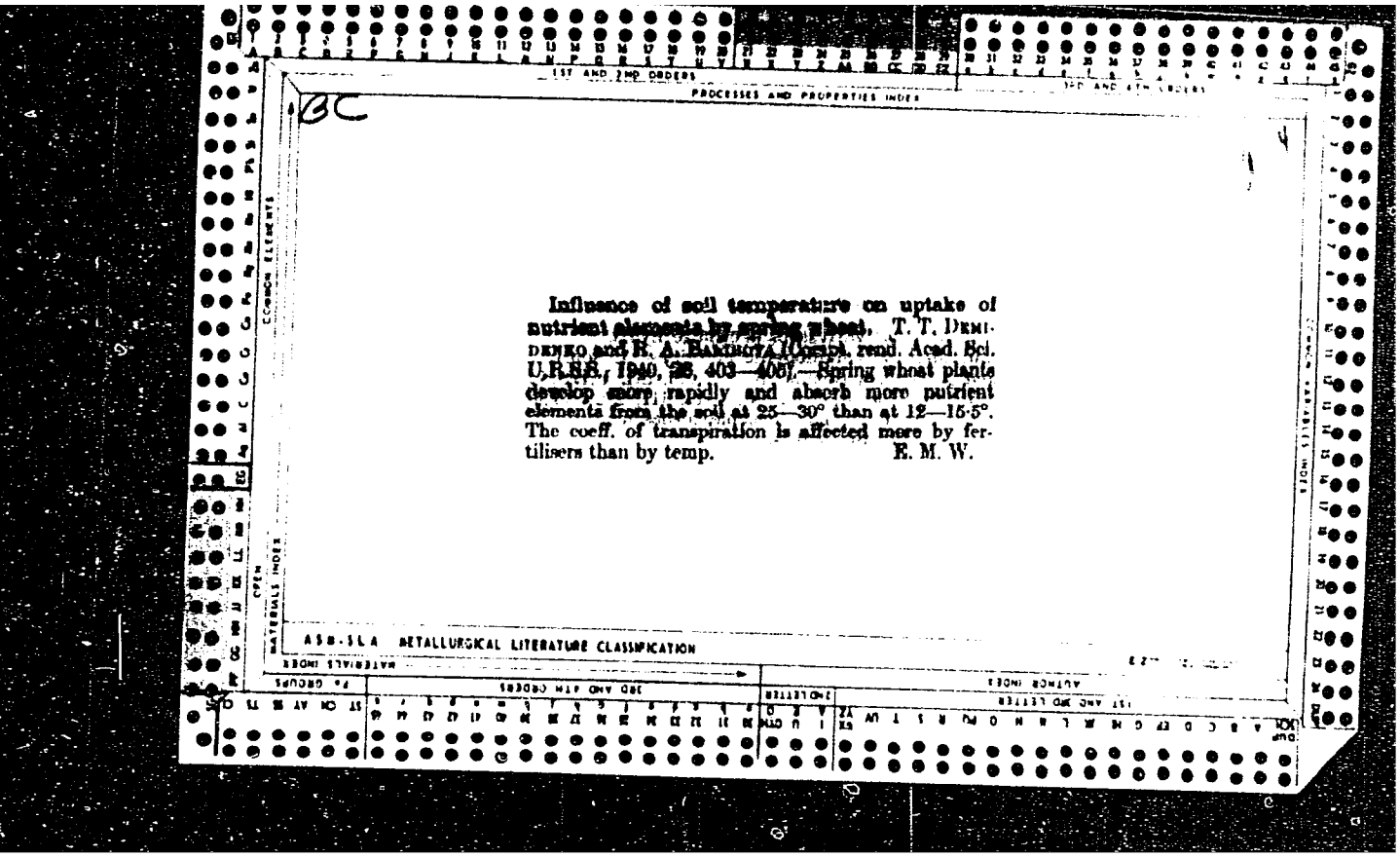
Yield and composition of spring wheat in relation to microelements [illegible] and R. A. [illegible] *[illegible]* 26, [illegible] (in English). Fertilization tests were made on spring wheat supplied with H_3BO_3, $MnSO_4$, $ZnSO_4$ and $CuSO_4$ in [illegible] of 0.5, 1.0, 2.0 and [illegible] mg. per kg. of dry soil. [illegible] increased the yield of grain by [illegible] and decreased the green part of the plant. Mn, Zn and Cu in decreasing order increased both green part and grain. All the micro-elements increased the protein and decreased the starch content. Because of a lower consumption of N, the other element caused increased N absorption. [illegible] of the grains was lowest in plants treated with B, highest in those treated with Mn.

V. H. Krapp[illegible]

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

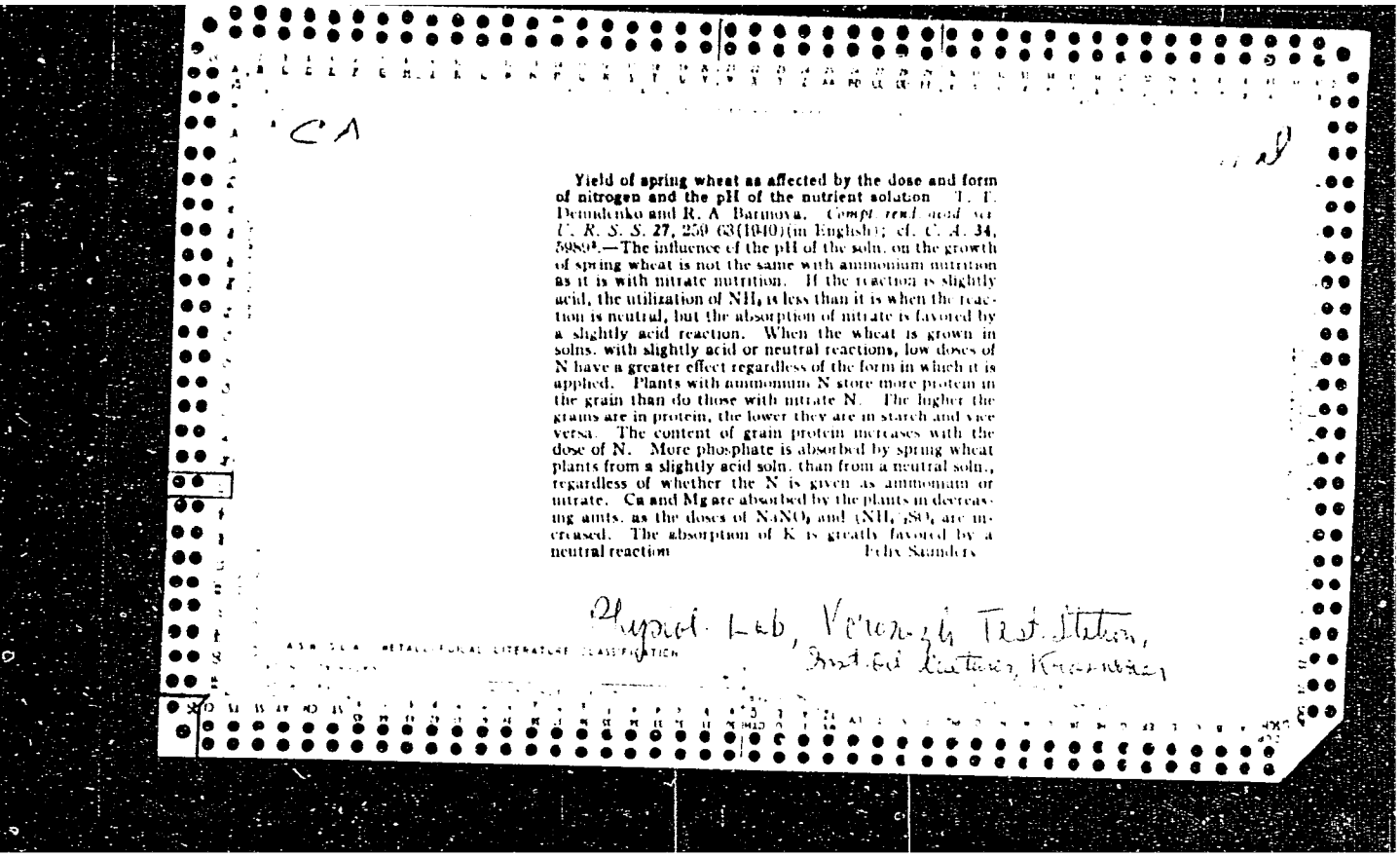


Uptake of nutrient elements by plants suffering water deficiency. I. I. Demidenko and R. A. Barmova. *Compt. rend. acad. sci. U. R. S. S.* 26, 297-9(1940) (in English). Sunflowers were grown on Heltriegel's nutrient mixt. in glass vessels contg. 7 kg. of sand each, to which 0.1 mg. of B was added. At the end of the expt. both the substratum and the plants, kept under varying conditions of H_2O supply, were subjected to chem. analysis. Dry matter is continuously being stored by plants that receive an optimum H_2O supply. Reduction of this supply slows up the synthesis; restoration of optimum moisture leads to quick recovery of the plant and to the production of dry matter at an increased rate. Gradual increase of moisture after wilting leads to a slower accumulation of org. matter than immediate restoration of the optimum level. The absorption of N, P and K ceases when the humidity falls below the double hygroscopicity of the sand. K is not absorbed at low humidity. The results are tabulated. 9 references. A. H. Krappe



BC

Influence of soil temperature on uptake of nutrient elements by spring wheat. T. T. Demidenko and K. A. Bakhmeta (Dokl. Akad. Nauk. Acad. Sci. U.R.S.S., 1940, 28, 403—405).—Spring wheat plants develop more rapidly and absorb more nutrient elements from the soil at 25—30° than at 12—15·5°. The coeff. of transpiration is affected more by fertilisers than by temp. E. M. W.



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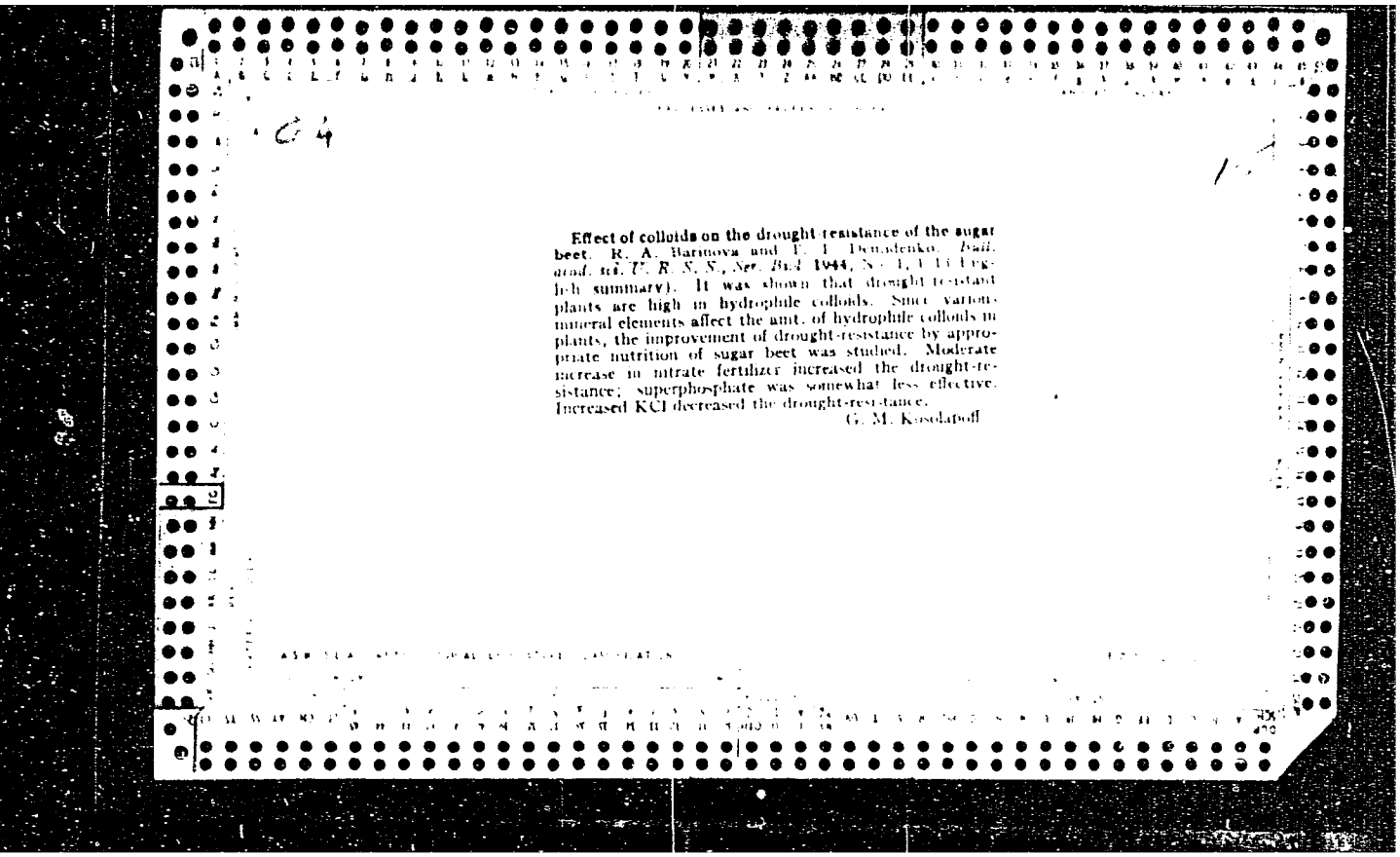
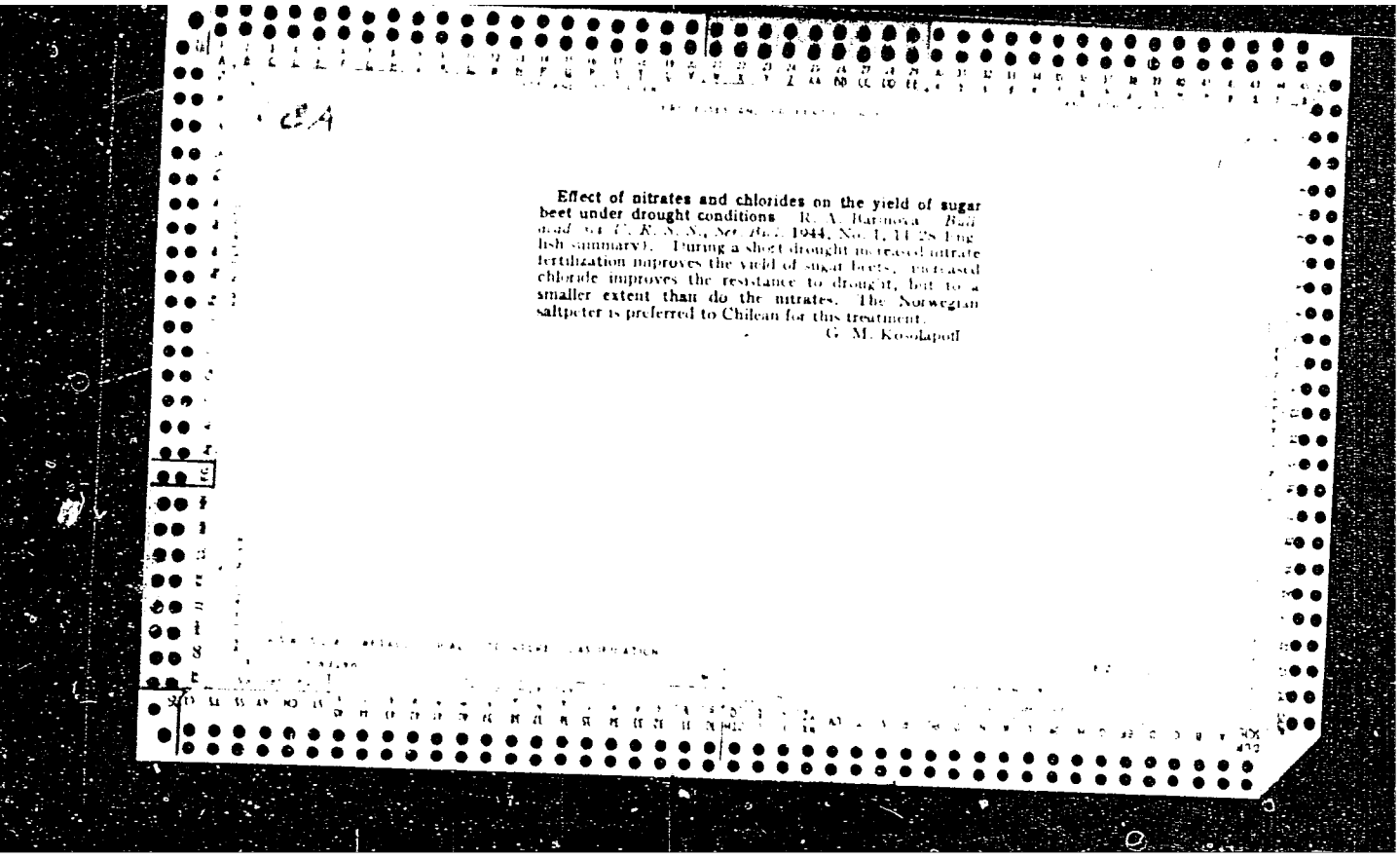
Yield of spring wheat as affected by the dose and form of nitrogen and the pH of the nutrient solution T. F. Deriudenko and R. A. Barmova. *Compt. rend. acad. sci. U. R. S. S.* **27**, 259-63(1940)(in English); cf. *C. A.* **34**, 5989[4].—The influence of the pH of the soln. on the growth of spring wheat is not the same with ammonium nutrition as it is with nitrate nutrition. If the reaction is slightly acid, the utilization of NH_4 is less than it is when the reaction is neutral, but the absorption of nitrate is favored by a slightly acid reaction. When the wheat is grown in solns. with slightly acid or neutral reactions, low doses of N have a greater effect regardless of the form in which it is applied. Plants with ammonium N store more protein in the grain than do those with nitrate N. The higher the grains are in protein, the lower they are in starch and vice versa. The content of grain protein increases with the dose of N. More phosphate is absorbed by spring wheat plants from a slightly acid soln. than from a neutral soln., regardless of whether the N is given as ammonium or nitrate. Ca and Mg are absorbed by the plants in decreasing amts. as the doses of $NaNO_3$ and $(NH_4)_2SO_4$ are increased. The absorption of K is greatly favored by a neutral reaction Felix Saunders

Agric. Lab, Voronezh Test Station, Botanical Institute, Kazan



Effect of colloids on the drought-resistance of the sugar beet. R. A. Barinova and V. I. Denisenko. *Bull. acad. sci. U. R. S. S., Ser. Biol.* 1944, No. 1, 1 ill. (Engl. summary). It was shown that drought-resistant plants are high in hydrophile colloids. Since various mineral elements affect the amt. of hydrophile colloids in plants, the improvement of drought-resistance by appropriate nutrition of sugar beet was studied. Moderate increase in nitrate fertilizer increased the drought-resistance; superphosphate was somewhat less effective. Increased KCl decreased the drought-resistance.

G. M. Kesolapoff



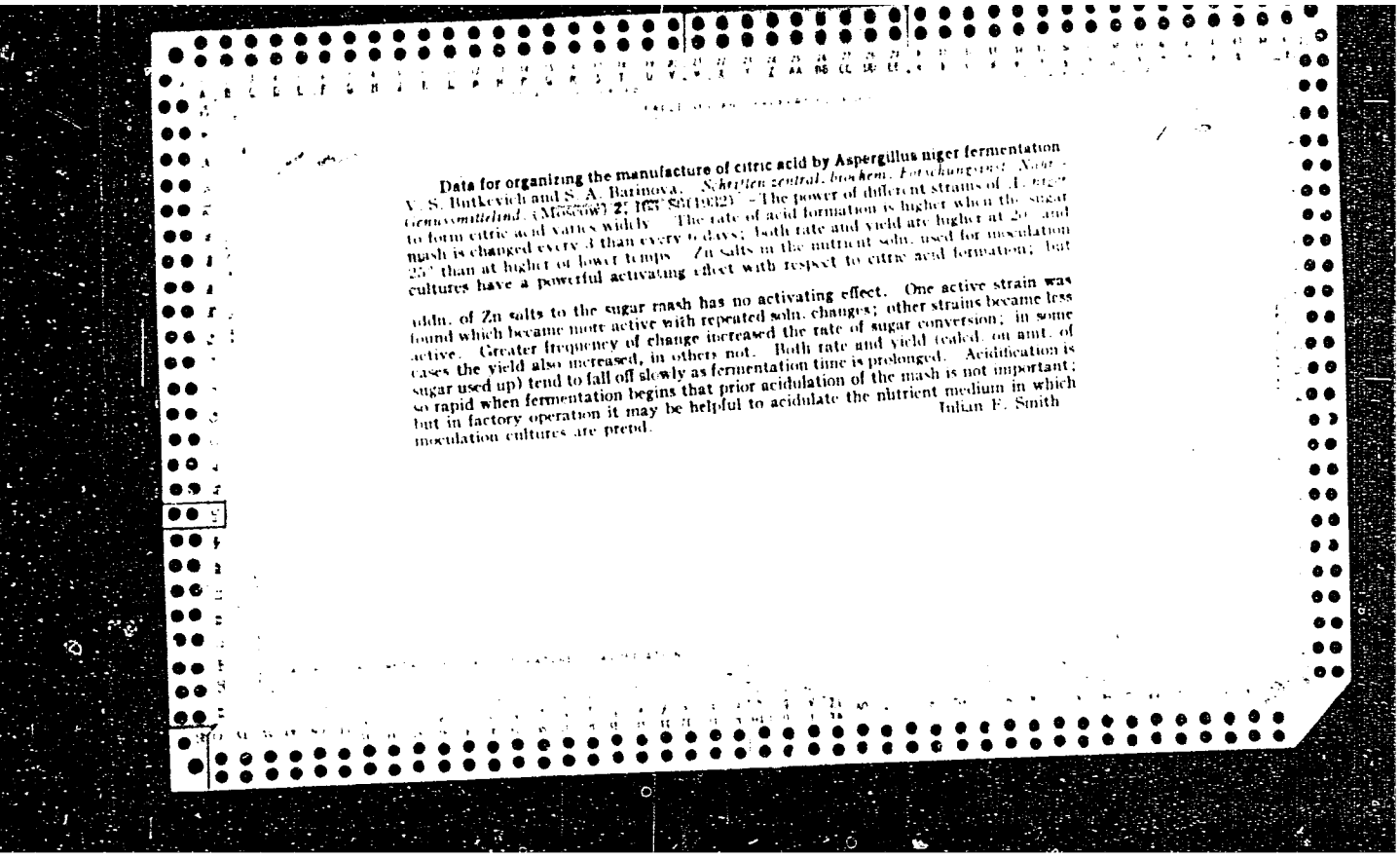
Effect of nitrates and chlorides on the yield of sugar beet under drought conditions. R. A. Barinova. *Bull. acad. sci. U.R.S.S., Sér. Biol.*, 1944, No. 1, 11-28 (English summary). During a short drought increased nitrate fertilization improves the yield of sugar beets, increased chloride improves the resistance to drought, but to a smaller extent than do the nitrates. The Norwegian saltpeter is preferred to Chilean for this treatment.

G. M. Kosolapoff

CA

Effect of granulated superphosphate upon the yield of stubble-field crops. I. I. D[illegible]ko and R. A. [illegible]ova. ([illegible]) (in English). Millet and buckwheat were grown in plots in the field and fertilized with phosphates applied either with the seeds (5 and 10 kg. P_2O_5 per hectare) or scattered before plowing (45 kg. of simple superphosphate or granulated superphosphate per hectare). The percentage of P_2O_5 was somewhat higher in the grain from the fertilized plots, as compared to unfertilized controls. J. F. W.

METALLURGICAL LITERATURE CLASSIFICATION



Data for organizing the manufacture of citric acid by Aspergillus niger fermentation V. S. Butkevich and S. A. Barinova. *Scherten zentral. biochem. Forschungsinst. Nahr. Genussmittelind.* (Moscow) **2**, 165–88(1932).—The power of different strains of *A. niger* to form citric acid varies widely. The rate of acid formation is higher when the sugar mash is changed every 3 than every 6 days; both rate and yield are higher at 20° and 25° than at higher or lower temps. Zn salts in the nutrient soln. used for inoculation cultures have a powerful activating effect with respect to citric acid formation; but addn. of Zn salts to the sugar mash has no activating effect. One active strain was found which became more active with repeated soln. changes; other strains became less active. Greater frequency of change increased the rate of sugar conversion; in some cases the yield also increased, in others not. Both rate and yield (calcd. on amt. of sugar used up) tend to fall off slowly as fermentation time is prolonged. Acidification is so rapid when fermentation begins that prior acidulation of the mash is not important; but in factory operation it may be helpful to acidulate the nutrient medium in which inoculation cultures are prepd.

Julian F. Smith

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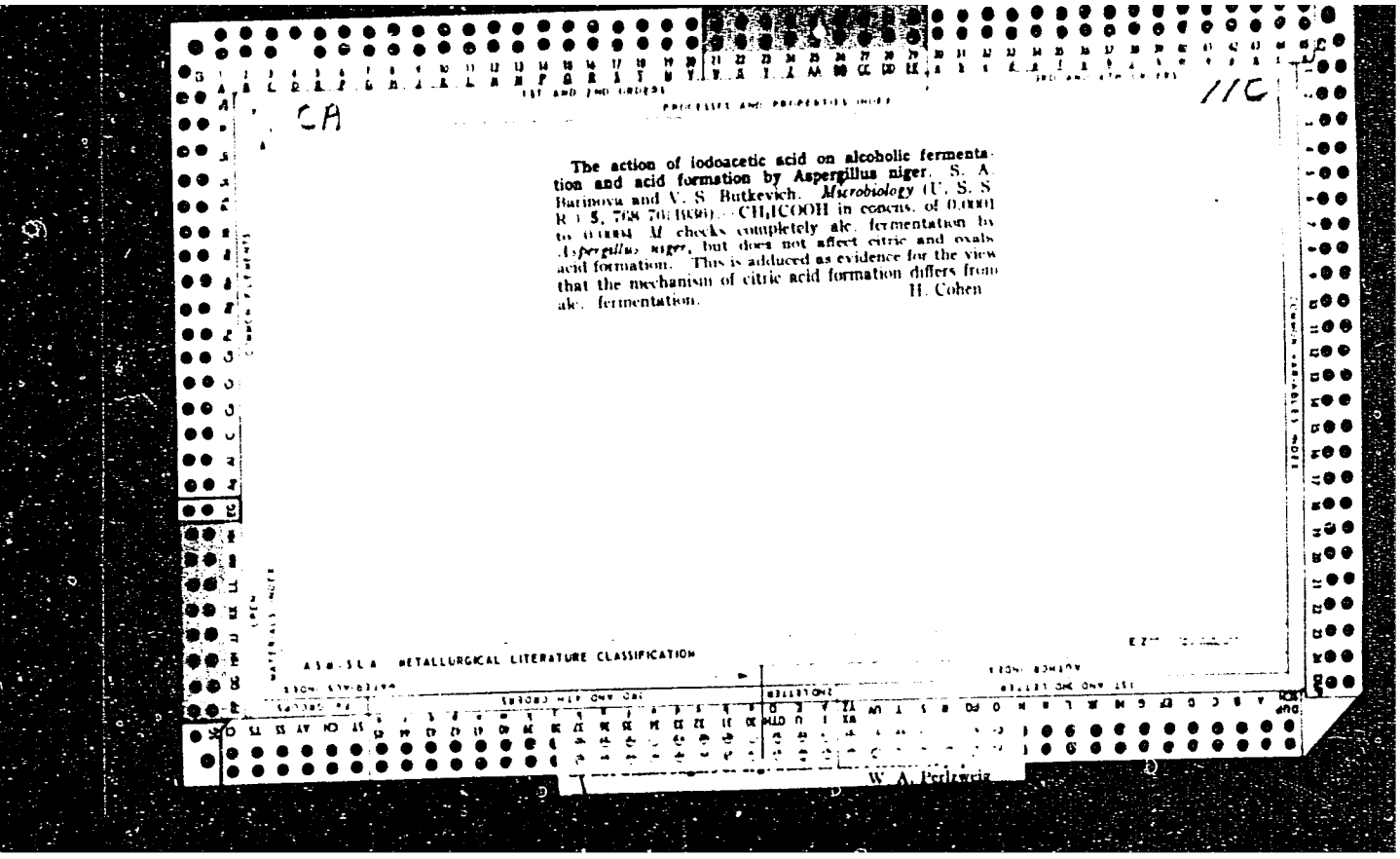

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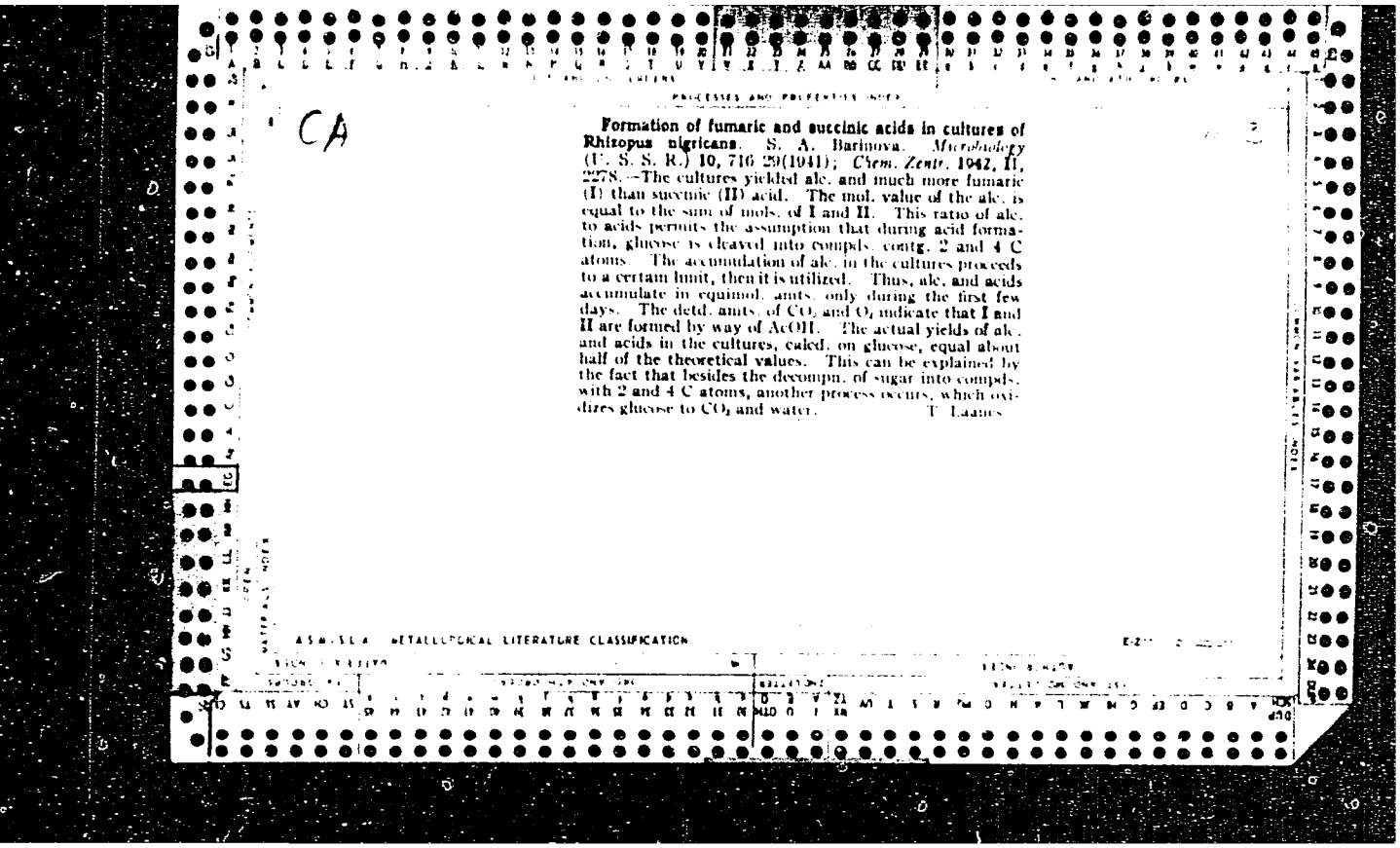
IIC

The action of iodoacetic acid on alcoholic fermentation and acid formation by Aspergillus niger. S. A. Barinova and V. S. Butkevich. *Microbiology* (U. S. S. R.) 5, 708-70(1936).—CH_2ICOOH in concns. of 0.0001 to 0.0005 *M* checks completely alc. fermentation by *Aspergillus niger*, but does not affect citric and oxalic acid formation. This is adduced as evidence for the view that the mechanism of citric acid formation differs from alc. fermentation. H. Cohen

A5a-5La METALLURGICAL LITERATURE CLASSIFICATION

W. A. Perlewitz



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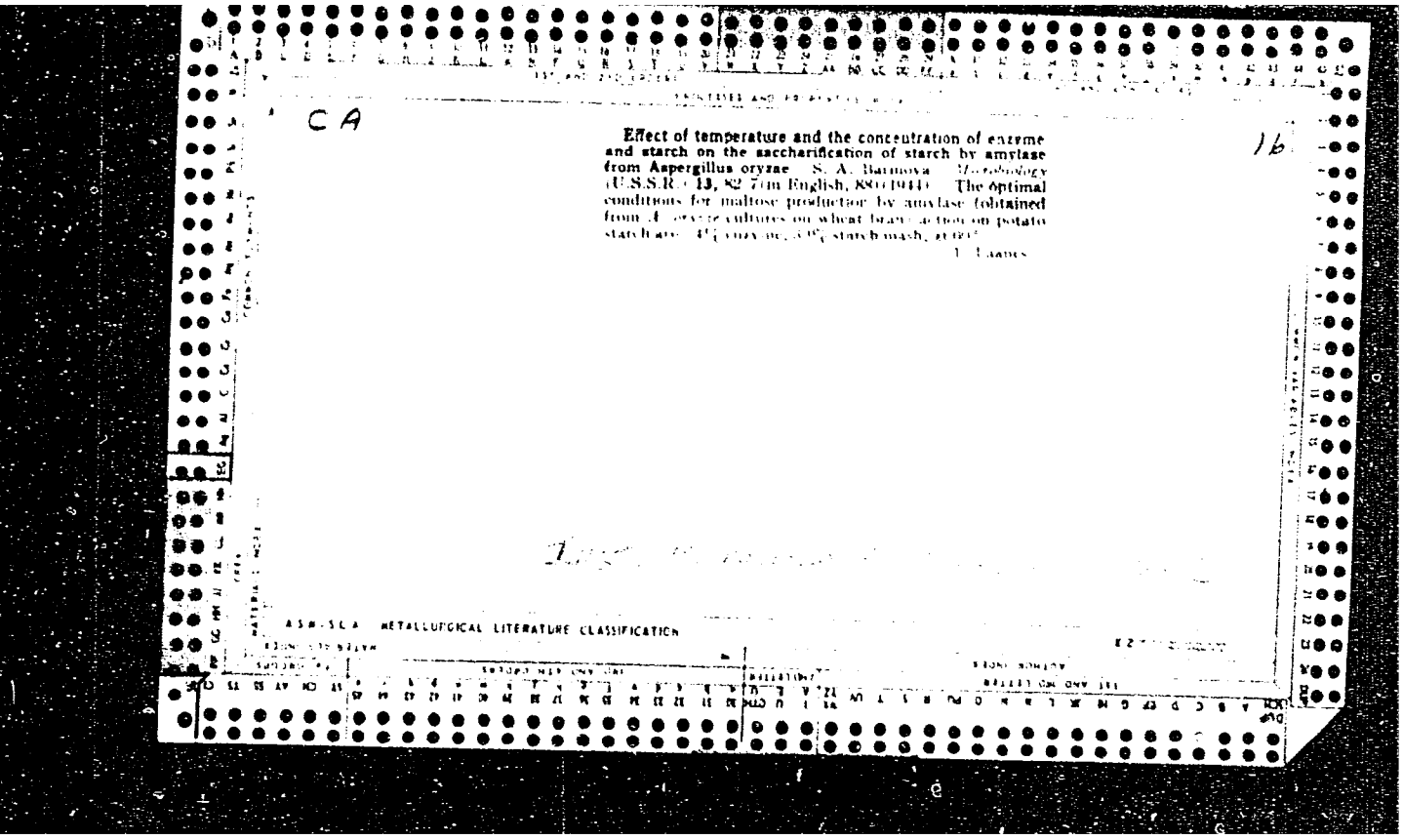
Formation of fumaric and succinic acids in cultures of Rhizopus nigricans. S. A. Barinova. *Microbiology* (U. S. S. R.) **10**, 716-29(1941); *Chem. Zentr.* **1942**, II, 2278.—The cultures yielded alc. and much more fumaric (I) than succinic (II) acid. The mol. value of the alc. is equal to the sum of mols. of I and II. This ratio of alc. to acids permits the assumption that during acid formation, glucose is cleaved into compds. contg. 2 and 4 C atoms. The accumulation of alc. in the cultures proceeds to a certain limit, then it is utilized. Thus, alc. and acids accumulate in equimol. amts. only during the first few days. The detd. amts. of CO_2 and O_2 indicate that I and II are formed by way of AcOH. The actual yields of alc. and acids in the cultures, calcd. on glucose, equal about half of the theoretical values. This can be explained by the fact that besides the decompn. of sugar into compds. with 2 and 4 C atoms, another process occurs, which oxidizes glucose to CO_2 and water. T. Laanes



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16

Effect of temperature and the concentration of enzyme and starch on the saccharification of starch by amylase from Aspergillus oryzae. S. A. Barmova. *Microbiology* (U.S.S.R.) 13, 82-7 (in English, 88) (1944). The optimal conditions for maltose production by amylase (obtained from *A. oryzae* cultures on wheat bran) action on potato starch are 4% enzyme on 3.5% starch mash, at 40°.

T. James

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION