KREJCIR, J.; KYJONKA, A.

Single purpose two-arbor milling machine. Stroj vyr 9 no.6:315 '61.

1. Sigma Olomouc, n.p., Lutin

KYJOVSKY, Milan, dr.

Utilization of scientific, technical and economic information, especially patent literature. Nova technika no.6:285-287 '60.

1. Patentovy referent, Prvni brnenske strojirny, Zavody Klementa Gottwalda, n.p., Brno.

KYKES, Oldrich, V.

Purkyne's student years at the medical school in Prague.
Cas. lek. cesk. 95 no.14:386-390 6 Apr 56.

(BIOGRAPHIES
Purkyne, J)

KYKHNE, A.M.; CHAPLIK, A.V.

Theory of inelastic atomic collisions. Zhur. eksp. i teor. fiz. 43 no.3: 889-892 '62. (MIRA 15:10)

1. Institut radiofiziki i elektroniki Sibirskogo otdeleniya AN SSSR.
(Collisions (Nuclear physics))

KYKHOVSKIY, A.I.

Some peculiarities of transforming white tin into gray. Fiz. met. i metalloved. 6 no.3:487-495 '58. (MIRA 11:10)

1. Ukrainskaya sel'skokhozyaystvennaya akademiya.
(Tin--Metallurgy) (Metallography)

BALIBALOV, I.A.; SOKOLOVA, N.N.; VARNAKOVA, N.L.; POPOV, P.D.; KYKOV, A., red.; RUDINA, G., tekhn. red.

[The stride of the seven-year plan; work results of Kuznetsk Basin workers during the first year of the seven-year plan and tasks for 1960]Shagi semiletki; itogi raboty truzhenikov Kuzbassa v pervom godu semiletki i zadachi na 1960 god. Kemerovo, Kemerovskoe knizhnoe izd-vo, 1960. 150 p.
(MIRA 15:11)
(Kuznetsk Basin--Economic conditions)

ACCESSION NR: AT3013101 S/2757/62/000/002/0091/0116

AUTHORS: Ky*kov, Ya. V.; Salpagarov, Kh. M.

TITLE: Contribution to the theory of integro-differential equations

SOURCE: AN KirgSSR. Institut fiziki, matematiki i mekhaniki. Issledovaniya po integro-differentsial'ny*m uravneniyam v Kirgizii, no. 2, 1962, 91-116

TOPIC TAGS: integrodifferential equation, Volterra equation, Grunwall Bellman inequality, periodic solution, uniqueness, stability, boundary value problem, hyperbolic integrodifferential equation

ABSTRACT: The Volterra integro-differential equation is investigated by using the generalized Grunwall-Bellman inequality. The study covers the existence of the periodic solution of the limiting mode, continuous dependence and uniqueness of the solutions and other problems. The $Y(t_0)$ stability of the solutions is examined

Card 1/2

ACCESSION NR: AT3013101

and certain theorems derived concerning them. Bounds are estimated for the solutions. Uniqueness, boundedness, stability, and estimates are also derived for the solutions of the first boundary-value problem with integro-differential equations of the hyperbolic type. Orig. art. has: 23 formulas.

ASSOCIATION: Institut fiziki, matematiki i mekhaniki AN KirgSSR (Institute of Physics, Mathematics, and Mechanics, AN KirgSSR)

SUBMITTED: 00	DATE ACQ: 30Sep63	ENCL: 00
SUB CODE: MM	NO REF SOV: 009	OTHER: 008

Card 2/2

KYLACHKIN, YA. L.

Schweissen Der Buntmetalle. Nerlin, Technik, 1952.
p. 144 Illus., Diagrs., Tables
Translation from the Russian: "S varka Tsevtnykh Metallov", Moscow, 1950.
Added T.-p. in Russian

"Literaturverzeichnis": p. 143-144.

N/5
615.927
.k6

KVLACHKO, Yu. A.

KLYACHKO, Yu.A.; ATLASOV, A.G.; SHAPIRO, M.M.

[Analysis of gases, nonmetallic impurities, and carbides found in steel] Analiz gazov, nemetallicheskikh vkliuchenii i karbidov v stali. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1953. 593 p. (MLRA 7:8)
(Steel--Analysis)

KYLAKOV, YU. I.

CZECHOSLOVAKIA/Theoretical Physics - Quantum Mechanics B-4

Abs Jour : Ref Zhur - Fizika, No 6, 1958, No 12362

Author : Kylakov, Yu.I.
Inst : Moscow State University
Title : New Proof of the Dirac Theorem

Orig Pub : Chekhosl. fiz. zh., 1957, 7, No 4, 504-505

Abstract : New proof is given for the well-known Dirac theoren concerning the form of the wave function in the p representation, corresponding to a divergent wave in the x representation.

Card : 1/1

BULGARIA/Nuclear Physics - Nuclear Reactions C-5

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 26960

Author : Kylakov Yu.I.
Inst : Moscow State University
Title : Invariant Matrix Polynomial for Total Spin S=1.

Orig Pub : Dokl. Bolg. AN, 1957, 10, No 4, 257-260

Abstract : A new derivation is offered for the matrix polynomials for S=1. Previously obtained by V.I. Ritus (Referat Zhur Fizika, 1958, No 2, 29401). To summarize the bilinear combinations of spherical tensors $G^{L,S}_{I,M}(n, \lambda)$, the author uses the reduction formula for the spherical function $Y_{lm}(\underline{n})$. The relations between the matrix polynomials $L^{l,l}_{1,1;I}(\underline{n},\underline{n})$ and the Legendre polynomials and spin operators are obtained. These relations make it possible to simplify considerably the expansion of an arbitrary interaction operator, invariant under rotation and reflection, in polynomials $L^{l,1}_{1,1;I}(\underline{n}',\underline{n})$.

Card : 1/1

KYLAKOVA, I. N.

USSR/Medicine - Cancer Aug 53

"About the Electrically Induced Reaction of Erythrocyte Precipitation," I.N. Kylakova, Pathohistol Lab, Karaganda Oblast Oncol Dispensary, Karaganda

Klin Med Vol 31, No 8, pp 79-80

Describes further research on the electrically induced reaction of erythrocyte pptn proposed by Prof A.L. Chizhevskiy. Graph shows the rapid and evenly descending curve characteristic for the blood of cancer patients. Author assumes that this method deserves further research and experimentation as a valuable aid for the diagnosis of malignancy. 273T50

KYLAROVA, K.

"Preparing and improving workers' qualifications in the training work of machine-tractor stations."

p. 514 (Mechanisace Zemedelstvi) Vol. 7, no. 22, Nov. 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

L 26488-66 EWT(1)/EWA(h)

ACC NR: AP6013067 SOURCE CODE: UR/0048/66/030/004/0620/0627

AUTHOR: Kylasov,V.A.; Lyamichev,I.Ya.; Orlov,I.N.; Pershin,G.G.; Peterimov,S.V.; Taborko,N.I.; Fok,M.V.

ORG: None

TITLE: Problems involved in the development of electroluminescent indicators and image converters /Report, Fourteenth Conference on Luminescence held in Riga, 16-23 September 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 620-627

TOPIC TAGS: real time data display, image converter, electroluminescence, phosphor, information storage and retrieval, control circuit

ABSTRACT: The paper is devoted to a general discussion of the problems involved in development of electroluminescent display screens (matrix screens) and electroluminescent converters of visible and x-ray images. In conjunction with the screens it is indicated that current research is aimed at increasing the peak brightness of electroluminescent phosphors (important because the average viewing brightness is a function of the maximum brightness multiplied by the excitation time of a screen element and divided by the interval between successive activations) and development of means for realization of information storage on or for the screen. Approaches to enhancement of brightness are improvement of the composition of phosphors and electroforming, which involves application of an ac or dc potential to the electroluminescent

Card 1/2

L 26488-66

ACC NR: AP6013067

capacitor while the binder (paraffin) is solidifying. Realization of storage is connected with development of appropriate control circuitry, including external storage components. A block diagram of a control circuit for a matrix screen with external storage is shown in a figure. Research in the field of image converters is being carried out along the lines of improving the parameters of photoconducting powdered materials in the visible and x-ray regions, theoretical and experimental determination of the optimum operating conditions for converters of different design, design development and improvement of the technology of image converters. A table gives a series of formulas that should be useful in designing new image converters. Mention is made of work on development of tubes for converting ultrasonic images to visible images. Photographs reproduced in the text show a converter image of a TV test pattern and images of x-ray pictures of some vacuum tubes and electronic components displayed on a 200 cm^2 screen. Orig. art. has: 14 formulas and 5 figures.

SUB CODE: 09,20/ SUBM DATE: 00/ ORIG REF: 005/ OTH REF: 004

Card 2/2

KYL'BERG L. M.

Aluminocresone—an improved reagent of the aluminon type. L. M. Kyl'berg and L. A. [illegible] (N.G. Chernyshevskii Sta[redacted]). *Ukrain. Khim. Zhur.* 21, 258-9(1955).—Aluminocresone (I) was prepd. as the free acid from 3 moles 2,3-cresotic acid and 1 mole paraformaldehyde at 0° in the presence of H_2SO_4 and $NaNO_2$. The product is purified by treating with NaOH followed by acidification of the Na salt with HCl. Treatment of the free acid with NH_3 gives I. It furnishes with the following cations the following colors, with the sensitivities in γ, and the limiting diln. (in this sequence): Fe^{III}, 0.002, 1:16,500,000, violet-pink; Al^{III}, 0.007, 1:5,000,000, pink; Be^{II}, 0.008, 1:400,000, raspberry-violet; Ga^{III}, 0.055, 1:80,000, pink; UO_2^{II}, 0.080, —, pink; $PtCl_6^{II}$, 1.5, 1:4500, pink. The absorption curve of the Al lake of I is presented for various pH values, the absorption max. is always at 500 mμ, it is flattest at pH 6.08, and steepest at pH 3.36. If an absorption curve is prepd. at 500 mμ, pH 4.37 at 70°, the absorption will be proportional to the amt. of Al from 0 to 12 γ. The relative error in the detn. will be about ±4%. Fe furnishes a lake with an absorption max. at 530 mμ, the absorption differs but little over the pH range 8.78-6.16; thus the detn. is done at this wave length, pH 4.37, 70°, where there is a proportionality of the light absorption from 0 to 25 γ Fe. I is extremely well suited to det. Ga in ZnO; in amts. up to 25 γ the error is about ±5%.

Werner Jacobson

KYLBOVA, V.

USSR / Cultivated Plants. Cereals. M

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34655

Authors : Kylbova, V.; Staiykov, G.
Inst : Not given
Title : Corn in the People's Republic of Bulgaria.

Orig Pub : Kukuruza, 1957, No 10, 59-61.

Abstract : Not given

Card 1/1

BULGARIA / Chemical Technology. Dyeing and Chemical Treatment of Textile. H-34

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 79941.

Author : Kylchishtov, S.
Inst : Not given.
Title : The Modern Methods of Boiling and Bleaching Cotton Fabrics.

Orig Pub: Leka promyshlenost, 1957, 6, No 4, 18-22.

Abstract: A review (methods being in use, equipment and chemical materials, continuous methods; application of $NaClO_2$). Four references are given.

Card 1/1

KYLESHOV, I. M.

Spitsyn, I. and Kyleshov, I. M. Investigation of the binary system Rb_2WO_4 - WO_3. Vict. Page 1197.

The M. V. Lomonosov
Moscow State University
February 14, 1950.

SO: Journal of Physical Chemistry, Vol. 74, No. 10. October 1950.

KYLESHOV, N

Vysotnyye zdaniya moskvy (Tall buildings of Moscow, by) N. Kyleshov A. Pozdnev.
Moskva, Moskovskiy Rabochiy, 1954.
218 p. illus

SO: 527N/5
884
.K9

KYLEVSKIY, A. A.

Turkmenistan - Fruit Culture

Local graft stocks for the Main Turkmen Canal Zone. Sad i og., no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

KÜLL, A.; KLIMOV, K.

Condensed tars from heavy fractions of shale oil.

p. 183 (Trudy) No. 2, 1956, Tallin, Estonia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

KYLL' A.T.

USSR /Chemical Technology. Chemical Products and Their Application

I-15

Treatment of solid mineral fuels

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31845

Author : Kyll' A.T., Usk I.A., Vallas K.R.

Title : Investigation of the Total Tarry Products and of Industrial Fractions of Operating Shale-Processing Installations

Orig Pub: Sb.: Goryuchiye slantsy. Khimiya i tekhnologiya, No 2, Tallin, Est. gos. izd-vo, 1956, 93-105

Abstract: Technical and physico-chemical indices are given, of the total tarry products and of the individual fractions produced at the industrial, shale-processing installations. Optimal limits of fraction cuts, are determined, in industrial distillation,

Card 1/2

USSR /Chemical Technology. Chemical Products and Their Application

I-15

Treatment of solid mineral fuels

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31845

on the basis of characteristics of distillates and distillation residues. Quality indices of fractions obtained on using different distillation processes permit to determine the advisability of carrying out atmospheric or vacuum distillation, in each specific instance. Curves are shown by means of which the corresponding drop-point temperature is determined for different amounts of residue.

Card 2/2

KYLL, A.T.

5
1-HN
4E3d

373. LIQUID PHASE STABILIZATION OF SHALE GASOLINE. Kyll, A.T., Faingol'd, S.I., and Korv, H.Yu. (Tallin: Estonian Govt, 1956, "Oil shales: Chemistry and Technology," iss. 2, 159-182; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1957, (11), 38662). Stabilization of dephenolized shale gasoline in the presence of 10% by weight of zinc chloride was studied. At atmospheric pressure after 75 h at 80°C (the main reactions lasted 10-15 h) the following percentages by weight were obtained: gasoline boiling at up to 200°C 37.9, kerosine 20.6, diesel fuel 13.1, and lubricating oil 14.6. The loss of catalyst was 0.4%. Composition of the gasoline in % by volume was: paraffin and naphthene hydrocarbons 24, unsaturated 56 and aromatic 20. On stabilization with anhydrous zinc chloride in an autoclave at 200° for 3 h, the yield of product was 92% and that of gasoline 42-52% with an octane number of 70. Two-stage purification by slow distillation of the gasoline with zinc chloride up to 200°C and keeping the residue at the same temperature for 3-8 h produced 84-86% 70 octane gasoline and 14-16% lubricating oil, with a 85-90% yield of polymerizate. Purification with zinc chloride reduces the sulphur content from 1.0 to 0.26-0.29%, removes a large part of the neutral oxygen compounds and diolefins and enables lubricating oils to be obtained.

Kyll, A.T.

6559

1929. SULPHO-PRODUCTS BASED ON LIGHT AND MEDIUM FRACTIONS OF SHALE OIL AND THEIR USE. Kyll, A.F. and Keel, E.I. (Tallin, Estonian Government, 1956, *Oil Shales: Chemistry and Technology, iss. 2, 195-202; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1957, (8), 27956). Partial treatment of dephenolized middle fractions of shale oil with sulphuric acid produces high quality surface active agents. Use of these together with the 250-350°C fraction of shale oil gives the following emulsifying agents; emulsol, carbolineum, cresolin and flotation agent. The sulpho-product obtained from the 200-250 or 170-220°C fraction also has industrial uses.

KyLLAT

ESTONIA / Chemical Technology. Processing of Solid Fuels H-22

Abs Jour : RZhKhim., No 12, 1958, No 40928

Author : ~~Kyll' A.T.~~, Alumyae, T.E.
Inst : Academy of Sciences
Title : Oxidation of Shale During Drying

Orig Pub : Izv. AN Est. SSR., Ser. tekhn. i fiz.-matem. n., 1956, 5, No. 3, 196-205

Abstract : No abstract

Card 1/1

6

KYLL, A.T.

AARNA, A.Ya. [Aarna, A.J.], doktor tekhnicheskikh nauk, retsenzent; KULL', E. [Kull, E.], kandidat ekonomicheskikh nauk, retsenzent; KÜLL', A.T., [Küll, A.T.], redaktor; KIVIT, A.A., redaktor; MIKHELIS, K.A. [Mihelis, K.A.], redaktor; GUBERGRITS, Mark Yakovlevich, redaktor; ROGINA, G.M., vedushchiy redaktor; YASHCHURZHINSKAYA, A.B., tekhnicheskiy redaktor

[Engineering and economic problems of industrial semicoking of combustible shale; a collection of papers] Voprosy tekhniki i ekonomiki promyshlennogo polukoksovaniia goriuchikh slantsev; sbornik statei. Leningrad, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, Leningr.otd-nie, 1957. 337 p. (MLRA 10:7)

1. Kivioli Polevkivikeemia Kombinaat.
(Oil shales)

KYLL, A.T.

23-58-2-3/9

AUTHOR: Köll, A.T. (Kyll', A.T.), Candidate of Chemical Sciences. Kudryavtsev, I.B., Rikken, V.A., Candidate of Technical Sciences

TITLE: On the Sulfation of Oil-Shale Tar Olefinic Hydrocarbons (O sul'fatirovanii olefinovykh uglevodorodov slantsevoy smoly)

PERIODICAL: Izvestiya Akademii nauk Estonskoy SSR, Seriya tekhnicheskikh i fiziko-matematicheskikh nauk, 1958, Nr 2, pp 105-117 (USSR)

ABSTRACT: The considerable content of olefinic hydrocarbons in the oil-shale tar found in the Baltic States is the prerequisite for obtaining synthetic detergents and wetting agents. A.T. Kyll with his coworkers have proved the possibility of obtaining surface-active substances, such as Namonoalkyl sulfates by means of sulfoesterification with concentrated sulfuric acid of olefinic hydrocarbons of dephenolized medium oil-shale fraction. Experiments have shown that sulfoproducts obtained from the oil layer, which is separated from the acid-layer, have better surface-active properties than those originating from acid-layers. Compared with "Teepol", a detergent produced in France on similar principles, and DS-RAS, a detergent developed by Institut Nefti AN SSSR (Petroleum Institute AS USSR)

Card 1/2

On the Sulfation of Oil-Shale Tar Olefinic Hydrocarbons 23-58-2-3/9

by M.A. Geyman and A.Ya. Larin, the Estonian detergent is equal to the French product and surpasses the one produced in the USSR.
There are 4 tables, 8 graphs, 1 chart and 9 references, 4 of which are Soviet, 3 English and 2 German.

ASSOCIATION: Institut khimii Akademii nauk Estonskoy SSR (Institute of Chemistry of the Academy of Sciences of the Estonian SSR)

SUBMITTED: Jan 21, 1958

Card 2/2

1. Wetting agents - Sources 2. Detergents - Sources
3. Hydrocarbons - Sulfation 4. Detergents - Evaluation

KYLL', A. T.

"Problems in connection with the use of the slates of Estonia (Estoniya)

report presented at the session of the Presidium of the Council for Co-ordination of Scientific Work of the Academies of Sciences of Union Republics and Branches (on Development of Researches on Highly Molecular Compounds) 21 June 1958. (Vest. Ak Nauk SSSR, 1958, No. 9, pp. 101-104)

Head of the Institute of Chemistry of the Academy of Sciences, Estonskaya SSR

KYLL', A. [Kõll, A.], kandidat khimicheskikh nauk; LAUS, T.; ELENURM, A.

The two-stage thermal processing of shale. Eesti tead akad tehn fuus 9 no.2:105-112 '60. (EEAI 9:12)

1. Institut khimii, Akademii nauk Estonskoy SSR.
(Shale)

Kyllandr, K.M. 5

PHASE I BOOK EXPLOITATION SOV/6205

Makarchenko, A. F., Resp. Ed.

Osnovnyye voprosy elektrofiziologii tsentral'noy nervnoy sistemy (Basic Problems in the Electrophysiology of the Central Nervous System) Kiyev, Izd-vo AN UkrSSR, 1962. 231 p. Errata slip inserted. 1600 copies printed.

Sponsoring Agency: Vsesoyuznoye fiziologicheskoye obshchestvo im. I. P. Pavlova. Institut fiziologii im. A. A. Bogomol'tsa Akademii nauk USSR.

Eds.: A. F. Makarchenko, Resp. Ed.; D. S. Vorontsov, P. G. Kostyuk, F. N. Serkov; Resp. Secretary: I. P. Semenyutin; Tech. Ed.: Yu. M. Bokhno.

PURPOSE: This book is intended for physiologists who are interested in recent advances in electrophysiology.

Card 1/3

5

Basic Problems in the (Cont.) SOV/6205

COVERAGE: The present book is a collection of articles presented at the Symposium on Electrophysiology held in Kiyev on 1-2 July 1961. The articles in the collection are grouped into the following sections: 1) Electrophysiology of neurons (sensory, motor, and relay neurons of the spinal cord, and neurons of the retina); 2) Induced electrical potentials of the cerebral cortex; and 3) Background rhythms of the cerebral cortex. References are given following the individual chapters. No personalities are mentioned.

TABLE OF CONTENTS:

Card 2/3

AVAILABLE: Library of Congress

SUBJECT: Biology and Medicine

Card 3/3

IS/dmp/bc
2-12-63

L 13483-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/WB

ACC NR: AP6002219 (N) SOURCE CODE: UR/0080/65/038/012/2832/2835

AUTHOR: Kochergin, V. P.; Kylosova, R. K.

ORG: Ural State University im. A. M. Gor'kiy (Ural'skiy gosudarstvennyy universitet)

TITLE: Oxidation of iron in molten phosphates and chlorides of sodium and zinc

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 12, 1965, 2832-2835

TOPIC TAGS: corrosion, iron, oxidation, zinc chloride, sodium chloride, phosphate

ABSTRACT: The rate of iron oxidation was studied at 850°C in the following binary salt melts: $NaCl-Zn(PO_3)_2$, $NaCl-NaPO_3$, $NaCl-Na_4P_2O_7$, and $NaCl-Na_3PO_4$. The object of the work was to learn more about the corrosive properties of molten salts, widely used high temperature lubricants. The isotherms of the average rate of iron oxidation in various melts is shown in fig. 1. The isotherms (850°C) of the average rate of iron oxidation in various melts are shown in fig. 2. The polytherms of the average rate of iron oxidation in various melts are shown in fig. 3. The rate of iron oxidation was found to increase in the sequence:

UDC: 542.943 + 546.72

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L 13483-66

ACC NR: AP6002219

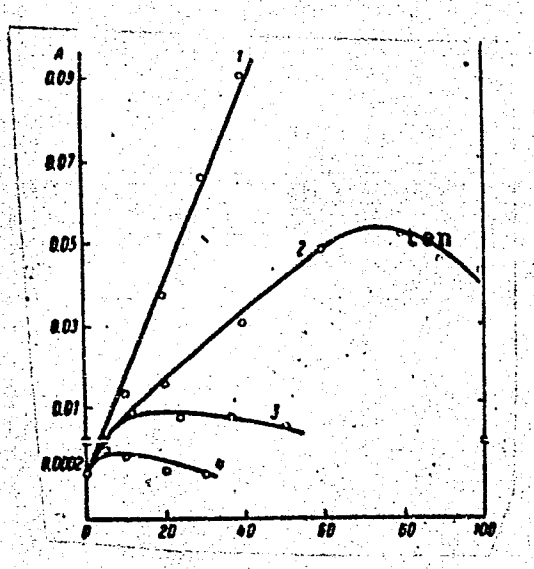

Fig. 1. Isotherms of average rate rate of iron oxidation in various melts at 850°C: A--average rate of oxidation ($g/cm^2 \cdot hour$); B--content of phosphates in the melt (wt %); 1--$NaCl-Zn(PO_3)_2$; 2--$NaCl-NaPO_3$; 3--$NaCl-Na_4P_2O_7$; 4--$NaCl-Na_3PO_4$ (80 wt % NaCl).

Card 2/4

L 13483-66

ACC NR: AP6002219

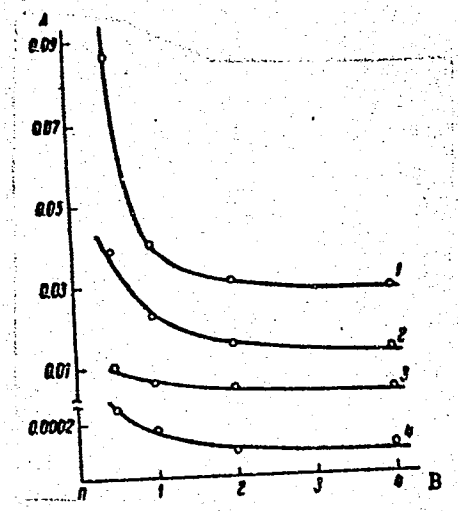

Fig. 2. Isotherms of average rate of iron oxidation in various melts; A--average rate of iron oxidation ($g/cm^2 \cdot$); B--time (hours). Other denotations same as in Fig. 1.

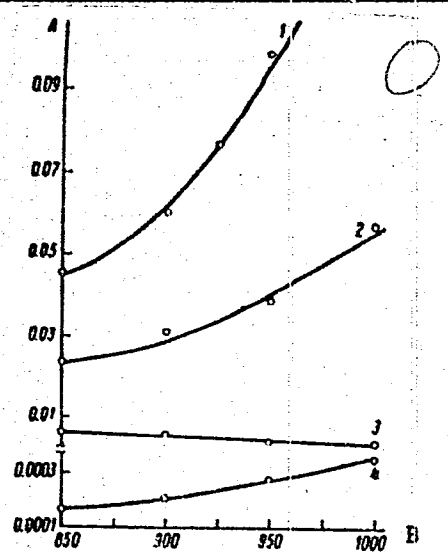

Fig. 3. A--average rate of iron oxidation ($g/cm^2 \cdot hour$); B--time (hours). Other denotations same as in Fig. 1.

Card 3/4

L 13483-66

ACC NR: AP6002219

$NaCl-Na_3PO_4$, $NaCl-Na_4P_2O_7$, $NaCl-NaPO_3$, $NaCl-Zn(PO_3)_2$. It was found that the vacuum degassing of melts was reflected in an increased rate of iron oxidation. X-ray examination revealed that in the course of oxidation in $NaCl-Na_3PO_4$ and $NaCl-Na_4P_2O_7$ the iron surface is coated with magnetite and wuestite, respectively. In the cases of oxidation in $NaCl-NaPO_3$ and $NaCl-Zn(PO_3)_2$ the iron surface is coated with respective iron salts. X-ray analysis was carried out under V. N. Konev at the laboratory of Ural University im. A. M. Gor'kiy. Orig. art. has: 4 figures.

SUB CODE: 07/ SUBM DATE: 21Aug63/ ORIG REF: 008/ OTH REF: 002

Card 4/4

0

Diseases of Cultivated Plants.

Abs Jour : Ref Zhur - Biol., No 9, 1958, No 39672

Author : Kyl'pinova, M. I.
Inst : Azerbaydjan Agricultural Institute.
Title : Large Blistered Smut on Sorghum Fields and Measures to Control This Disease.

Orig Pub : Tr. Azerb. s.-kh. in-ta, 1957, 4, 151-156

Abstract : This is a description of the results of the study on the biology and contamination of sorghum by Polyposporium ehrenbergii Kuhn conducted by the author in 1950-1953 in Middle Asia. Means of controlling this disease are described.

Card 1/1

KYLYMNYK, O. V.

Myrnyi, Tanas, 1848-1920

"Soviet literary criticism." Reviewed by O. V. Kylymnyk. Visnyk AN URSR 22 No. 10, 1950.

9. Monthly List of Russian Accessions, Library of Congress, August 1952, UNCL.

KIML, Josef, inz.

Methods of analysis of the handling of materials in machine factories. Tech praca 15 no.4:274-280 Ap '63.

1. Kovotechna, Praha.

KYMOVSKIY, N.M., redaktor

[Vegetable and vine crops and potatoes] Ovoshche-bakhchevye kul'tury i kartofel'. 21 perer. izd. Alma-Ata, Kazakhskoe gos. izd-vo, 1955. 306 p. (MLRA 10:3)

(Kazakstan--Vegetable gardening) (Kazakhstan--Potatoes)

PAVEL, I.; KYAPYANU , S.; KISHIU, N.

Electrophoretic examination of blood serum proteins in experimental deficiency of vitamins A, B, C and D, and biotin. Vop.pit. 20 no.2:47-50 Mr-Ap '61. (MIRA 14:6)

1. Iz kliniki pitaniya i diyetetiki pri bol'nitse imeni doktora Kantakuzena, Bukharest, Rumyniya.
(DEFICIENCY DISEASES) (BLOOD PROTEINS)

KYMR, F

KYMR, F.

More or less average deviation for valuation of yarn? p. 118. (Textil, Praha, Vol. 9, no. 4, Apr. 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

KYMR, F

KYMR, F.

To expand progressive labor methods in all cotton spinning mills. p. 147. (Textil, Praha, Vol. 9, no. 5, May 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol. 4, No. 6, June 1955, Uncl

KMIR, F.

Dry weight of samples and commercial weight in delivery. p. 243.
TEXTIL. (Ministerstvo lehkeho prumyslu) Praha. Vol. 9, no. 8, Aug. 1954.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

KYR, F.

The winding of rovings on roving frames.

p. 101. (Veda a Vyzkum v Prumyslu Textilnim. No. 1, 1956, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 195?

Kynchev, K.S.

136-12-6/18

AUTHORS: Mechenov, P.I. Candidate of Technical Sciences, and Kynchev, K.S.

TITLE: Practice at the Kurilo (Bulgaria) Lead Works for the Recovery of Silver from Zinc Froth (Praktika izvlecheniya serebra iz tsinkovoy peny na svintsovom zavode Kurilo (Narodnaya Respublika Bolgariya))

PERIODICAL: Tsvetnyye Metally, 1957, No.12, pp. 30 - 35 (USSR).

ABSTRACT: At the old lead works of Kurilo, the zinc froth contains 2 - 3% Ag and is melted in a 600-kg oil-fired rotary furnace (Fig.1) to which 5-10 kg of wood charcoal are added. After completion of fusion, the heating is stopped, oxide powders are removed and the charge allowed to cool. When the liquid reaches a temperature of 600 °C, the silver crust is removed and distilled. The authors give details of this practice with materials balances (Tables 1 and 2). They analyse the results in terms of the equilibrium diagram for the system Ag-Zn-Pb and describe results of experiments on the layering of the fused crust. Finally, they give results of the vacuum distillation of an enriched Ag-Zn-Pb-Cu alloy. An editorial note indicates that before the advantages of the Kurilo practice can be realised in Soviet works, difficulties due to the introduction

Card1/2 of manual labour into large-scale production must be overcome.

136-12-6/18

Practice at the Kurilo (Bulgaria) Lead Works for the Recovery of Silver from Zinc Froth

There are 3 figures, 3 tables and 3 references, 2 of which are Russian and 1 German.

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928320017-9"

KYNCHEV, P.I.

Separating and tracking the kinetics of complex specific inductive capacitance. Prib. i tekh.eksp. 6 no.4:131-136 Jl-Ag '61. (MIRA 14:9)
(Semiconductors--Electric properties--Measurement)

SKVARIL, F.; GRUNBERGER, D.; KYNCL, F.

Inhibition of the spontaneous splitting of human γ-globulin preparations by ε-aminocaproic acid. Coll Cz Chem 28 no.3: 644-651 Mr '63.

1. Institute of Sera and Vaccines, Prague, and Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague.

CZECHOSLOVAKIA

KYNCL, F

Serum and Vaccine Institute, Prague

Prague, Collection of Czechoslovak Chemical Communications, No 12, December 1966, pp 4644-4650

"Graphic method for computation of the sedimentation coefficient."

KYNCL, F.

Preparation of specimens for electron microscopy of infectious materials. Acta virol. (Praha) [Eng.] 8 no.4:381-382 Jl '64.

1. Institute of Sera and Vaccines, Prague, Czechoslovakia.

KYNCL, F.

Removal of crystals from biological preparations for electron microscopy. Folia morph. (Praha) 13 no.4:413 '65.

1. Institute of Sera and Vaccines, Prague. Submitted November 11, 1964.

L 13214-66 EWA(j)/T/EWA(b)-2 JK

ACC NR: AP6006102 SOURCE CODE: CZ/0053/65/014/004/0320/0321

AUTHOR: Waitzova, D.; Kymel, F.; Kral, Z.; Smejkal, F. 33

ORG: Research Institute for Antibiotics, Roztoky (Vyzkumny ustav antibiotik) B

TITLE: Effect of changes in the acid-base balance on nephrotoxicity of neomycin [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 320-321

TOPIC TAGS: acid base equilibrium, rat, antibiotic, neomycin, pathology, toxicology, urology

ABSTRACT: Acidosis brought on by administration of ammonium chloride reduced urinary concentration of neomycin in rats to 367 units per ml, whereas in control rats and those given nothing but sodium carbonate ($NaHCO_3$), the concentration was 834 to 837 units per ml. Neither acidification or alkalization prevented the nephrotoxic histopathologic effect of this antibiotic. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004

jrn

Card 1/1

KYNCL, J. MERT. O.

Significance of waterglass as a stabilizer in bleaching with hydrogen peroxide. p. 182.

(Textil. Vol. 12, no. 5, May 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

KYNCL, J.; MERT, O.

Significance of waterglass as a stabilizer in bleaching with hydrogen peroxide.

P. 226, (Textil) Vol. 12, no. 6, June 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

Kyncl, F.

Vocational field work for students of the Industrial School of Ceramics in the ceramic industries. p.113

(Stavivo. Vol. 35, no. 3, Mar. 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

KYNCL, Jaroslav, inz.

Maintenance regulations for motor vehicles. Zel dop tech 9 no.7:209-210 '61.

KYNCL, Jaroslav, inz.

Organization of work in the repair shops for railroad motor cars.
Zel dop tech 9 no.10:294-297 '61.

CZECHOSLOVAKIA

KYNCL, J., and WAITZOVA, D., Antibiotics Research Institute (Vyzkumny ustav antibiotik), Roztoky near Prague, Docent Engr M. HEROLD, Dr of Sciences, director.

"Contribution to the Problem of the Neuromuscular Effect of Neomycin"

Prague, Casopis Lekaru Ceskych, Vol CII, No 26, 28 June 63, pp 713-717.

Abstract [Authors' English summary, modified]: Neomycin-N-methanesulfonate has no curare-like effect. The complex of neomycin with dextrasulfate blocks the neuromuscular transmission in doses higher than 20 milligrams per kilogram of neomycin plus 60 milligram per kilogram of dextransulfate i.a. Lower doses (10 milligrams per kilogram of neomycin plus 30 milligram per kilogram of dextransulfate) in single application have no effect on contractions of m. gastrocnemius, but with repeated application the neuromuscular blockade again sets in. Neomycin with sodium polymethacrylate (ratio 1:3) seems to have no curare-like effect even in doses one degree higher than in neomycin. The neuromuscular effect of neomycin on isolated rat diaphragm may be suppressed by increasing the pH bath above 8.3. Graphs. Ten references, including 4 Czech.
1/1

WAITZOVA, D.; KYNCL, J.

Apropos of some pharmacological properties of neomycin. Cas. lek. cesk. 104 no.7:169-172 19 F '65.

1. Vyzkumny ustav antibiotik, Roztoky u Prahy (reditel: prof. M. Herold).

CZECHOSLOVAKIA

KYNCL, J.; PLISKA, Vl.; JELINEK, V.; Research Institute of Pharmacy and Biochemistry, Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences (Vyzkumny Ustav pro Farmacii a Biochemii, Ustav Organicke Chemie a Biochemie, CSAV), Prague.

"The Pressor and Antidiuretic Effect of Triglycyl^{1} - Lysine^{8} - Vasopressin."

Prague, Ceskoslovenska Fysiclogie, Vol 15, No 5, Sep 66, p 398

Abstract: The effect of triglycyl^{1}-lysine^{8}-vasopressin is much longer lasting than the effect of lysine^{8}-vasopressin. Verification of this fact by experiments on rats is described. 1 Table, no references. Submitted at 14 Days of Pharmacology at Smolenice, 15 Feb 66.

1/1

CZECHOSLOVAKIA

REZABEK, K.; KYNCL, J.; Research Institute of Pharmacy and Biochemistry (Vyzkumny Ustav pro Farmacii a Biochemii), Prague.

"Characteristics of Long-Lasting Effects of Drugs "

Prague, Ceskoslovenska Fysiologie, Vol 15, No 5, Sep 66, p 399

Abstract: The characteristics of resonance of the effects of a drug may be calculated using its elimination constant calculated on the basis of the course of its effect. The long-lasting effect may be expressed by the coefficient of persistency. This is the ratio of the elimination constant of the investigated drug to that of the basic substance. Formula for the calculation of the elimination constant is presented. It is expressed as 2.303 (log D - log d) / t, where t is the time of the experiment duration, and D and d are the two investigated doses. The persistency coefficient is specific for a given kind of animal tested. 1 Figure, 2 Western references. Submitted at 14 Days of Pharmacology at Smolenice, 15 Feb 66.

1/1

KYNCL, K.; WOLF, J.; WOLF, J. ml.

Equipment for automatic lubrication of the mold cavity in pressure die casting. Slevarenstvi 13 no.1:19-20 Ja '65.

1. Mold Research and Development Department of the Vihorlat National Enterprise, Prague.

9,2181
9,2180

Z/037/62/000/002/008/015
E073/E535

AUTHOR: Kyncl, L.

TITLE: Contribution to the process of quartz polishing

PERIODICAL: Československý časopis pro fysiku, no.2, 1962,152-156 + 2 plates

TEXT: Some results are given of experimental study of the process of quartz polishing. In contrast to grinding, which is predominantly a mechanical process, polishing is a complex combination of physical, physico-chemical and chemical phenomena which so far have not been satisfactorily explained. It was found that the polishing is effected by powders with grain sizes below 2 μ of a hardness within the limits of V to VII of the Mohs' scale, combined with the effect of H^+ and OH^- ions and the dissociated water. On the basis of the obtained results and published information, it is concluded that polishing of quartz consists of the following two simultaneous processes:
1) Mechanical energy which causes the breaking up of Si-O-Si bonds; the formed cathions and anions react with hydrogen and hydroxyl ions producing various forms of silicic acid.

Card 1/2

Contribution to the process of ... Z/037/62/000/002/008/015
E073/E535

2) Dehydration of the silicic acid to a salt and gel, which combine with the broken Si-O-Si bonds in the cavities of the polished surface.
There are 7 figures.

ASSOCIATION: Tesla Lanškroun, závod 05, Hradec Králové
(Tesla Lanškroun, Plant 05, Hradec Králové)

SUBMITTED: November 14, 1961

Card 2/2

KYNCL, M., inz.; SLUNECKO, M., inz.

Injection jet burners for making fine glass fibers. Sklar a keramik 15 no.2:44-46 F '65.

1. Higher School of Mechanical Engineering, Liberec.

KYNCL, Miroslav, inz. VOREL, Jiri

Microvision, a blind landing device. Letecky obzor 9 no.4:91 Ap '65.

KYNCL, Miroslav, inz.

New connection for trouble signals. Sdel tech 10 no.7:278-279 Jl '62.

KYNCL, Miroslav, inz.

Computation of polynomials of the second order on calculating machines. Automatizace 6 no.11:281-282 N '63.

L 24351-65 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h) Pf-4/Pe5 EM

ACCESSION NR: AP5005487 Z/0003/64/000/026/0872/0874

AUTHOR: Kyncl, V. (Engineer)

TITLE: The V-503--a new-concept variable-pitch airscrew

SOURCE: Kridla vlasti, no. 26, 1964, 872-874

TOPIC TAGS: variable speed airscrew, variable pitch propeller

ABSTRACT: A new type of variable-pitch airscrew, the V-503, has been developed at the Avia aircraft plant in Letňany near Prague, Czechoslovakia. The new feature is the principle of pitch control: An increase in the flight speed is directly used for a corresponding increase in the angle of blade setting, and vice versa. During the last world acrobatic championships at Bilbao, Spain, the introduction of this airscrew stirred great interest among pilots and designers. The characteristic feature of this propeller is the presence of small fins on the independently rotating airscrew cap (Fig. 1).

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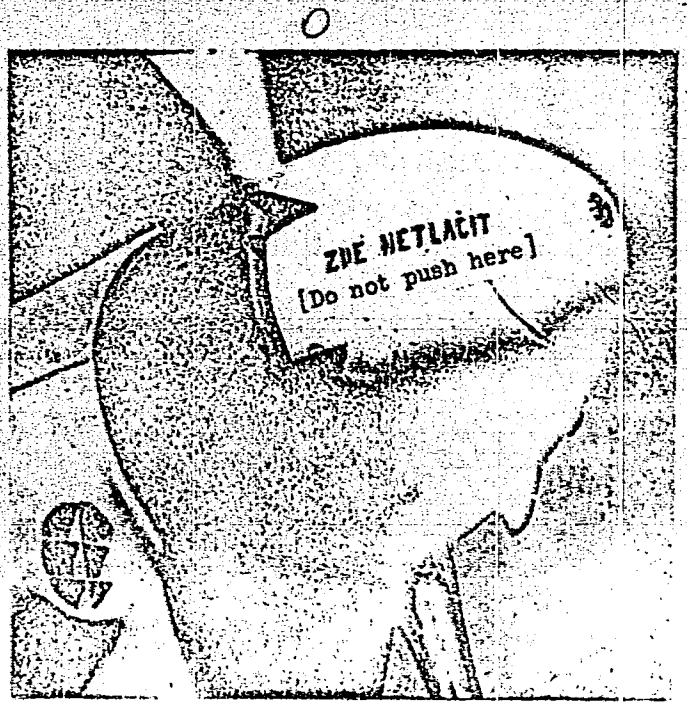
L 24351-65

ACCESSION NR: AP5005487

Fig. 1. Detail of the cap of the V-503 airscrew



Card 2/5

L 24351-65

ACCESSION NR: AP5005487

The V-503 is fully automatic, and is the first variable-pitch propeller in which the impulse for turning the blades is not imparted by a change in engine rpm but directly by a change in the flight speed. This fact makes the new propeller operate independently of the operation of the engine, and eliminates the need for those devices for controlling engine rpm and for transmitting energy from the engine to turn the blades which are used in classical variable-pitch propellers. The V-503 has its own independent open oil pressure circuit and therefore does not undergo transient regimes caused by a sudden increase in the output (rpm) of the engine. The V-503 can be installed without any adaptations on any engine of its category. The arrangement of the propeller is shown schematically in Fig. 2. Blades 1 are held in the head 2, and turned by a slide-guide 3 connected with the piston 4, comprising a gear pump, driven by the formed cap 5, which pumps the oil from chamber A to chamber B; the oil can flow from B to A through holes in the shaft and in the hub of the piston 4. The driving shaft 6 carrying the cap 5 can move axially; it is connected with the bearing 7 supported by the spring.

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L 24351-65

ACCESSION NR: AP5005487

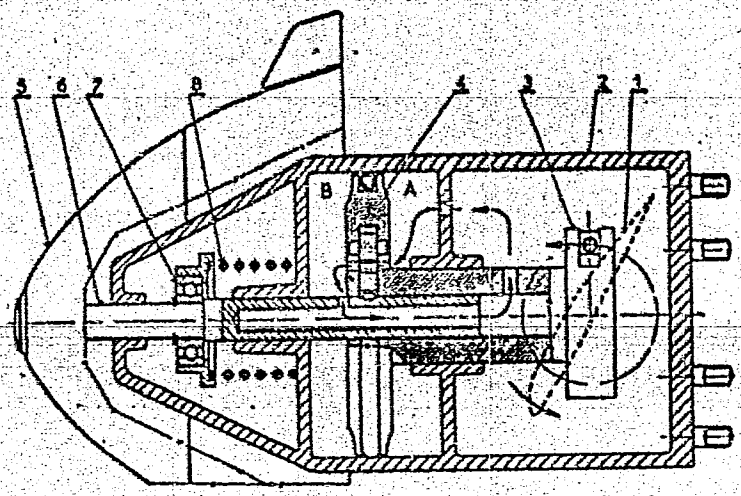

Fig. 2. Schematic diagram of V-503 airscrew

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L 24351-65

ACCESSION NR: AP5005487

The state of equilibrium corresponding to a certain flight velocity is attained when the blades, under the action of the blade-pitching moment, bring the piston 4 (and the hole in the shaft 6) into such a position that the pressure difference on the piston balances the moment. The increasing flight velocity increases the axial aerodynamic force on the cap and compresses the spring 8, pushes the shaft 6 in, and reduces the opening of the hole, thus increasing the pressure in chamber B; this causes the piston to move to the right and increase the pitch angle of the blade. In case the flight velocity decreases, the blade angle will be reduced.
Orig. art. has 6 figures

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: PR

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3174 F

Card 5/5

Kynev, K. D.

AUTHOR: Kynev, K. D. 51-6-17/25

TITLE: On Low-Temperature Activation of Precipitated Zinc Sulphide by Copper. (O nizkotemperaturnoy aktivatsii osazhdennogo sul'fida tsinka med'yu.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol. III, Nr. 6, pp. 652-654. (USSR)

ABSTRACT: It is possible to prepare ZnS-Cu phosphors, with a reasonable luminescent intensity, at temperatures not exceeding 100°C. ZnS was precipitated from a trinormal solution of zinc carbonate on addition of a trinormal solution of sodium sulphide and on vigorous shaking. The suspension thus produced was covered with a solution of copper sulphate with 2×10^{-4} g/ml of Cu (the amount of Cu per 1 g of ZnS was about 0.001 g). After second shaking the suspension was activated by heating at 100°C for 10 minutes. The suspension then exhibited green luminescence on excitation with an ultraviolet line at 365 mμ. Using a Pulfrich photometer it was found that a ZnS-Cu phosphor prepared at high temperature had 100 times stronger emission than a

Card 1/3

On Low-Temperature Activation of Precipitated Zinc Sulphide by Copper.

low-temperature ZnS-Cu phosphor prepared as above. The spectral distribution of luminescence was recorded by means of a MCP-51 spectrograph. Luminescence was excited using a mercury lamp. Figs. 1-3 show the spectral distributions of luminescence of various ZnS-Cu phosphors. Curve 2 in Fig.1 represents a ZnS-Cu phosphor prepared at high temperature. All the other curves represent low-temperature phosphors. Curve 3 is a low-temperature phosphor without copper. Comparison of curves 1 (ZnS-Cu phosphor prepared at 100 C° as described earlier) and 3 shows that activation with copper displaces emission maximum towards longer wavelengths and greatly increases the intensity. When ZnS is activated with copper sulphide (curve 4 in Fig.2), the luminescence intensity is no lower than that for curve 1. When ZnS (curve 5 in Fig.2) or copper sulphide (curve 6 in Fig.2) is subjected to thermal treatment before activation, a decrease of intensity is observed. In all the low-temperature

On Low-Temperature Activation of Precipitated Zinc Sulphide by Copper.

phosphors studied no afterglow was observed at room temperature. But this may be due to the absence of deep localized levels below the conduction band, or due to the high degree of dispersion of ZnS-Cu suspensions used. Increase of the amount of copper sulphate added on activation first increases the luminescent intensity (Fig.3). Further increase of the amount of copper added in this way produces concentration quenching (curve 12, Fig.3). There are 3 figures and 4 references, of which 3 are Russian and 1 German.

ASSOCIATION: Sofia State University, Bulgaria. (Sofiyskiy gosudarstvennyy universitet, Bolgariya.)

SUBMITTED: Submitted to the Editor of "Doklady AN SSSR" on February 26, 1957.

AVAILABLE: Library of Congress.

Kynev, K.D.

AUTHOR: Kynev, K. D. 51-6-18/25

TITLE: On the Structural Sensitivity of Luminescence of the Low-Temperature ZnS-Cu Phosphor. (O strukturnoy chuvstvitel'nosti lyuminestsentsii nizkotemperaturnogo fosfora ZnS-Cu.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol. III, Nr. 6, pp. 655-657. (USSR)

ABSTRACT: This is a continuation of the preceding paper (pp.652-654). The present paper deals with the effects of variation in the chemical conditions of preparation of ZnS-Cu at 100°C on its luminescence. Preparation of the samples followed essentially the method described in the preceding paper. The spectral distribution and intensity of luminescence were obtained by the technique described in the preceding paper. The scatter of intensity due to experimental errors in measurement and due to variations in the conditions of preparation did not exceed 8%. The results for phosphors prepared in different solvents,

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On the Structural Sensitivity of Luminescence of Low-Temperature ZnS-Cu Phosphor.

using different washing treatments, etc., are shown in Figs.1-4. From the results obtained the author concludes that changes in the chemical conditions of preparation produce changes in luminescent centres, which are crystalline structural defects. Various ions of the zinc salts used before activation (such as CH_3COO, SO_4, Cl and Zn) can alter only the kinetics of precipitation of ZnS and of formation of Cu centres. Such ions or molecules of water, etc., added after activation are adsorbed on the phosphor. All this affects strongly the intensity and spectral distribution of luminescence. The latter effect suggests that the Cu activator centres are localized at the phosphor surface. There are 4 figures and 5 references, of which 3 are Russian and 2 German.

Card 2/2

ASSOCIATION: Sofia State University, Bulgaria. (Sofiyskiy gosudarstvennyy universitet, Bolgariya.)

SUBMITTED: Submitted to the Editor of "Doklady AN SSSR" on February 26, 1957.

AVAILABLE: Library of Congress.

KYNEV, ST.

Bulgaria/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 60914

Author: Borisov, M., Kynev, St., Zlateva, Ant.

Institution: None

Title: Some Experimental Results of Investigations of Internal Photoeffect in Mixed ZnS·CdS-Cu Crystallophosphors

Original Periodical: Dokl. Bolgar. AN, 1955, 8, No 1, 13-16; German resumé

Abstract: Investigated was the kinetics of internal photoeffect in mixed ZnS·CdS-Cu crystallophosphors. For crystals ZnS 50% CdS-Cu and CdS on excitation λ546 and 578 mu (outside region of principal absorption) and high intensity of excitation light there was observed a more complex course of kinetic curves than is usual. After switching on of illumination conductivity σ increases rapidly above its stationary value in light and after switching off of illumination there is again observed a brief increase of σ. Investigated was the variation of σ of previously excitated phosphors

Card 1/2

Bulgaria/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 60914

Abstract: during heating from 20° to 230°. Thus with ZnS-Cu and ZnS 25% CdS-Cu were observed maxima of σ similar to maxima of curves of thermoemission of light of luminescence. These maxima decrease and are shifted toward higher temperatures with increased time of holding in the dark prior to heating. Magnitude of maxima of curves of temperature changes of σ decreases if after excitation the phosphor is irradiated with infrared radiation.

Card 2/2

Кынев, Стефан

BULGARIA/Optics. K

Abs Jour: Referat Zhur-Fizika, 1957, No 4, 10389

Author : Kynev Stefan
Inst : Physics Institute Bulgarian Academy of Sciences
Title : Features of the Kinetics of Photodielectric Losses of Powdered ZnS, CdS-Cu Crystal Phosphors.

Orig Pub: Doklady Bolgar. AN, 1956, 9, No 2, 5-8

Abstract: The dependence of photodielectric losses on the intensity of the exciting light (I) for phosphors of ZnS. CdS-Cu has a pronounced maximum. At large I these phosphors after excitation give a short-lived sharp increase in the photodielectric losses (peak). This increase takes place at lower I for light with longer waves near the edge of the fundamental absorption. The lag of the attenuation of the photodielectric losses increases sharply with reduction in temperature. In specimens with lower content of CdS, the appearance of the peak of the photodielectric losses upon darkening occurs

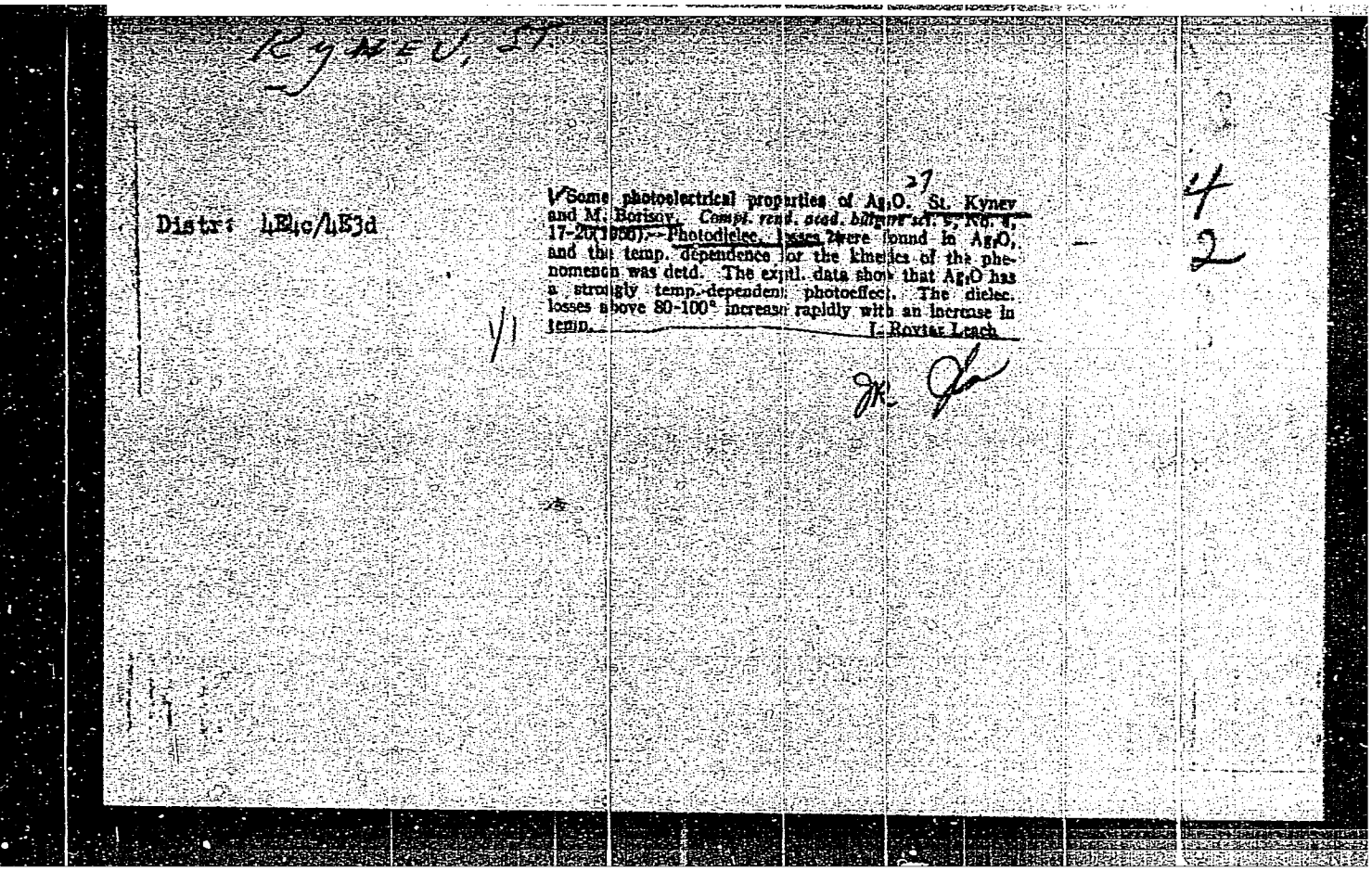
Card : 1/2

BULGARIA/Optics. K

Abs Jour: Referat Zhur-Fizika, 1957, No 4, 10389

at lower values of I and at higher temperatures. The temperature dependence of the photodielectric losses is analogous to the dependence of I, and the curves for the temperature dependence of the photodielectric losses are analogous to the curves of thermal glow of these phosphors.

Card : 2/2



Distr: 4E4c/4E3d

Some photoelectrical properties of Ag_2O. St. Kyuev and M. Borisov. *Compt. rend. acad. bulgare sci.* 9, No. 1, 17-20(1956).--Photodielec. losses were found in Ag_2O, and the temp. dependence of the kinetics of the phenomenon was detd. The exptl. data show that Ag_2O has a strongly temp.-dependent photoeffect. The dielec. losses above 80-100° increase rapidly with an increase in temp. L. Rovtar Leach

Kynev, S.

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1136. SOME EXPERIMENTAL RESULTS OF INVESTIGATIONS ON THE INTERNAL PHOTOEFFECT IN MIXED (Zn, Cd)S:Cu CRYSTAL PHOSPHORS. M. Borisov, S. Kynev [Könev] and A. Zlateva. C.R. Acad. Bulg. Sci., Vol. 1, No. 1, 13-16 (Jan.-March, 1957). In Russian.

Presents the results of experiments with powder specimens at room temperature and at 230° C, using the dielectric-loss method. Four phosphors were studied, containing 0, 25, 50 and 100% CdS respectively, and activated with 0.01% Cu; the wavelength of excitation light varied between 365 and 578 µ. In the case of phosphors with 0 or 25% CdS the regular kinetics of the internal photoeffect was observed; with the two other phosphors and wavelengths 546 and 578 µ, more involved kinetic curves were obtained. It was also established that the conductivity v. temperature curves of phosphors with 0 and 25% CdS showed maxima at temperatures above room temperature; these maxima were shifted towards higher temperatures when the phosphor remained in darkness for a relatively long period between excitation and heating. The maxima flattened out when the phosphors were irradiated with infrared light between excitation and heating.

F. Lachman

KYNEV ST.

N1

Internal photoeffect and photodesorption of oxygen in zinc oxide. St. Kynev and El. Vateva. *Compt. rend. acad. bulgare. sci.* 12, 33-6(1959)(in Russian).—The temp. dependence of photodesorption of O was studied by cond. and photocond. measurements of ZnO. Photodesorption of O takes place not only in the region of absorption of light, but also at longer wave lengths. The temp. dependence of the desorption, the magnitude and kinetics of the photo-effect, and the influence of adsorbed O are described. The results obtained by simultaneous application of high-frequency voltage and d.c. voltage also are given.

A. Libackyj

3

S/194/61/000/012/060/097
D201/D256

26.1512

AUTHORS: Borisov, M., Kynev, St., Yateva, Ye. and Georgiyeva, I.

TITLE: Electrically stimulated currents in irradiated monocrystals of cadmium sulphide

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1961, 13, abstract 12G79 (Dokl. Bolg. AN, 1960, v. 13, no. 1, 23-26)

TEXT: This is a description of the results of analysis of electrically stimulated currents (ESC), originated with the superimposition of voltage on a previously irradiated CdS crystal. The magnitude of ESC depends in general not on the intensity of irradiation, but on its dosage. With the increase of dose the ESC increases up to a certain limit, beyond which saturation occurs. With the increase of the voltage applied to the crystal the ESC increases monotonically so that it is impossible in this way to detect the electron energy traps. The graphs of ESC against the

Card 1/2

Electrically stimulated currents ... S/194/61/000/012/060/097
D201/D303

temperature exhibit 2 maxima (-80 and +80°C), showing different levels of electron traps. The positions of thermally and electrically stimulated electric current maxima coincide with each other which shows a close interdependence of the two phenomena. [Abstractor's note: Complete translation.]

VB

Card 2/2

9.4177 (1035,1051)

30802
S/181/61/003/011/049/056
B102/B138

AUTHORS: Kynev, St., and Sheynkman, M. K.

TITLE: Effect of a strong electric field on the kinetics of photocurrent in single crystals of CdS

PERIODICAL: Fizika tverdogo tela, v. 3, no. 11, 1961, 3539-3541

TEXT: During the measurements of the increase in photocurrent the specimens were either in a vacuum (10^{-6} mm Hg) or in air. When steady photocurrent had been established after illumination (λ = 5200-5300 Å), the light was switched off and the specimen remained in darkness for a certain period of time Δt_d (Δt_d = 20-600 sec). The light was again switched on and the curve of the increase in photocurrent was observed on the screen of an ЭНО-1 (ENO-1) oscilloscope. The time $\tau_{50\%}$ required for a 50% increase was calculated. The experiments were repeated with the same periods of darkness and light, but during the dark period a sinusoidal voltage with a frequency of 70-100 kc/sec and an amplitude of 2.5 kv was applied to the side electrodes. It was found that $\tau_{50\%}$ was considerably longer in this

Card 1/3

Effect of a strong electric ...

case than in the absence of a high-frequency field. In some cases this increase was 200 times. Heating the specimen had no effect on $\tau_{50\%}$. The τ value increased with the amplitude, the high frequency field, and the length of the dark period. The large increase in τ is attributed to destruction of electron adhesion levels and hole trapping on adhesion levels by the electric field causing redistribution between the various recombination levels, followed by rapid recombination. Thanks are given to Academician AS UkrSSR V. Ye. Lashkarev for discussions. There are 1 figure and 12 references: 6 Soviet and 6 non-Soviet. The three most recent references to English-language publications read as follows: I. T. Steinberger. I. Phys. Chem. Solids, 15, 354, 1960. W. W. Piper, F. E. Williams. Solid State Physics, 6, 95, 1958. R. N. Dexter. J. Phys. Chem. Solids, 8, 494, 1959.

ASSOCIATION: Institut poluprovodnikov AN USSR Kiyev (Institute of Semiconductors AS UkrSSR, Kiyev)

SUBMITTED: March 31, 1961 (initially) [illegible], 1961 (after revision)

Card 2/2

24.7700

37806
S/120/62/000/002/037/047
E140/E163

AUTHORS: Kynev, St., Sheynkman, M.K., Shul'ga, I.B., and Fursenko, V.D.

TITLE: Contactless method of measuring the parameters of certain semiconductors

PERIODICAL: Pribory i tekhnika eksperimenta, no.2, 1962, 154-159

TEXT: Essentially, the method consists in placing the sample of semiconductor between two capacitor plates in a Hartley oscillator circuit and measuring the change of grid current. This can be calibrated in terms of the bulk conductivity of the sample. The oscillator operates at about 10-15 Mcs. The electrodes are shaped so that the sample can be illuminated, for determining its photoelectric properties. Some applications are: acceptance testing of samples for their photoelectric properties, under conditions eliminating the distorting effects of electrodes in contact with the sample; study of just these distorting effects; study of samples in an enclosed volume without requiring their exposure to the atmosphere; study of the kinetics of infra-red extinction of a

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Contactless method of measuring... S/120/62/000/002/037/047
E140/E163

photocurrent; study of local phenomena in inhomogeneous CdS single crystals and thin PbS films. There are 7 figures.

ASSOCIATION: Institut poluprovodnikov AN USSR
(Semiconductor Institute, AS Ukr.SSR)

SUBMITTED: August 8, 1961

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(22)

Sofia, Doklady Bolgarskoy Akademii Nauk, Vol 15, No 1, 1962 (cont)

11. "The Influence of Aluminum Sulfate on the Formation of Soot Carbon and the Extraction of Metallic Iron in the Reduction of Ferric Oxide and Iron Ores with Carbon Oxide," K. KURCHATOV of the Institute of General and Inorganic Chemistry of the Bulgarian Academy of Sciences; article in Russian; pp 45-48.

12. "The Reduction of Organic Compounds with Magnesium or Zinc in Liquid Ammonia," Ch. IVANOV and P. MARKOV of the Department of Organic Chemistry of the University of Sofia; article in German; pp 49-52.

13. "Concerning the Extraction of Needle-shaped Gamma-ferric Oxide," P. PESHEV, G. TSYRNORECHKI, and I. ASPARUKHOV of the Scientific Research Institute for Chromatography and Radio; article in German; pp 53-56.

14. "On the Adsorption of Chlorine Ions on Silver Surfaces," G. BLIZNAKOV and D. LAZAROV; article in English; pp 57-60.

15. "The Semiconductor Properties of Certain Cobalt-Oxide Catalysts and the Catalytic Oxidation of Ammonia," S. KYNEV, D. SHISHKOV, and E. BATEVA; article in Russian with English summary; pp 61-64.

16. "Integrated Indicators on Dryness and Natural Water Supply in Various Irrigation Regions," G. MARKOV of the Institute of Water Economy and Construction, Bulgarian Academy of Sciences; article in English; pp 65-68.

17. "Doucrouvelites--a New Genus of Valanginian Ammonites," T. NIKOLOV; article in English; pp 69-71.

18. "Certain Peculiarities of the Emulsion Structures in the Blende of the Madzharovo Poly-metal Deposits in the Eastern Rhodopes," A. ATANASOV; article in Russian with English summary; pp 73-76.

19. "The Influence of Temperature Changes and the Acidity of the Medium on the Thermal Stability of Certain Types of Bacteria in Canned Fruits and Vegetables," T. ZALINOV; article in Russian; pp 77-80.

20. "On the Role of the Lymphocytes in Immunogenesis," V.L. MARKOV and V.Ch. VULCHANOV of the Department of Immunology, Institute of Microbiology, Bulgarian Academy of Sciences; article in English; pp 81-84.

BORISOV, M.; KYNEV, S. [Kunev, S.]; GEORGIYEVA, I. [Georgieva, I.]

On a new rectifying effect in cadmium sulfide monocrystals.
Doklady BAN 15 no.7:715-718 '62.

1. Predstavleno akad. G. Nadzhakovym [Nadzhakov, G.].

KYNEV, St.; PIRINCHIYEVA, R.; MARINOVA, Kr.

Distribution of the potential and motion of minority carriers in CdS single crystals. Fiz. tver. tela 5 no.1:291-300 Ja '63. (MIRA 16:1)

1. Institut fiziki Bolgarskoy akademii nauk, Sofiya.

(Potential, Theory of)
(Cadmium sulfide—Electric properties)

KYNEV,S. [Kunev,S.]; SHEKERDZHIYSKI, V. [Shekerdzhiiski, V.]; STOYANOV,V [Stoianov, V.]

Preparation of photocells and photoresistors from sintered CdS. Doklady BAN 16 no.7:685-688 '63.

1. Predstavleno akad. G.Nadzhakovym, chlenom Redaktsionnoy kollegii, "Doklady Bolgarskoy Akademii nauk".

KYNEV, St.[Kunev, St.]; STOYANOV, V. [Stoianov, V.]; SHEKEREDZHIYSKI, V. [Shekeredzhiiski, V.].

Highly-sensitive photoresistance and photoelements of sintered CdS and certain reversible processes of their aging. Acta physica Pol 25 no.3:313-321 Mr '64.

1. Bulgarian Academy of Sciences, Institute of Physics, Sofia.

ACCESSION NR: AP4040357 P/0045/64/025/003/0313/0321

AUTHOR: Ky*nev, St.; Stoyanov, V.; Shekaredzhiyski, V.

TITLE: High-sensitivity photoconductive and photoelectric cells made of sintered CdS and some reversible aging processes in them

SOURCE: Acta physica polonica, v. 25, no. 3, 1964, 313-321

TOPIC TAGS: photoconductive device, photoelectric cell, sintered cadium sulfide, photoelectric cell aging, reversible aging, CdS

ABSTRACT: The authors have developed a simple and rapid method for preparation of CdS pellets by sintering under pressure of several hundred kg/cm^2 and subsequent heating for half an hour in argon at 900C. The cadmium sulfide produced by Soviet industry for luminescence was used. The admixture of cadmium sulfate enters during sintering into the reaction $CdS+CdSO_4=2Cd+2SO_2$. The precipitated cadmium serves as donor. By adding a certain amount of copper acting as acceptor, the resistivity of the specimen is increased to several hundred M ohm.cm; the photosensitivity is increased accordingly. The permissible applied voltage increases with the increase of the sintering time. A typical example of performance

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ACCESSION NR: AP4040357

is 250 amp/cm^2 at 500 lux and 5 v. The prepared photoconductive cell ages under illumination, but heating for a few tens of seconds restores the original properties. The observed phenomena are interpreted in terms of acceptor-donor and interactions. Orig. art. has: 10 figures.

ASSOCIATION: Bolgarskaya Akademiya nauk, Fizicheskiy Institut, Sofia (Bulgarian Academy of Sciences, Physics Institute)

SUBMITTED: 02Jul63 ENCL: 00 SUB CODE: EC

NO REF SOV: 001 OTHER: 014

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L 4340-66 EWT(1)/T/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/AT

ACC NR: AP5028770 SOURCE CODE: BU/0011/65/018/002/0101/0104

AUTHOR: Kynev, S.; Vateva, E.; Koparanova, N. 44,55 98 B

ORG: Physics Institute, Bulgarian Academy of Sciences (Fizicheskiy institut, Bolgarskoy akademii nauk) 49,55

TITLE: Method for the determination of the type of contacts in CdS, CdSe and other crystals 21,44,55

SOURCE: Bulgarska akademiya na naukite, v. 18, no. 2, 1965, 101-104

TOPIC TAGS: crystal, cadmium sulfide, cadmium selenide, semiconductivity, dielectrics

ABSTRACT: [Russian article] The determination of the kind and properties of contacts in semiconductors and dielectrics is of importance not only for the process of design of practical instrumentation but also for the study of underlying physical events. There exist presently only a few methods for determining the kind of contact (W. M. Buttler, W. Huscheid, Ann. Physik, 15, 1954, 1; K. Boer, K. Lubitz, Z. Naturforsch., 17, a. 1962, 397) and they are not always reliable. A new simple and fast method is proposed here for the determination of the kind of contact on photosensitive homogeneous CdS, CdSe, and other crystals. The method is based on an effect described earlier by two of the authors (S. Kanev, N. Koparanova, Compt. rend. Acad. bulg. Sci., 17, 1964, 5) which appears only in case when the cathode contact is a shut-off one. The article contains graphs representing typical cases.

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