Static and impulse properties of micron cores S/721/61/000/000/002/006

kcps. There are 46 figures, 7 tables, and 6 references (3 Russian-language Soviet, 1 German, and 2 English-language). The participation of a great number of staff members of the Special Engineering Bureau of Computer Engineering of the IT MiVT is acknowledged.

Card 3/3

Static and impulse properties of micron cores S/721/61/000/000/002/006

MC having the following dimensions: Thickness 2, 3, 5, and 10 μ; strip width 1.25, 2.5, 5, 10, and 15 mm; IDiam 2.6, 3, 5, and 8 mm; number of strip coils 10, 25, 50, and 100. The alloys 79HM (79NM), 79HMA (79NMA), 34HKMP (34NKMP), and 50HP (50NP) developed by the Institute of Precision Alloys of the TsNIIChM (Central Scientific Research Institute of Ferrous Metallurgy) were employed. Cores made of the alloys 79NM and 79NMA exhibit similar static and impulse parameters which, with 2-and 3-μ thickness, are fairly good. A 5-μ thick core exhibits substantial deviations from the RHL. 2- and 3-μ cores of 79NM have the lowest value of the remagnetization constant (0.3 and 0.4 $\phi \cdot \mu$sec). Cores made 79NM strip 3 μ thick operate with no appreciable changes in output signal up to 600-700 kcps of the sequence of polarity-reversal-current impulses in fields exceeding 10 times the coercive force. For 2-μ strip the respective frequency attains up to 800 kcps. Comparable frequency for ferrite cores: 300 kcps. Optimal static RHL is exhibited by 34NKMP cores, with a mean rectangularity coefficient for 5-μ strip cores: 0.96, 10-μ strip cores: 0.98, in a maximal field exceeding 5 times the coercive force. The less favorable impulse properties of cores made of the 34NKMP alloy and the 50NP alloy are discussed in detail. The use of MC made of the alloys 79NM (or 79NMA) with a strip thickness of 3 μ and less is recommended for remagnetization frequencies of several hundreds of kcps and of the alloy 34NKMP 5 and 10 μ thick for remagnetization frequencies of the order of tens of

Card 2/3

S/721/61/000/000/002/006

AUTHORS: Bardizh, V.V., ~~Berezhnoy, Ye.F.~~, Mokhel', L.L., Smetanina, V.M.

TITLE: Static and impulse properties of micron cores with a rectangular hysteresis loop.

SOURCE: Akademiya nauk SSSR. Institut tochnoy mekhaniki i vychislitel'noy tekhniki. Magnitnyye elementy ustroystv vychislitel'noy tekhniki; sbornik statey. Moscow, 1961, 31-55.

TEXT: The paper describes the static and impulse properties of the so-called micron cores (MC), that is, small magnetic strip cores made of 2-10 μ thick rolled alloy having a rectangular hysteresis loop (RHL). Such MC serve primarily in switching circuits, such as logical elements, decoders, trigger circuits, etc., in which the cores are subjected to magnetic reversal pulses which create magnetic fields that exceed the static coercive force by several times. MC are more temperature-stable and are magnetically more effective than ferrite cores. The thin and highly T-stable MC permit a more elevated maximal polarity-reversal frequency than ferrite cores. The paper reports experimental work performed at the ITMiVT (Institute of Precision Mechanics & Computer Engineering), AS USSR, in the development of both manufacturing and measuring equipment for the making and study of

Card 1/3

BARDIZH, V.V.; BEREZHNOY, Ye.F.; MOKHEL', L.L.; SMETANINA, V.M.

[Static and pulse characteristics of miniature cores with rectangular hysteresis loop]Staticheskie i impul'snye svoistva mikronnykh serdechnikov s priamougol'noi petlei gisterezisa. Moskva, ITM i VT AN SSSR, 1961. 60 p.
(MIRA 15:9)

(Cores (Electricity))
(Electronic calculating machines)

BEREZHNOY, Ye.F. (Moskva); CHESACHENKO, V.F. (Moskva)

Resynchronization of synchronous generators with weak damping moments. Izv.AN SSSR.Otd tekh.nauk.Energ.i avtom. no.2:15-21 Mr-Ap '61. (MIRA 14:4)

(Electric generators)

BEREZHNOY, Ye. F.

Cand Tech Sci - (diss) "Magnitostriction delay line as an element of equipment in computing and impulse techniques." Moscow, 1961. 24 pp; (Inst of Precision Mechanics and Computer Techniques, Academy of Sciences USSR); 120 copies; price not given; (KL, 6-61 sup, 213)

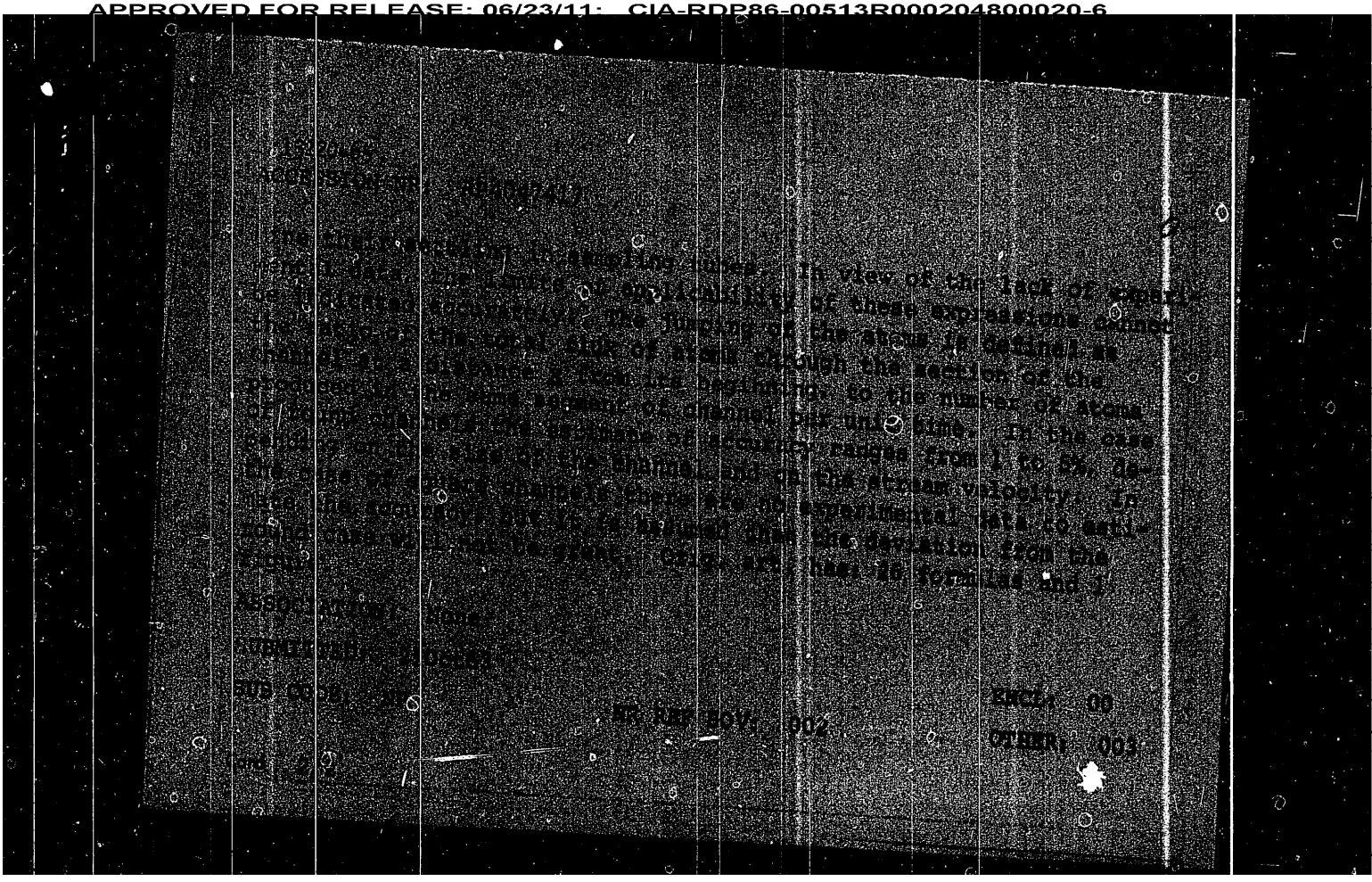
APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800020-6

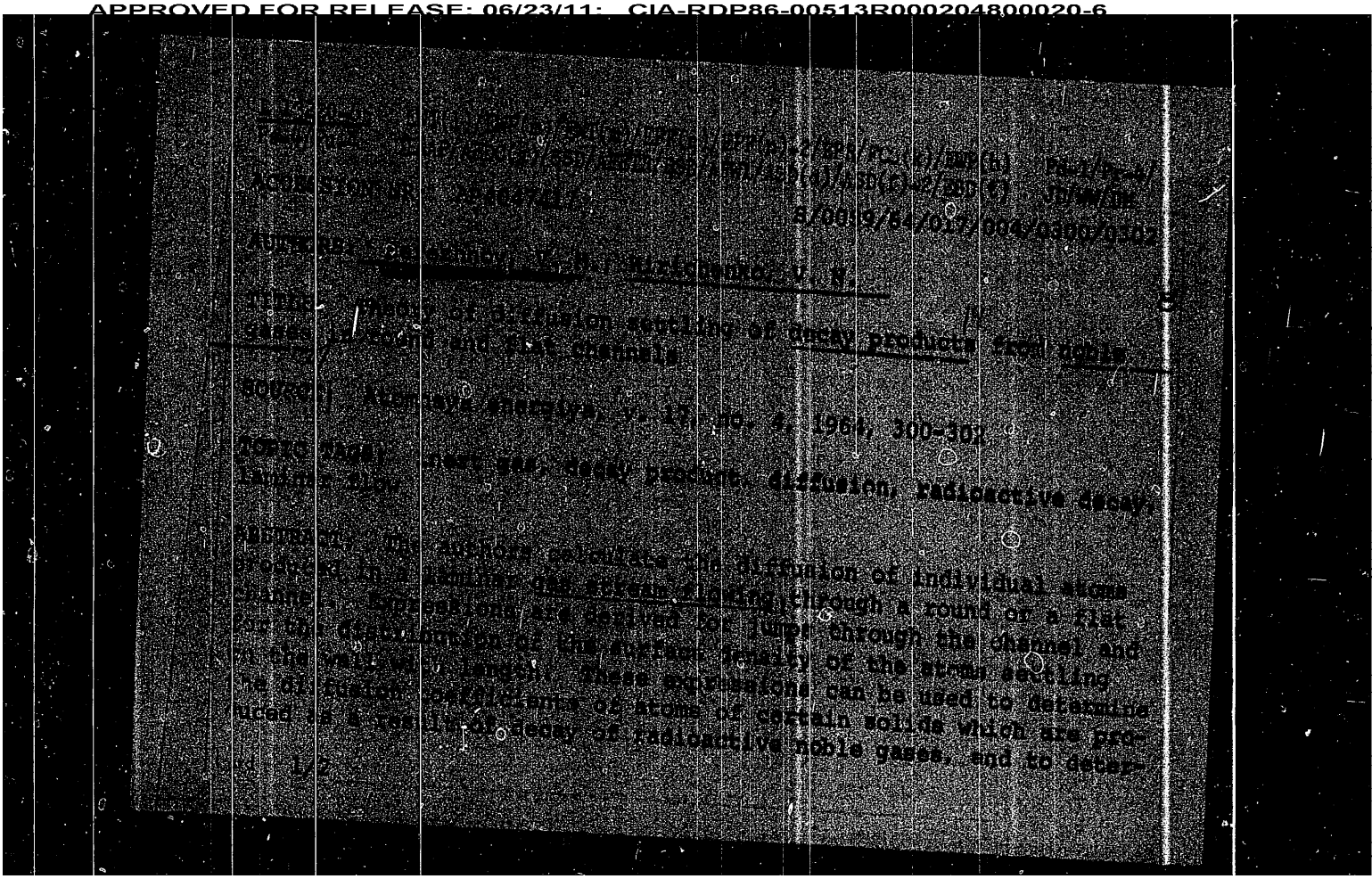
BEREZHNOY, Ye.

Moving-picture Projectors

Arc projector replaced by the projection lamp K-22.
Klub 2 no. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.





BEREZUNOV, V.I. (Chernovtsy, ul. Sholom-Aleykhema, d.4, kv.8)

Some experimental data on G.A. Reinberg's operation (abdominalization of the heart). Vest.khir. 86 no.3:79-80 Mr '61.
(MIRA 14:3)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. V.L. Khenikn) Chernovitskogo meditsinskogo instituta.
(CORONARY HEART DISEASE) (HEART—SURGERY)

BEREZHNOY, V.G.; DRAPKINA, G.I.

Studying irregular forest growth in the fall region of the Tunguska meteorite. Meteoritika no.24:162-169 '64.
(MIRA 17:5)

BEREZHNOY, V. (Astrakhanskaya oblast' s.Sasykoli)

Shortwave amateurs of a village school. Radio no.1:13 Ja '56.
(Sasykoli--Radio clubs) (MLRA 9:4)

BAKSHEYEV, I.I.; BEREZHNOV, S.P.; NESTEROV, A.G.; ZAMARATSKAYA, K.I.

Raw materials for hydrolysis plants as a second-class freight. Gidroliz. i lesokhim. prom. 16 no.5:26-28 '63. (MIRA 17:2)

1. Vostochno-Sibirskiy nauchno-issledovatel'skiy i proyektnyy institut lesnoy i derevoobrabatyvayushchey promyshlennosti.

12(4), 28(4)

S/115/60/000/04/028/041
D002/D006

AUTHOR: Berezhnoy, S.I.

TITLE: On Mobile Inspection Laboratories

PERIODICAL: Izmeritel'naya tekhnika, 1960, Nr 4, pp 55-56 (USSR)

ABSTRACT: At the Stavropol'skaya gosudarstvennaya kontrol'naya laboratoriya po izmeritel'noy tekhnike (Stavropol' State Control Laboratory of Measurement Techniques), four "GAZ-51" trucks were converted into mobile inspection laboratories. Now, inspection is possible in the Kabardino-Balkarskaya and Kalmykskaya ASSR's. The Laboratories can check scales of all kinds, gasoline tanks, lactometers, pressure gages of up to 1000 kg/cm^2 pressure, length and diameter gages, electric meters, etc. The interior of the laboratory is described (seats, shelves, working tables, etc.).

Card 1/1

BEREZHNOY, N.Z., inzh.

Simplified system used for testing traction motors. Elek. i tepl. tiaga 2 no.11:30-31 N '58. (MIRA 11:12)
(Electric railway motors--Testing)

AKOL'ZIN, L.Ye.; BOROZDOV, I.A.; BEDILO, V.Ye.; TERESHKIN, F.N. Prinimali uchastiye: BELYAYEV, F.R.; BEREZHNOY, N.V.; BUBYR', V.A.; VARSHAVSKIY, I.N.; DUDKO, V.P.; YERSHOV, V.S.; DUGIN, Ye.V.; DUKALOV, M.F.; IVANOV, P.S.; KONAREVA, V.F.; MOHIN, M.I.; MOGILKO, A.P.; PANCHENKO, A.I.; POKALYUKOV, S.N.; PRIKHOD'KO, N.D.; RUBIN, I.A.; SIDORENKO, P.A.; TYUTYUNIK, Ya.I.; KHMEL'NITSKIY, L.Ya.; BONDAR', V.I.; KRIVTSOV, A.T.; LOKSHIN, V.D.; SOFIYENKO, N.P. RABINKOVA, L.K., red.izd-va; BOLDYREVA, Z.A., tekhn.red.

[Types of mine cross section] Tipovye secheniia gornykh vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.4. [Cross section of mines supported by a sectional reinforced-concrete lining of URP-11 panels for 1-, 2- and 3-ton railroad cars] Secheniia vyrabotok, zakreplennykh sbornoi zhelezobetonnoi krep'iu iz plit URP-II, dlia 1-, 2- i 3-tonnykh vagonetok. 1960. 278 p.
(MIRA 13:12)

1. Khar'kov. Gosudarstvennyy proyektnyy institut Yuzhgiproshakht.
(Mine timbering)

ROVENSKIY, I.I., kand. tekhn. nauk; SAVITSKIY, I.I.; MUKOVSKIY, G.I.; BEREZHNOY, N.N.

Economizing on solid fuel by using gas in sintering operations. Met. i gornorud. prom. no.2:73 Mr-Ap '65.

(MIRA 18:5)

BEREZHNOY, N.N., inzh.; ROVENSKIY, I.I., kand. tekhn. nauk, rukovoditel' raboty

Investigating gas permeability and heat exchange in the layer of iron ore pellets during roasting on a fire grate. Stal' 25 no.2:107-112 F '65. (MIRA 18:3)

1. Nauchno-issledovatel'skiy i proyektnyy institut po obogashcheniyu i aglomeratsii rud chernykh metallov, Krivoy Rog.

ROVENSKIY, I.I., kand. tekhn. nauk; RUDOVSKIY, G.I., inzh.; BEREZHNOY, N.N., inzh.

Partial replacement of solid fuel by gas in the process of sintering iron ore materials. Stal' 24 no.5:402-405 My '64. (MIRA 17:12)

1. Nauchno-issledovatel'skiy i proyektnyy institut po obogashcheniyu i aglomeratsii rud chernykh metallov, Krivoy Rog, i Yuzhnyy gornoobogatitel'nyy kombinat.

ROVENSKIY, I.I.; BEREZHNOY, N.N.

Investigating the gas permeability of a layer of pellets. Izv. vys. ucheb. zav.; chern. met. 7 no.1:27-32 '64. (MIRA 17:2)

1. Mekhanobrchermet.

BEREZHNOY, N.N.

Determining the thermal diffusivity of granules. Inzh.-fiz. zhur. no.12:35-39 D '63. (MIRA 17:2)

1. Institut "Mekhanobrchermet" Pridneprovskogo soveta narodnogo khozyaystva UkrSSR, Krivoy Rog.

ROVENSKIY, I.I., kand.tekhn.nauk; BEREZHNOY, N.N., inzh.

Conveying machine for the roasting of fluxed iron ore nodules.
Stal' 22 no.3:205-209 Mr '62. (MIRA 15:3)

1. Mekhanobrchermet.
(Conveying machinery) (Ore dressing—Equipment and supplies)

BEREZHNOY, N.I.

Effect of gas pressure on the permeability of rocks. Izv. vys. ucheb. zav.; neft' i gaz 8 no.3:37-39 '65.

(MIRA 18:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

BEREZHNOY, N.I.

Obtaining pressure build-up curves on an experimental unit and their investigation. Izv. vys. ucheb. zav.; neft' i gaz 8 no.6:53-56 '65.
(MIRA 18:7)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.

Berezhnoy, N.F.

USSR / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 22053

Author : Kuzin, L.D., Berezhnoi, N.F., Sukhanova, N.P.
Inst :
Title : On the Prospectives of Obtaining a New Vaccine Against Anthrax of Farm Animals (Communication 2).

Orig Pub: Tr. Chkalovskogo s.-kh. in-ta, 1955, 7, 205-212

Abstract: A nonencapsulated avirulent culture of anthrax bacilli, whose properties are stably preserved, was obtained from the virulent strain #343 by means of direct cultivation. It is virulent only to white mice in a dose of 0.2 ml. This culture can form a reliable immunity in animals inoculated with it (intramuscularly, twice). The use of a 20% camphor oil solution stimulates the nervous system and assures immunity even in animals inoculated once. The spore vaccine, unlike the avirulent 24-hour culture, causes death in 11-12% of the inoculated guinea pigs. Part 1 see Ref. Zh.-Biol., 1955, 40326.

Card : 1/1

BEREZHNOY, N. F.
Omsk State Veterinary Inst. Min Higher Education USSR

BEREZHNOY, N. F.- "Nutrient media from coarsely-ground cottonseed and the outlook for their use in bacteriological practice." Omak State Veterinary Inst. Min Higher Education USSR. Omsk, 1955.

(Dissertation for the Degree of Candidate in Veterinary Sciences)

SO: Knizhnaya Letopis' No. 20, 1956

MALYSHEV, S.I., inzh.; KHOSHTARIYA, Sh.F., inzh.; GLADKOSKOK, P.P., inzh.; RADCHENKO, F.G., inzh.; Prinimali uchastiye: BOKOLISHVILI, Sh.S.; RUKHADZE, R.I.; SHARASHIDZE, S.Sh.; BEREZHNOY, N.; GORDEZIANI, N.N.; RUKHADZE, D.A.; TATARADZE, Z.

Mastering the sintering of Dashkesan ores as acceptable charge for open-hearth furnaces. Stal' 20 no. 7:584-590 Jl '60. (MIRA 14:5)

1. Zakavkazskiy metallurgicheskiy zavod.
(Dashkesan--Iron ores) (Sintering)
(Open-hearth furnaces--Equipment and supplies)

BEREZHNOY, N., krepil'shchik

Correct according to form... Sov.shakht. 13 no.2:30-31 F '64.
(MIRA 17:3)

1. Shakhta "Proletarskaya diktatura", (g.Shakhty, Rostovskoy obl.)

USLONTSEV, B., nauchnyy sotrudnik; BEREZHNOY, N.

Using three-step blocks in building cow barns. Sel'. stroi. 14 no.11:9-11 N '59 (MIRA 13:3)

1. Akademiya stroitel'stva i arkhitektury USSR (for Uslontsev).
2. Predsedatel' Izyumskogo mezhkolkhozstroya (for Berezhnoy).
(Izyum District--Dairy barns) (Building blocks)

BEREZHNOY, Nikolay; OKHANOVA, L., redaktor; SAMOLETOVA, A., tekhnicheskiy redaktor

[Permanent building brigades on collective farms] Postoiannaia stroitel'naia brigada v kolkhoze. [Stalino] Stalinskoe obl. izd-vo, 1956. 14 p. (MLRA 10:1)

1. Brigadir stroitel'noy brigady kolkhoza imeni Karla Marksa, Selidovskogo rayona. (for Berezhnoy)
(Collective farms) (Building trades)

YAROVOY, L.V.; BEREZHNOY, M.A.; SHALOMAYENKO, V.A.; BIRYUKOVA, V.F.

Clinical and epidemiological characteristics of a familial outbreak of encephalitis. Sov. med. 25 no.10:130-131 O '61. (MIRA 15:1)

1. Iz kliniki infektsionnykh bolezney (zav. - dotsent L.V.Yarovoy) i kliniki nervnykh bolezney (zav. - dotsent M.A.Berezhnoy) Stavropol'skogo meditsinskogo instituta.
(ENCEPHALITIS)

BEREZHNOY, M., general-mayor aviatsii

Control of execution, a method of party leadership. Komm. Vooruzh. Sil 5 no.24:20-26 D '64.

(MIRA 18:2)

BEREZHNOY, Konstantin Leont'yevich, kand. ist. nauk; OSIPOV, Mikhail Georgiyevich, zhurnalist; BEREZIN, I.A., red.

[On the rise; story about the "Proletarskaia Volia" Collective Farm in Stavropol Territory] Na vzlete; rasskaz o kolkhoze "Proletarskaia volia" Stavropol'skogo kraia. Moskva, Sovetskaia Rossiia, 1964. 124 p. (MIRA 17:8)

A Mutually Useful Exchange of Experience

produced and sent to all instructors of the Chair working in 30 branches and training-consultation points of the institute.

ASSOCIATION: Vsesoyuznyy zaochnyy politekhnicheskiy institut (All-Union Polytechnical Correspondence Institute)

22(1) SOV/3-59-3-38/48

AUTHOR: Berezhnoy, K.L. Candidate of Historical Sciences, Docent

TITLE: A Mutually Useful Exchange of Experience (Oboyudno poleznyy obmen opytom)

PERIODICAL: Vestnik vysshey shkoly, 1959, Nr 3, pp 73-74 (USSR)

ABSTRACT: The idea of establishing contacts and an exchange of experience between the Chair of Marxism-Leninism of the Peking People's University and the Chair of KPSS History of the All-Union Polytechnical Correspondence Institute arose after the instructor T.N. Avdey had been in China. A group of instructors wrote a letter to the People's University, and in the reply received, the Chinese comrades told of their successes and of the method they have adopted in conducting a course of Marxism-Leninism. The letter from China was re-

Card 1/2

KORABLIN, V.V.; [illegible]

Testing the performance of horizontal separators in the Maikop gas-condensate field. Gaz. prom. 10 no.8:12-17 '65. (MIRA 18:9)

BEREZHNOY, I.V.

Importance of the determination of the moisture content of gas in gas fields for controlling hydrate formation. Gaz. delo no.12:6-7 '64. (MIRA 18:2)

1. GPU No.1 "Krasnodarneftegaz".

BEREZHNOY, I.V.

Similarity of seeds of plants from the shrubby group of the Carpathian pastures. Dop. ta pov. L'viv. un. no.7 pt.3:53-59 '57. (MIRA 11:2)

(Carpathian Mountain region--Seeds)

BERNZHNOY, I.V.

Station study of whortleberry formations in the subalpine zone of the Soviet Carpathians. Dop. ta pov. L'viv.un. no.6 pt.2:62-64 '55. (MLRA 10:3)

(Carpathian Mountains--Pastures and meadows) (Whortleberry) (Botany--Ecology)

BEREZHNOY, I.P.

Use of apogeotropism in the accelerated propagation of small-growing apple rootstocks. Agrobiologiia no.5:769-770 S-O '65.
(MIRA 18:9)

1. Azovskoye opytnoye pole Donskogo nauchno-issledovatel'skogo instituta sel'skogo khozyaystva, Rostovskaya oblast'.

BEREZHNOY, I.N.; SEROSHTAN, V.I.

Selective mining of refractory clays and kaolins by rotary excavators. Ogneupory 30 no.3:16-24 '65. (MIRA 18:5)

1. Trest "Ogneupornerud" (for Berezhnoy). 2. Nauchno-issledovatel'skiy gornorudnyy institut (for Seroshtan).

BEREZHNOY, I.N.

Complete working of refractory clay and kaolin deposits with utilization of accessory minerals. Ogneupory 27 no.6:257-264 '62. (MIRA 15:5)

1. Trest "Ogneupornerud".
(Fireclay) (Kaolin)

BELEZHNOY, I.N.

Further improvement of operations in fire clay and kaolin mines. Ogneupory 26 no.1:10-18 '61. (MIRA 14:2)

1. Trest "Ogneupornerud."
(Fire clay) (Kaolin) (Mining machinery)

BIRZHNOY, Ivan Nikolayevich; ZAYCHENKO, Grigoriy Evlampiyevich; GOLOVANENKO, I.M., red.; SHUSTOVA, V.M., red. izd-va; KARASEV, A.I., tekhn. red.

[Open-pit mining of deposits of refractory clays and kaolins] Razrabotka mestorozhdenii ogneupornykh glin i kaolinov otkrytym sposobom. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 162 p. (MIRA 11:8)
(Clays) (Strip mining)

127-10-6/24

TITLE: Mechanization of Mining Operations in the Chasov-Yar Open Mines (Mekhanizatsiya gornykh rabot na Chasov-Yarskikh kar'yerakh)

ASSOCIATION: Chasov-Yar Mining Administration (Chasov-Yar rudoupravleniye)

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress.

Card 3/3

TITLE: Mechanization of Mining Operations in the Chasov-Yar Open Mines (Mekhanizatsiya gornykh rabot na Chasov-Yarskikh kar'yerakh)

excavators and transported to external dumps in narrow-gauge cars or dump trucks;
2. Non-transport system, with distribution of overburden rocks into already mined space by means of walking type excavators of the "ЭШ-4/40" type.

In 1955, a new highly efficient mechanism was constructed in the Chasov-Yar Mine, which consisted of a "РВ-1" rotor excavator and a walking-type swing chute "ОШ-1". The capacity of the "РВ-1" rotor excavator is 600 m^3/hour and the power of installed electric motors amounts to 240 kw.

The rated capacity of the walking-type swing chute is 650 m^3/hr and the total power of installed electric motors amounts to 106 kw.

In 1956 mechanization in the Chasov-Yar open mines reduced the net cost per ton of refractory clay to 15 rubles 66 kopeks as compared to 30 rubles 47 kopeks in 1950.

The article contains 2 photos, 6 figures and 5 tables.
No references are cited.

BEREZHNOY, I.N.

127-10-6/24

SUBJECT: USSR/Mining

AUTHORS: Ktitorov, P.M., Berezhnoy, I.N. and Zaychenko, G.Ye.

TITLE: Mechanization of Mining Operations in the Chasov-Yar Open Mines (Mekhanizatsiya gornykh rabot na Chasov-Yarskikh kar'yerakh)

PERIODICAL: Gornyy Zhurnal, 1957, #10, pp 25-31 (USSR)

ABSTRACT: The Chasov-Yar refractory clay deposit has a thickness of from 1 to 12 m with an irregular hypsometry of both roof and bottom. The thickness of overburden rocks varies from 16 to 38 m.

The refractory clay in the Chasov-Yar open mine is mined with rotor excavators designed and constructed by local mine-work shops. The average capacity per excavator in 1956 was 634 tons per shift, varying from 236 tons for dump truck transport to 1,005 tons for belt conveyers transport. The belt conveyers-reloaders, 16 and 32 m long, also manufactured in the Chasov-Yar mechanical shops, are extensively used for clay transportation. Their total length in the open mines of the Chasov-Yar Mining Administration amounts to over 2.5 km.

In removing overburden rocks two systems are used:
1. The transport system, in which rock is loaded by 2-m^3

Card 1/3

BEREZHNOY, I. N.

KRITOROV, P.M.; ZAYCHENKO, G.Ye.; BEREZHNOY, I.N.

Use of conveyer belts in Chasov Yar quarries. Ogneupory 20 no.6: 269-276 '55. (MLRA 9:1)

1. Chasov-Yarskoye rudoupravleniye.
(Chasov Yar--Quarries and quarrying) (Conveying machinery)

KTITOROV, P.M.; BEREZHNOY, I.N.; ZAYCHENKO, G.Ye.

Working the overlying strata with use of an ESH-4/40 excavator and without transportation. Ogneupory 18 no.4:159-163 Ap '53.
(MIRA 11:10)

1.Chasov-Yarskoye rudoupravleniye.
(Excavating machinery)

BEREZHNOY, I.N.

"Complex mechanization of the process for obtaining refractory clays"
Ogneupory, no. 7, 1949

HEREZHNOY, I., agronom

Machinery for tea plantations. Nauka i pered. op v sel'khoz 9 no.5:68-70 My '59. (MIRA 12:8)
(Tea machinery)

BEREZHNOY, I.M.

TYURIN, I.V., akademik, glavnyy redaktor; ALIYEV, G.A., akademik, glavnyy redaktor; KISLYAKOV, V.D., professor, otvetstvennyy redaktor[deceased] VOLOBUYEV, V.P., otvetstvennyy redaktor; IVANOVA, A.N., kandidat sel'skokhozyaystvennykh nauk, redaktor; EMIR-SHAKH, A.S., redaktor; BEREZHNOY, I.M., redaktor izdatel'stva; MAKUNIN, Ye.V., tekhnicheskiy redaktor.

[Development of tea cultivation in Azerbaijan along with other branches of agriculture] Razvitie kul'tury chaia Azerbaidzhane v sochetanii s drugimi otrasliami sel'skogo khoziaistva. Moskva, 1957. 409 p. (MLRA 10:5)

1. Akademiya nauk SSSR. Sovet po izucheniyu poizvoditel'nykh sil. 2. Akademiya nauk Azerb.SSR (for Aliyev) 2. Sovet po izucheniyu proizvoditel'nykh sil Akademii nauk SSSR (for Kislyakov) 3. Chlen-korrespondent Akademii nauk Azerb.SSR (for Volobuyev).
(Azerbaijan--Tea) (Azerbaijan--Agriculture)

BEREZHNOY, I.M.

Tea. Nauka i pered.op.v sel'khoz.7 no.1:85-87 Ja '57. (MLRA 10:2)
(Tea)

BREZHNOV, Ivan Mikhaylovich; TAIROVA, V.N., redaktor; ZUBRILINA, Z.P., tekhnicheskiy redaktor

[Cultivation practices for tea] Agrotekhnika chainogo rasteniia. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 69 p. (MLRA 9:11)
(Tea)

[Subtropical plants] Subtropicheskie kul'tury. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1951. 576 p. (MLRA 10:9)
(Tropical plants)

BEREZHNOY, I.M.; IVANOVA, A.N.; SELETSKIY, I.M.

[Growing tea]Kul'tura chaia. Moskva, Gos.izd-vo sel'khoz. lit-ry, 1950. 265 p. (MIRA 15:11)

(Tea)

BEREZHNOY, I. M.

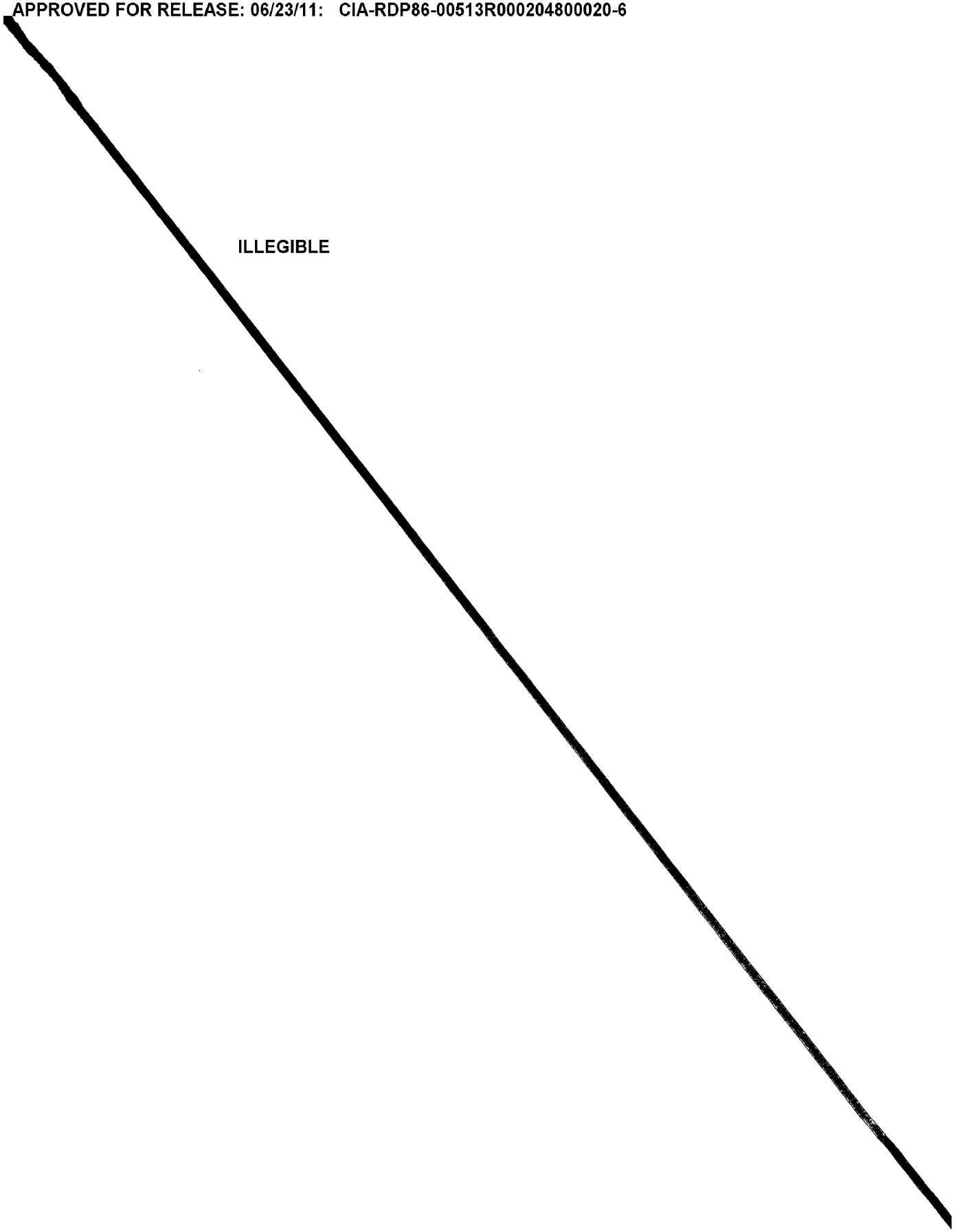
BEREZHNOW, I M

Kul'tura chaya v SSSR. (Tea Cultivation in USSR) Moskva.

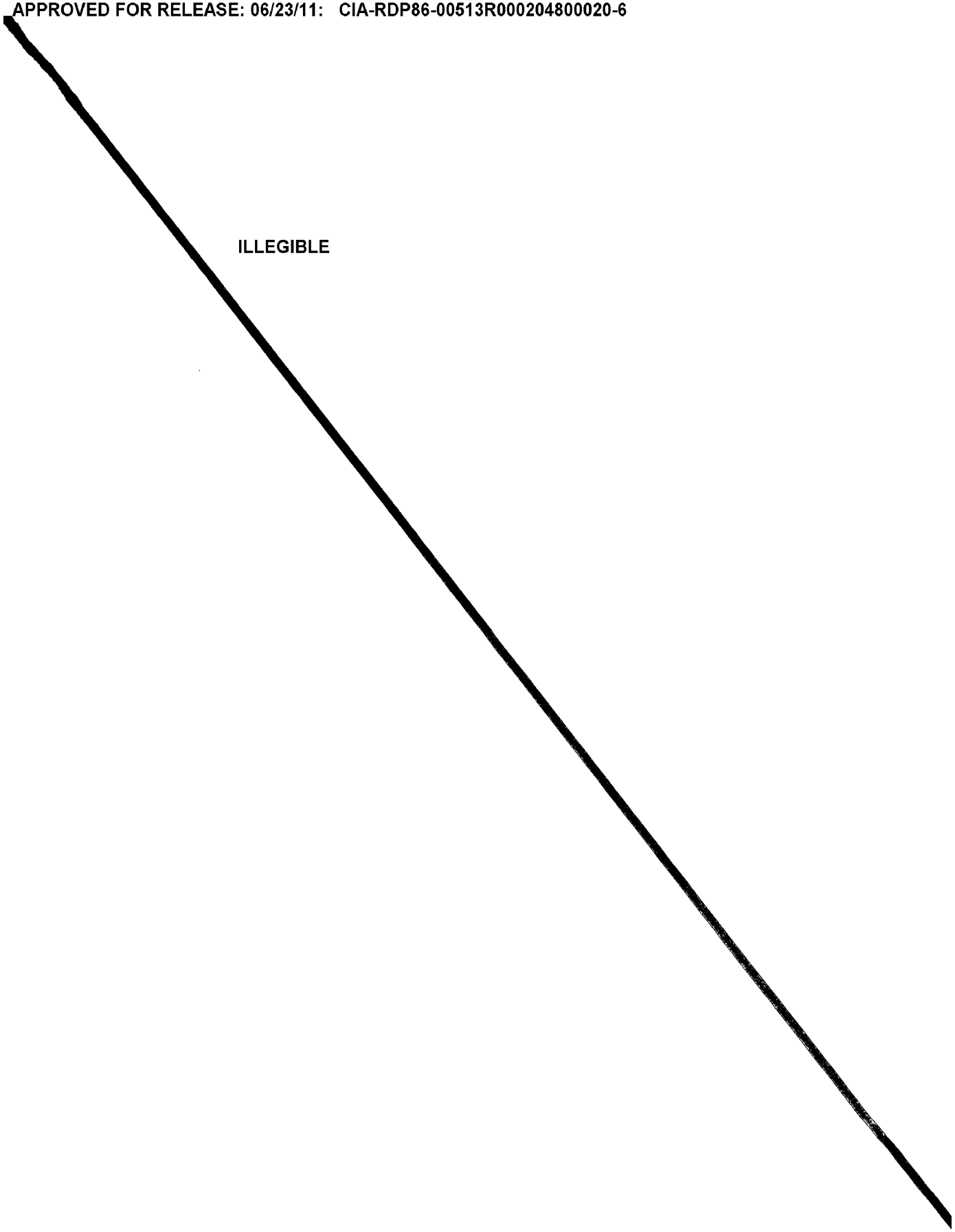
Sel'khozgiz, 1950.
94 p. Illus., Diagms.
"Isyl'zovannaya Literatua":
p. 94, 95)

Information about tea cultivation in sun tropic areas of the Georgian and Alabama SSR and the Krasnokarsk region. Gook is intended for agricultural technicians and field team-leaders.

ILLEGIBLE



ILLEGIBLE



BEREZHNOY, I.A. (Voronezh); IVLEV, D.D. (Voronezh)

Torsion of prismatic rods from ideally plastic material taking microstress into account. PMTF no.5:154-157 S-O '63.

SHTENGEL'MEYYER, S.V.; SMIRNOV, A.N.; SUBBOTIN, A.I.; KAGASOV, V.M.; GRINKIN, G.K.; BEREZHNOY, I.A.; MIRIMANOV, G.I.

Exchange of experience. Zav. lab. 28 no.9:1142-1144 '62. (MIRA 16:6)

1. Institut metallurgii Ural'skogo filiala AN SSSR (for Shtengel'meyyer). 2. Gor'kovskiy politekhnicheskiy institut (for Smirnov, Subbotin). 3. Karagandinskiy metallurgicheskiy zavod (for Kagasov, Grinkin). 4. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i gidroenergetiki (for Mirimanov). (Scientific apparatus and instruments)

BEREZHNOY, G.P.; MIKHAYLOVA, N.P., inzh.

Welding of rails on the track. Put' i put. khoz. 9 no.3:12 '65.
(MIRA 18:6)

1. Zamestitel' nachal'nika rel'sosvarochnogo predpriyatiya No.27, stantsiya Kastornaya-Novaya, Yugo-Vostochnoy dorogi (for Berezhnoy).
2. Stantsiya Kastornaya-Novaya, Yugo-Vostochnoy dorogi (for Mikhaylova).

BEREZHNOY, Georgiy Kirillovich[Berezhnyi, H.K.], agitator; TOCHENYY, P.A.[Tochenyi, P.A.], red.; LIMANOVA, M.I., tekhn. red.

[In close contact with life] U tisnomu zv'iazku z zhyttiam. Kharkiv, Kharkivs'ke knizhkove vyd-vo, 1961. 14 p. (MIRA 15:1)

1. Aparatoskladochnyy tsekh zavoda "Elektromashina", Khar'kov (for Berezhnoy).

(Kharkov--Electric machinery industry)

BEREZHNOY, G.D.; KHOMIKOVSKIY, P.M.; MEDVEDEV, S.S.; POLUYAN, I.V.

Effect of the addition of emulsifying agents on the course of the emulsion polymerization of styrene. Vysokom. soed. 6 no. 5:891-895 My '64. (MIRA 17:6)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova i Fiziko-khimicheskiy institut imeni Karpova.

MEDVEDEV, S.S.; KHOMIKOVSKIY, P.M.; SHEYNKER, A.P.; ZABOLOTSKAYA, Ye.V.; BEREZHNOY, G.D.

Some laws governing emulsion polymerization. Probl.fiz.khim. no.1:5-17 '58. (MIRA 15:11)

1. Laboratoriya polimerizatsionnykh protsessov Nauchno-issledovatel'skogo fiziko-khimicheskogo instituta im. Karpova.

(Polymerization) (Emulsions)

S/190/61/003/012/008/012
B124/B101

Study of the emulsion (latex)...

E. Cochain, Trans. Inst. Rubber Ind., 28, 297, 1952

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology). Fiziko khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute imeni L. Ya. Karpov)

SUBMITTED: January 14, 1961

Fig. 1. Effect of the PP concentration [%] on v and P_n. SL (2 % of the aqueous phase) is used as an emulsifier: 1) according to the equation $v = c_1[I]^{1/2}$; 2) according to the equation $P_n = c_{1,1}[S]^{3/4}[I]^{1/2}$.

Fig. 2. Effect of the DN concentration on v and P_n. SL (2 %) is used as an emulsifier: 1) according to the equation $v = c_1[I]^{1/2}$; 2) according to the equation $P_n = c_{1,1}/[I]^{1/2}$.

Card 4/4

Study of the emulsion (latex)...

with increasing emulsifier concentration, and does not vary with the conversion degree provided the emulsifier concentration is kept constant. Assuming that termination takes place by the interaction of two polymer radicals, the equation: $P_n = c_{tot}[S]^{0.5}/[I]^{0.5}$ (1) holds for PP, and the equation $P_n = c_{tot}/(I)^{0.5}$ (2) for DN and BP, where [S] is the emulsifier concentration in the aqueous phase, [I] is the initiator concentration in the aqueous phase, and (I) is the initiator concentration in the adsorptive layers of the emulsifer. At high initiator concentrations, a deviation from the above-mentioned relationship was observed. The woman-students N. Petukhova and I. Korobanova participated in the work. T. Krishan (Ref. 8: Candidate Dissertation, Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov), 1959) is mentioned. There are 7 figures, 2 tables, and 12 references: 9 Soviet-bloc and 3 non-Soviet-bloc. The three references to English-language publications read as follows: E. Wilson, J. Miller, E. Rowe, J. Phys. Chem., 53, 357, 1949; S. Maron, M. Elder, J. Ulevitch, J. Colloid Sci., 9, 89, 263, 374, 1954;

Card 3/4

Study of the emulsion (latex)...

dependence of v and P_n on the concentrations of PP (Fig. 1) and DN (Fig. 2) at constant SL concentration, and the effect of the SL concentration on v and P_n at constant PP concentration (Fig. 3) were investigated. The effect of the concentration of the emulsifier MK on v and P_n at variable DN concentration is illustrated in Fig. 4. The number of polymer particles (PMP) and their total surface area (S_{total}) per unit volume of latex increases with rising emulsifier concentration, whereas the mean PMP diameter decreases with rising concentration of the emulsifier. The total surface area of PMP does not vary with the concentration region, while the increase of their mean diameter with the concentration decreases nearly linear. At constant concentrations of the emulsifier MK (1 and 3 %, respectively), the total surface area of PMP and their diameter remain unchanged even if the initiator concentration is increased by a factor of 40. When PF is used, S_{total} of PMP is proportional to the square root of MK concentration. Hence, the relation between v and S_{total} is linear. The same holds for DN. The degree of conversion of PMP increases linearly

Card 2/ 4

S/190/6 /001/012/006/012
B124/B101

AUTHORS: Bereshnoy, G. D., Khomikovskiy, P. M., Medvedev, S. S.

TITLE: Study of the emulsion (latex) polymerization of styrene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. [illegible], 1839-1845

TEXT: The polymerization of styrene is studied in emulsions stabilized with the emulsifier MK (MK) (a mixture of C_{12} to C_{18} alkyl sulfonates with the average composition $C_{15}H_{31}SO_3Na$) and sodium laurate (SL). Polymerization was initiated by potassium persulfate (PP), azoisobutyrodinitrile (DN), and benzoyl peroxide (BP). The methods used to determine the polymerization rate (v) and the mean polymerization degree (P_n) had been described by the authors in Ref. 1 (Vysokomolek. soyed. 2, 1414, 1960). All polymerization experiments were performed at 50°C, using a volume ratio of monomer to emulsifier solution = 1:3. The polymerization rate is given in grams of polymer per 100 milliliters of aqueous phase per minute. The

Card 1/04

BEREZHNOY, G.D.; KHOMIKOVSKIY, P.M.; MEDVEDEV, S.S.

Kinetics of the emulsion polymerization of styrene. Vysokom. soed. 2 no.1:141-152 Ja '60. (MIRA 13:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii i Fiziko-khimicheskiy institut im. L.Ya.Karpova.
(Styrene) (Polymerization)

Berezhnoy, G.D.

SOV/81-59-10-37461

Translation from: Referativnyy Zhurnal. Khimiya, 1959, Nr 10, p 577 (USSR)

AUTHORS: Medvedev, S.S., Khomikovskiy, P.M., Zheymker, A.P., Zabolotskaya, Ye.V., Berezhnoy, G.D.

TITLE: The Regularities of Emulsion Polymerization

PERIODICAL: V sb.: Probl. fiz. khimii. Nr 1, Moscow, Goskhimizdat, 1958, pp 5-17

ABSTRACT: A review. There are 13 references.

Card 1/1

BEREZHNOY, G.D.

Copolymerization of bivinyl with fumaric and maleic acid esters. M. F. Margaritova and G. D. Berezhnoi. *Trudy Moskov. Inst. Tonkoi Khim. Tekhnol.* 1956, No. 6, 41-55; *Referat. Zhur. Khim.* 1957, No. 42816.—The copolymerization of bivinyl (I) with diethyl fumarate (II), diethyl maleate (III), dinonyl fumarate (IV), and dinonyl maleate (V) were studied. The copolymerization consts. were detd. to be: $k_{I\,I}/k_{I\,II}$ = 2.13, $k_{II\,II}/k_{II\,I}$ = 0.26, $k_{I\,I}/k_{I\,III}$ = 3.09, $k_{III\,III}/k_{III\,I}$ = 0.11, $k_{I\,I}/k_{I\,IV}$ = 2.02, $k_{IV\,IV}/k_{IV\,I}$ = 0.02, $k_{I\,I}/k_{I\,V}$ = 5.86, and $k_{V\,V}/k_{V\,I}$ = 0.12. All these consts. were calcd. by the approx. equation (Gindin, *et al.*, *C.A.* 42, 5715c). Calcns. by the exact equation give for the system I-V $k_{I\,I}/k_{I\,V}$ = 5.87 and $k_{V\,V}/k_{V\,I}$ = 0.15. Calcns. show that links of the ester consist of a single monomeric mol., while the links of the bivinyl at high content of I in the original mixt. consist of a large no. of mols. of I (50-60 units). A study of the relation between vitrification temp. of the copolymers and their compn. showed that in the case of copolymers of I with II or IV there is an increase in the vitrification temp. with an increase of the ester and polymer contents. In the case of copolymers of I with III or V the curve expressing this relation passes through a max. This is attributed to changes in the intra- and intermol. interaction with a change of the ester content of the mixt.

M. Hosch

BERNZHNOY, F.

Concerning the article "Applied sports for training of firemen should be closer to practical use" by N.Platonov. Pozh. delo 6 no. 11:19 N '60. (MIRA 13:12)

1. Zamestitel' nachal'nika Upravleniya pozharnoy okhrany Mosoblispolkoma.

(Firemen--Education and training)
(Platonov, N.)

ACC NR: AP7004766 (N) SOURCE CODE: UR/0413/67/000/001/0081/0081

INVENTOR: Troyanovskaya, G. I.; Bereznikov, V. V.; Grib, V. V.; Alekseyev, N. M.; Mironov, O. G.

ORG: None

TITLE: A method for studying processes of sliding friction in a vacuum. Class 42, No. 190043

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1967, 81

TOPIC TAGS: friction, vacuum technique, surface property

ABSTRACT: This Author's Certificate introduces a method for studying processes of sliding friction in a vacuum. The procedure consists of placing two specimens in a vacuum chamber and moving them against one another under a load. In order to study friction processes between absolutely clean (juvenile) surfaces, the oxide film is sheared from the surfaces of the specimens before and during testing in the vacuum chamber.

SUB CODE: 20/ SUBM DATE: 26Jun65

Card 1/1 UDC: 620.1.05:621.91.071+620.178.162.4:533.5

ACC NR: AP7004758 (N) SOURCE CODE: UR/0413/67/000/001/0053/0053

INVENTOR: Kaleko, D. M.; Yemchenko-Rybko, V. P.; Berezhnoy, E. G.

ORG: None

TITLE: A method for capacitor arc welding. Class 21, No. 189964 [announced by the Institute of Electric Welding imeni Ye. O. Paton (Institut elektrosvarki)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1967, 53

TOPIC TAGS: arc welding, capacitor, welding electrode

ABSTRACT: This Author's Certificate introduces a method for capacitor arc welding with ionization of the arc gap. The welding is done with an electrode made from a nonrefractory metal which burns during welding to increase economy and make it possible to weld without a shielding gas.

SUB CODE: 13/ SUBM DATE: 24Feb66

Card 1/1 UDC: 621.791.753

L 20769-66 EWA(h)/EWP(k)/EWT(m)/T/EWP(v)/EWP(t) JD/HM

ACC NR: AP6009557 SOURCE CODE: UR/0413/66/000/005/0114/0114

INVENTOR: Moravskiy, V. E.; Kaleko, D. M.; Yemchenko-Rybko, V. P.; Berezhnoy, E. G.

ORG: none

TITLE: Method of stored-energy arc welding. Class 49, No. 179599 [announced by Electric Welding Institute im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 114

TOPIC TAGS: stored energy welding, arc welding

ABSTRACT: This Author Certificate introduces a method for stored-energy arc welding with excitation of the arc between the electrode and welded part. To localize the high-temperature zone in welding ultrathin sections, the distance between the electrode and the part is kept constant, and the arc is initiated by ionization of the arc gap. [AZ]

SUB CODE: 13/ SUBM DATE: 15Apr63/ ATD PRESS: 4224

Card 1/1 UDC: 621.791.762.5

BEREZHNOY, E. F.

"Operational Register with a Magnetostrictive Delay Line", 1958.

Inst. Exact Mechanics and Computing Techniques, Acad. Sci. USSR

L 04673-67

ACC NR: AP6024454

on the volt-ampere characteristics of some irradiated diodes in the forward direction. The oscillations in the volt-ampere characteristics, accompanying the negative-resistance region, could be suppressed by infrared illumination. The analysis of the data indicates that when certain relations between the recombination cross sections are satisfied in the region of small injection levels, the lifetime increases with rise of injection level, but further increase of the injection level causes a decrease in the lifetime. The presence of rising and falling sections of the lifetime explain the oscillations of the resistance of long diodes. If the increase in the lifetime leads to the appearance of negative resistance, then the oscillations are connected with a decrease in the lifetime on going to higher injection levels. Voltage oscillations of this type were observed in diodes compensated by the radiation defects. The authors thank S. M. Rybkin for interest in the work and a useful discussion. Orig. art. has: 5 figures and 13 formulas.

SUB CODE: 20/ SUBM DATE: 05Aug65/ ORIG REF: 004/ OTH REF: 006

kh

Card 2/2

L 04673-67 EWT(1)/T IJP(c) AT

ACC NR: AP6024454 SOURCE CODE: UR/0181/66/008/007/1985/1993

AUTHOR: Berkovskiy, F. M.; Kasymova, R. S.

ORG: Physicotechnical Institute im. A. F. Ioffe, Academy of Sciences SSSR, Leningrad (Fiziko-tekhnicheskiy institut Akademii nauk SSSR)

TITLE: Effects of charge exchange of deep impurity levels under electric injection

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 1985-1993

TOPIC TAGS: charge exchange, impurity level, semiconductor band structure, minority carrier, carrier lifetime, germanium diode, silicon diode

ABSTRACT: Charge exchange is defined here as the redistribution of bound charges among different impurity levels present in semiconductors. Using a semiconductor with two impurity levels as a model, the authors consider the dependence of the lifetime of the minority carriers on the intensity of generation, and show that as a result of the fact that the cross section for the capture may differ for the different impurity levels by several orders of magnitude, a very strong change in the occupation of the impurity levels can occur and can lead to a stronger change in the lifetime than in the presence of a single level. The experiments were made in the interval from room temperature to 77K on germanium and silicon diodes in which radiation defects were introduced by electrons of 3 Mev energy, fast reactor neutrons, and γ quanta from Co^{60}. The radiation doses were chosen such as to compensate the relatively lightly doped base region. Sections with negative resistance were observed on

Card 1/2

L 04592-67 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6033487 SOURCE CODE: UR/0413/66/000/018/0101/0101

INVENTOR: Berezhnoy, B. V.

ORG: none

TITLE: Unit for helical winding of large cylindrical articles made of thermoplastic material. Class 39, No. 186119 [announced by the All-Union Scientific Research Institute of Hydraulic Engineering and Melioration im. Kostyakov (Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii)]

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 101

TOPIC TAGS: helical winding unit, thermoplastic material, helically wound article, ~~thermoplastic material article~~, CYLINDRIC SHELL STRUCTURE

ABSTRACT: This Author Certificate introduces a unit for manufacturing large cylindrical articles helically wound from thermoplastic material. The unit consists of an extruder with movable frames, joined by a solenoid lock and carrying a mandrel, and a drive connected with frames. To increase the output, the mandrel is made of two parts: a cylindrical-conical section and an expandable cylindrical section. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 16Dec64/ ATD PRESS: 5100

Card 1/1 bdh UDC: 678.057.06: 073:621.643

BEREZHNOY, B., inzh.; NOVIKOVSKIY, V., inzh.

Water in a spiral. Izobr. i rats. no.12:5-6 '63.
(MIRA 17:2)

L 36346-66 EWT(m)/T/EWP(e)/EWP(t)/ETI IJP(c) AT/WH/WW/JG/JD
ACC NR: AP6007809 (A) SOURCE CODE: UR/0021/66/000/002/0200/0203

AUTHORS: Berezhnoy, A. S. (Corresponding member AN UkrSSR); Hul'ko, N. V.--Gul'ko, N. V.

ORG: Ukrainian Institute of Refractory Materials (Ukrayins'kyy instytut vohnetryviv)

TITLE: Subsolidus structure of the six-component system Fe_2O_3 - Cr_2O_3 - Al_2O_3 - ZrO_2 - TiO_2 - SiO_2

SOURCE: AN UkrRSR. Dopovidi, no. 2, 1966, 200-203

TOPIC TAGS: six component system, subsolidus structure, solid solution

ABSTRACT: On the basis of experimental data, thermodynamic calculations, and geometrical considerations 57 coexistent pairs of phases were determined. The results of the terahedration of 3 of 15 quanternary subsystems analyzed are presented. The six-component system below the solidus surface is composed of 16 elementary hexatopes, 10 of which are degenerated because of the formation of a continuous series of solid solutions between some phases. The investigated system is one of simplest six-component oxide systems. Orig. art. has 4 figures and 2 tables.
[NT]

SUB CODE: 11/ SUBM DATE: 27Mar65/ ORIG REF: 001/

Card 1/1

L 29333-66
ACC NR: AP6002855

a base for the manufacture of ceramics to be used at temperatures not exceeding 1800 K. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 07, 11/ SUBM DATE: 23Dec64/ ORIG REF: 004/

Card 2/2

L 29333-66 EWT(m)/T/EWP(e)/EWP(t)/ETI IJP(c) WH/WW/JD/JG
ACC NR: AP6002855 (A) SOURCE CODE: UR/0021/65/000/012/1592/1595

AUTHOR: Berezhnoy, A. S. (Corresponding member AN UkrSSR); Hul'ko, N. V.--
Gul'ko, N. V.

ORG: Ukrainian Institute of Refractories (Ukrayins'kyy instytut vohnetryviv)

TITLE: Subsolidus structure of the $CaO-MgO-Cr_2O_3-ZrO_2-TiO_2$ system and its four-component subsystems

SOURCE: AN UkrRSR. Dopovidi, no. 12, 1965, 1592-1595

TOPIC TAGS: solid solution, ~~chemistry~~, chemical composition, refractory, refractory product, refractory oxide, oxide ceramic, melting point

ABSTRACT: Sixty-one coexistent pairs of phases were found in the five-component $CaO-MgO-Cr_2O_3-ZrO_2-TiO_2$ system and the length of the conodes between the phases were determined. The elementary tetrahedra of the four $CaO-MgO-Cr_2O_3-ZrO_2$, $CaO-MgO-Cr_2O_3-TiO_2$, $CaO-Cr_2O_3-ZrO_2-TiO_2$, and $MgO-Cr_2O_3-ZrO_2-TiO_2$ subsystems containing Cr_2O_3 were drawn. The five-component system was divided into 16 elementary pentatopes and their relative volume was calculated. The presence of continuous $MgCr_2O_4-Mg_2TiO_4$ and $CaZrO_3-CaTiO_3$ solid solutions was established. It was found that the $CaTiO_3-Cr_2O_3$ and $CaTiO_3-ZrO_2$ eutectic type pseudobinary systems with limited solid solutions have eutectic temperatures of 2080 K and 2050 K, respectively. The data show that goods with high refractoriness cannot be manufactured from combinations of peroffskite and high-melting Cr_2O_3 or ZrO_2 but that they can be utilized as

Card 1/2

L 15931-66
ACC NR: AP6004511

$CaZrTi_2O_7$, $R_2Ti_2O_7$, where R = La-Lu), and more complex compounds. The thermodynamic characteristics of the compounds and reactions in the systems with MgO, CaO, SrO, and BaO are discussed, with particular emphasis on the free energy of formation of magnesium titanates, spinelides, pseudobrookites, ilmenites, and perovskites, and its dependence on temperature. Uses of the compounds as ceramics and refractories are indicated. Notable features of systems of TiO_2 with the other metals are mentioned. Multicomponent systems consisting of TiO_2 and several other oxides are also briefly discussed. Orig. art. has: 9 figures.

SUB CODE: 07/ SUBM DATE: 00/ ORIG REF: 026/ OTH REF: 036

Card 2/2

L 15931-66 EWT(m)/EWP(b)/EWP(e)/EWP(t) IJP(c) WH/JD
ACC NR: AP6004511 SOURCE CODE: UR/0063/65/010/005/0525/0531

AUTHOR: Berezhnoy, A. S. (Corresponding Member AN SSSR)

ORG: none

TITLE: Systems including titanium dioxide and prospects for their use in modern technology

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 10, no. 5, 1965, 525-531

TOPIC TAGS: titanium compound, titanium dioxide, phase diagram, oxide ceramic, refractory, free energy

ABSTRACT: Systems formed by TiO_2 with oxides of other metals and illustrates of the phase diagrams of $MgO-TiO_2$, $CaO-TiO_2$, $SrO-TiO_2$, and $BaO-TiO_2$ are reviewed. Among the compounds formed, the most common are the following structural types: inverted spinels (Mg_2TiO_4, Zn_2TiO_4, Mn_2TiO_4, Fe_2TiO_4, Co_2TiO_4), pseudobrookites (Fe_2TiO_5, Al_2TiO_5, $MgTi_2O_5$, $FeTi_2O_5$, $CoTi_2O_5$), ilmenites ($FeTiO_3$, $MgTiO_3$, $ZnTiO_3$, $MnTiO_3$, $CoTiO_3$, $NiTiO_3$), perovskites ($CaTiO_3$, $SrTiO_3$, $BaTiO_3$), pyrochlores ($Cr_2Ti_2O_7$,

Card 1/2 UDC: 546.824

BEREZHNOY, A.S.; GUL'KO, N.V. [Hul'ko, N.V.]

Subsolidus structure of the system CaO - MgO - Cr_2O_3 - ZrO_2 - TiO_2 and its four-component subsystems. Dop. AN UkSSR no.10:1592-1595 '65. (MIRA 19:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
2. Chlen-korrespondent AN UkrSSR (for Bereznoy). Submitted December 23, 1964.

BEREZHNOY, A.S.; GUL'KO, N.V.

Subsolidus structure of the six-component system $MgO - Cr_2O_3 - Al_2O_3 - ZrO_2 - TiO_2 - SiO_2$. Ukr. khim. zhur. 31 no.9:881-887 '65. (MIRA 18:11)

1. Ukrainskiy institut ogenuporov.

BEREZHNOY, A.S.

Systems with titanium dioxide and prospects of their use in modern technology. Zhur.VKHO 10 no.5:525-531 '65.
(MIRA 18:11)

1. Chlen-korrespondent AN SSSR.

BEREZHNOY, A.S.; GUL'KO, N.V.

Subsolidus structure of the four-component systems $MgO - Cr_2O_3 - Al_2O_3 - SiO_2$, $MgO - Cr_2O_3 - Al_2O_3 - TiO_2$, and $MgO - Cr_2O_3 - Al_2O_3 - ZrO_2$. Dokl. AN SSSR 164 no.2: 384-386 S '65. (MIRA 18:9)

1. Ukrainskiy institut ogneuporov, Khar'kov. Submitted February 27, 1965.

L 2013-66
ACCESSION NR: AP5023965

ENCLOSURE: 03

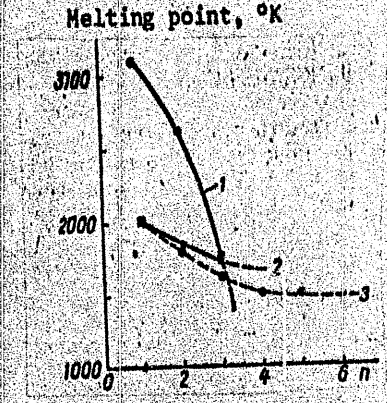


Fig. 3

Card 5/5

L 2013-66

ACCESSION NR: AP5023965

ENCLOSURE: 02

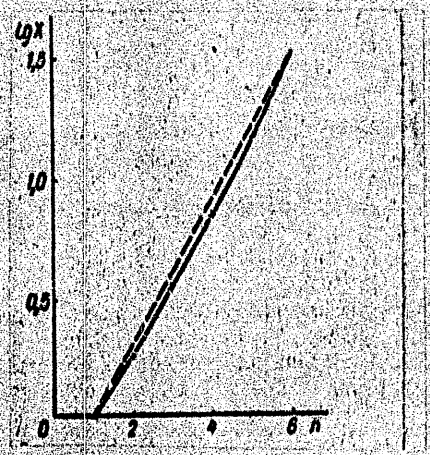


Fig. 2

Card 4/5

L 2013-66
ACCESSION NR: AP5023965

ENCLOSURE: 01

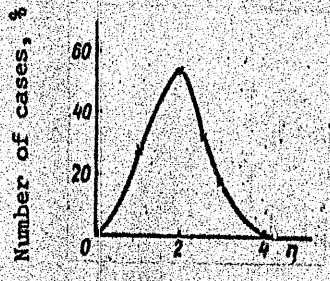


Fig. 1

Card 3/5

L 2013-66
ACCESSION NR: AP5021965

2

dence of the maximum (1) and minimum (2) melting temperatures of crystalline phases and of the melting temperature of the lowest melting eutectic (3) among the subsystems of the hexacomponent system MgO -Cr_2O_3-Al_2O_3-ZrO_2-TiO_2-SiO_2 upon the number of subsystems or phases, n, is shown in fig. 3 of the Enclosure. Orig. art. has: 4 tables, 7 figures.

ASSOCIATION: Ukrainskiy institut ogneuporov (Ukrainian Institute of Refractory Materials)

15

SUBMITTED: 09Feb65 ENCL: 03 SUB CODE: MT, SS

NO REF SOV: 006 OTHER: 000

Card 2/5

L 2013-66 EWP(e)/EWT(m)/EWP(1)/ETC/EPF(n)-2/EWG(m)/T/EWP(t)/EWP(b)/EWA(c)
ACCESSION NR: AP5023965 JD/WW/JG/AT/WH
UR/0073/65/031/009/0881/0887
62-503.4

AUTHOR: Berezhnoy, A. S.; Gul'ko, N. V.

TITLE: Subsolidus structure of a hexacomponent system $MgO-Cr_2O_3-Al_2O_3-ZrO_2-TiO_2-SiO_2$

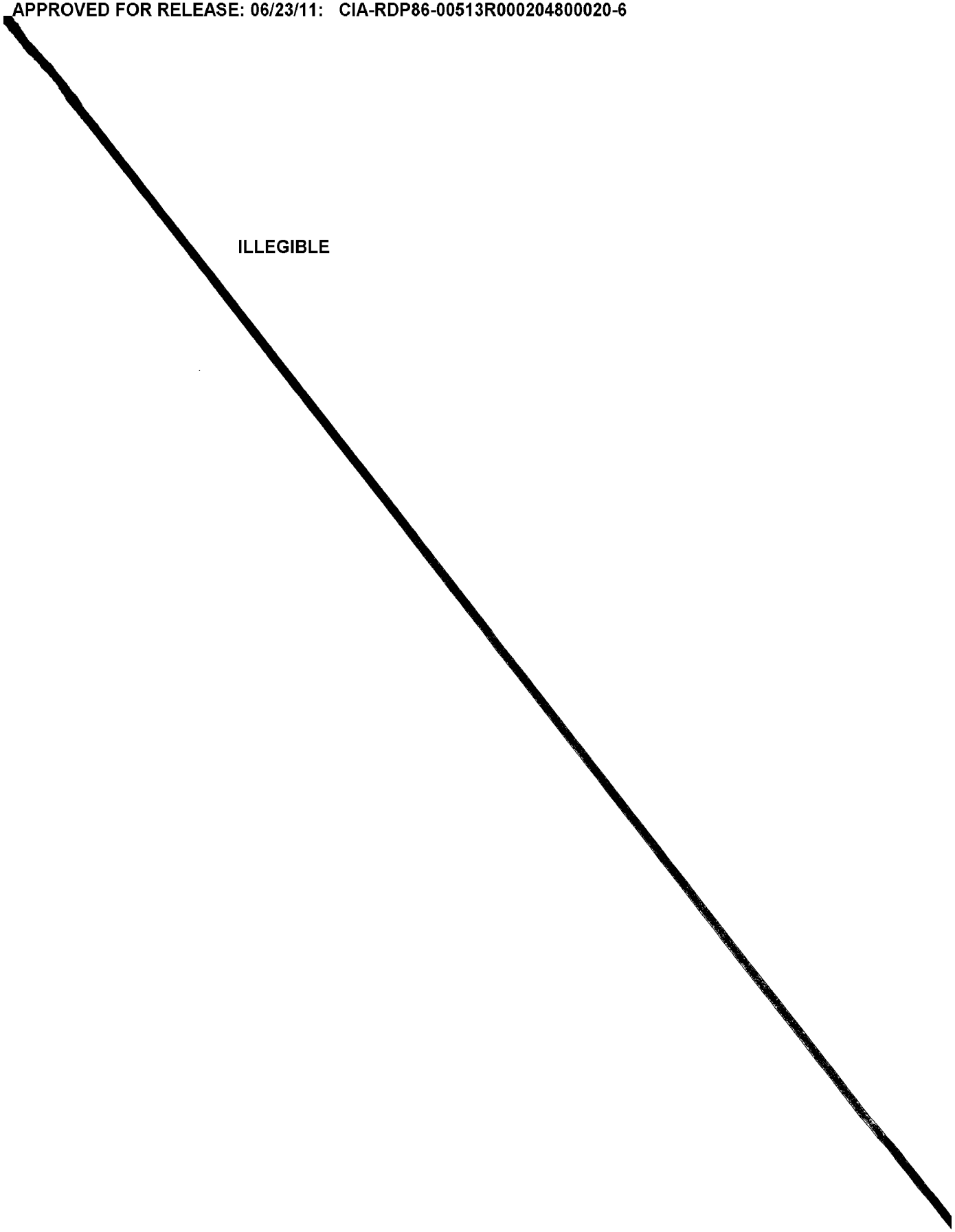
SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 9, 1965, 881-887

TOPIC TAGS: solid solution, refractory oxide, phase diagram, phase equilibrium, ceramic product

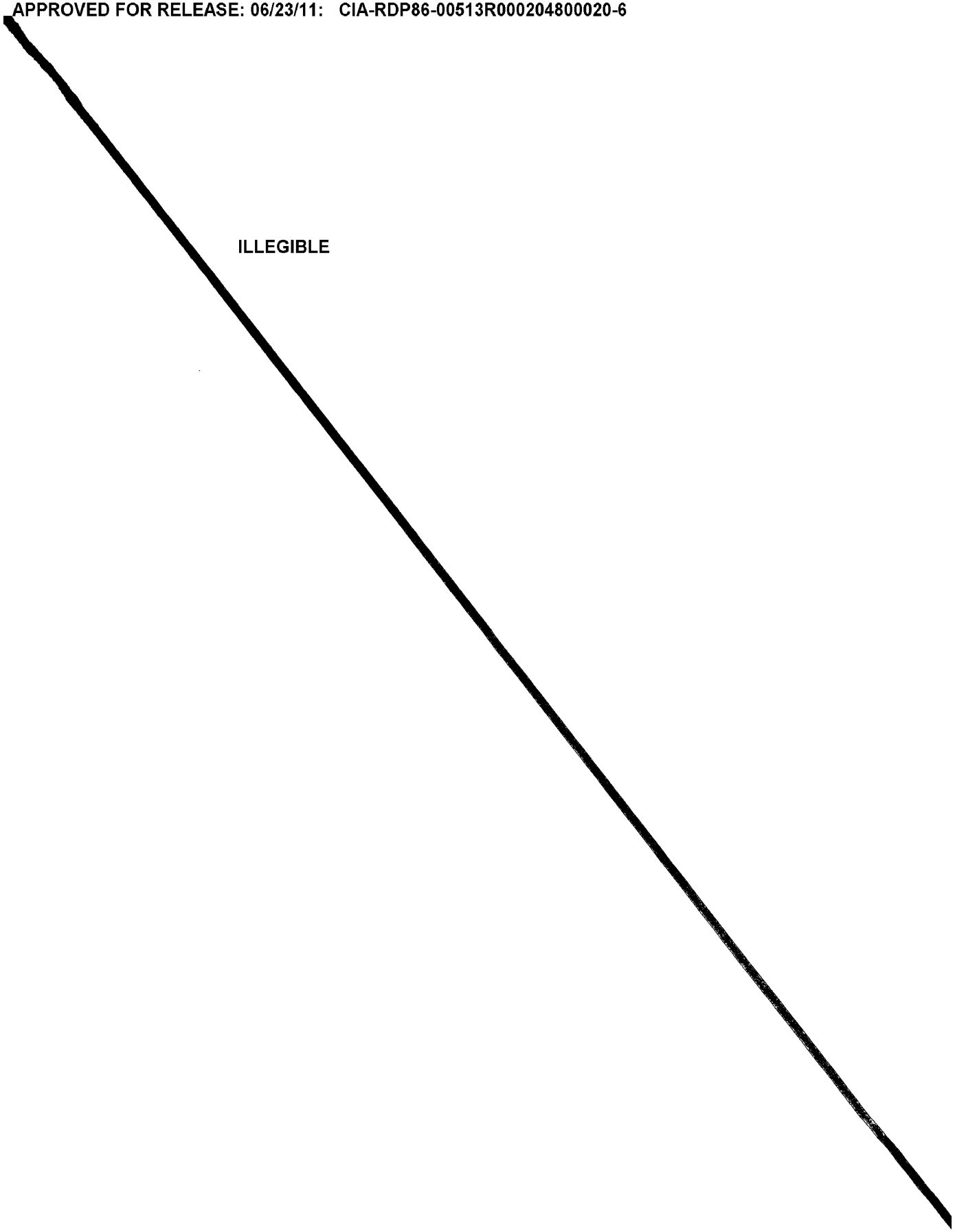
ABSTRACT: The subsolidus structure of $MgO-Cr_2O_3-Al_2O_3-ZrO_2-TiO_2-SiO_2$ was studied in detail. The complexity of this system is reflected in occurrance of 99 conodes between the neighboring phases. The distribution of conodes according to number of crystal spacings n corresponding to a concentrated hexaton of the $MgO-Cr_2O_3-Al_2O_3-ZrO_2-TiO_2-SiO_2$ system is shown in fig. 1 of the Enclosure. The dependence of the logarithm of the average number of elemental politons in subsystems of this hexacomponent system upon the number of these polytons n is shown in fig. 2 of the Enclosure. It was found that in the $MgO-Cr_2O_3-Al_2O_3-ZrO_2-TiO_2-SiO_2$ system there cannot be stable phases composed of more than 3 pure components. The depen-

Card 1/5

ILLEGIBLE



ILLEGIBLE



BEREZHNOY, A.S.

Partial density of oxygen in its compounds. Dop. AN URSR no.4: 478-481 '65. (MIRA 18:5)

1. Ukrainskiy institut ogneuporov; chlen-korrespondent AN UkrSSR.

BUDNIKOV, Petr Petrovich, akademik; OVCHARENKO, F.D., akademik, otv. red.; BEREZHNOY, A.S., red.; BUTT, Yu.M., prof., red.; MCHEDLOV-PETROSYAN, O.P., red.; AVGUSTINIK, A.I., prof.; BARZAKOVSKIY, V.P., doktor khim. nauk, red.; KUKOLEV, G.V., prof., red.; MATVEYEV, M.A., prof., red.; MCHEDLOV-PETROSYAN, O.P., prof., red.; ROYAK, S.M., prof., red.; POKROVSKAYA, Z.S., red.

[Chemistry and technology of silicates] Khimiia i tekhnologiia silikatov. Kiev, Naukova dumka, 1964. 608 p. (MIRA 17:12)

1. Akademiya nauk Ukr.SSR (for Ovcharenko). 2. Chlen-korrespondent Ukr.SSR (for Berezhnoy). 3. Chlen-korrespondent AN SSSR i deystvitel'nyy chlen Pol'skoy Akademii nauk , AN Ukr.SSR (for Budnikov).