L 39834-66
ACC NR: AP6018849

cates that they more or less completely absorbed radium from the nutrient solution, accumulating it in their cells. The formation of tracks is indicative of the great kinetic energy of alpha particles and their activity in reducing the atoms of silver chloride and bromide to metallic silver. Presumably a similar function is performed by alpha particles inside living cells. Each particle ionizes neutral molecules and atoms, exciting them and imparting to them a higher energy potential. Orig. art. has: 6 figures. [JPRS]

SUB CODE: 06, 20 / SUBM DATE: 21Apr65 / ORIG REF: 003

Card 2/2

KRASIL'NIKOV, N.A.

Toxic chemical: pluses and minuses. Priroda 55 no.1:13-22 Ja '66. (MIRA 19:1)

1. Chlen-korrespondent AN SSSR.

KRASIL'NIKOV, N.A.; BUDA, V.I.; SOKOLOV, A.A.

Protrusions on the surface of spores of anaerobic bacteria of the genus Clostridium. Mikrobiologiia 33 no.3:454-458 My-Je '64. (MIRA 18:12)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.

KRASIL'NIKOV, N.A., otv. red.; TEREKHOV, O.S., red.

[Biology of individual actinomycete groups] Biologiia otdel'nykh grupp aktinomitsetov. Moskva, Nauka, 1965. 369 p. (MIRA 19:1)

1. Akademiya nauk SSSR. Institut mikrobiologii. 2. Chlen-korrespondent AN SSR (for Krasil'nikov).

KRASIL'NIKOV, N.A.; GUKASYAN, A.B.

Bacillus tuviensis n. sp., a new causative agent of the disease of Dendrolium sibiricus Tschtv. Mikrobiologiia 33 no.4:664-671 Jl-Ag '64. (MIRA 18:3)

1. Institut mikrobiologii AN SSSR.

KRASIL'NIKOV, N.A.; AGRE, N.S.

Brown group of Actinobifida chromogena n. sp. Mikrobiologiia 34 no.2:284-291 Mr-Ap '65. (MIRA 18:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

KRASIL'NIKOV, N.A.; BOLTYANSKAYA, E.V.; SOKOLOV, A.A.; MELKONYAN, Zh.

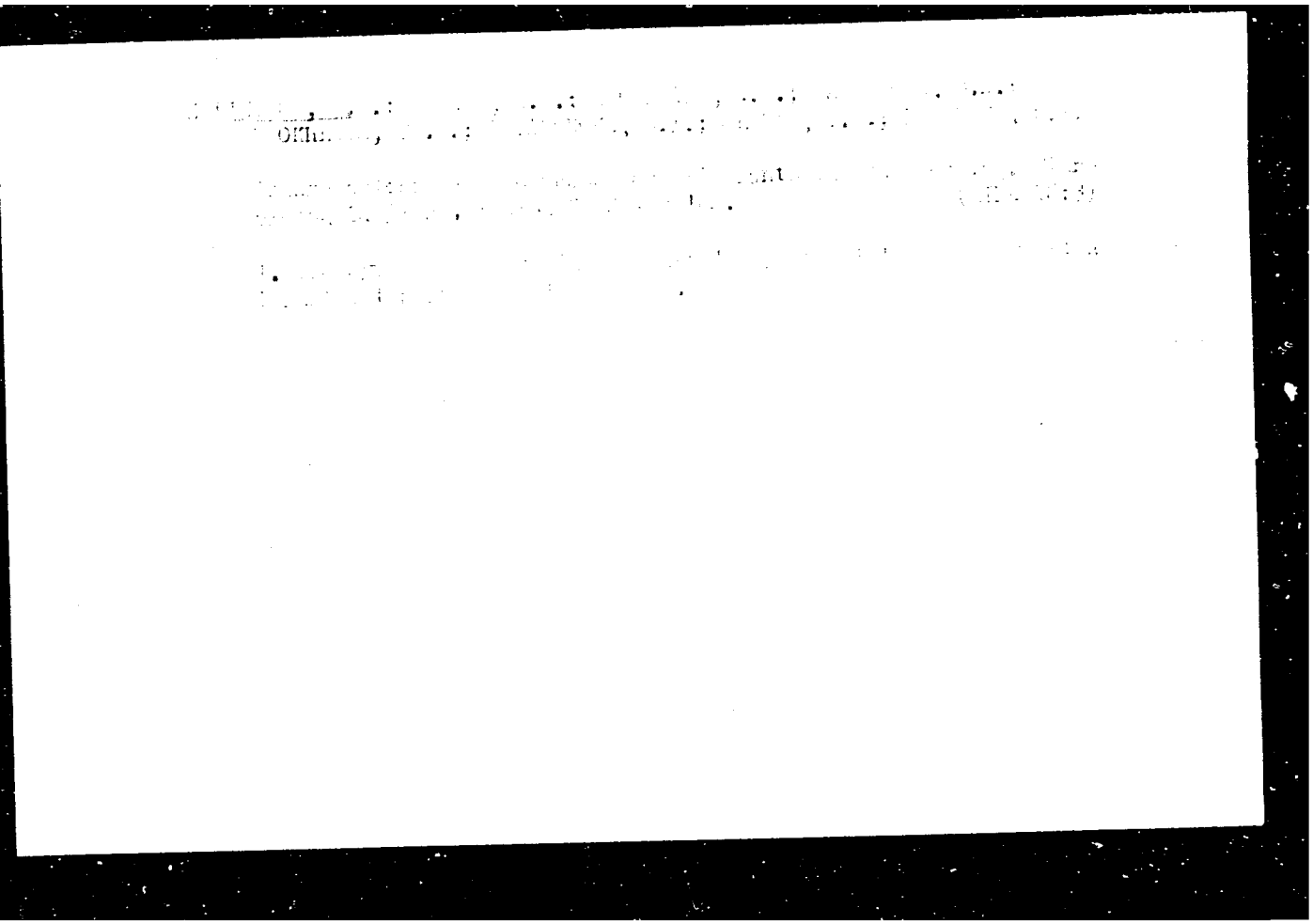
Flagelliform outgrowths in Azotobacter. Dokl. AN SSSR 164 no.4:931-933 O '65. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent AN SSSR (for Krasil'nikov).

KRASIL'NIKOV, N.A.; KOVESHNIKOV, A.D.

Actinomyces tumemacerans n.sp. a new species causing destruction of plant tumors. Mikrobiologiia 31 no.4:589-594 Jl-Ag '62. (MIRA 18:3)

1. Institut mikrobiologii AN SSSR.



KRASIL'NIKOV, N.A.; SKRYABIN, G.K.; NAVASHIN, S.M.

Reviews and bibliography. Antibiotiki 9 no.12:1111-1119 D '64. (MIRA 18:7)

KRASIL'NIKOV, N.A.; DUDA, V.I.; SOKOLOV, A.A.

New types of sporulation in anaerobic bacteria. Dokl. AN SSSR 159 no.2:434-435 N '64. (MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Krasil'nikov).

KRASIL'NIKOV, N.A.; DROBKOV, A.A.

Accumulation of natural radioactive elements by Azotobacter, algal cells and protozoans. Dokl. AN SSSR 163 no.2:486-487 Jl '65. (MIRA 18:7)

1. Chlen-korrespondent AN SSSR (for Krasil'nikov).

KRASIL'NIKOV, N.A.

Terminology of Actinomyces and Proactinomyces. Mikrobiologiia 32 no.6:988-994 N-D '63 (MIRA 18:1)

1. Institut mikrobiologii AN SSSR.

KUCHAYEVA, A.G.; KRASIL'NIKOV, N.A.; GESHEVA, R.L.; TAPTYKOVA, S.D.; SMIRNOVA, L.N.

Biology of actinomyces of the Fradiae group. Izv. AN SSSR Ser. biol. no.2:261-269 Mr-Ap '63. (MIRA 17:5)

1. Institut mikrobiologii AN SSSR i Institut mikrobiologii Bolgarskoy Akademii nauk.

KRASIL'NIKOV, N.A.; YAKUBOV, G.Z.; KHOKHLOVA, Yu.M.; ARTAMONOVA, O.I.; ULEZLO, I.V.

Study of antibiotics produced by actinomycetes of the violet group. Mikrobiologiia 32 no.5:748-754 S-O'63 (MIRA 17:2)

1. Institut mikrobiologii AN SSSR.

KRASIL'NIKOV, N.A.; AGRE, N.S.

New genus of ray fungi Actinobifida n. gen. Yellow group Actinobifida dichotomica n. sp. Mikrobiologiia 33 no.6:935-943 N-D '64. (MIRA 18:4)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

EL'-REGISTAN, G.I.; KIRILLOVA, N.F.; KRASIL'NIKOV, N.A.

Carotenoid pigments from Proactinomyces asteroides. Izv. AN SSSR Ser. biol. 30 no.1:128-130 Ja-F '65. (MIRA 18:2)

1. Institut mikrobiologii AN SSSR.

KHOREV, V.N.; BARANOVA, N.A.; GORLACH, I.A.; KVASOV, Ye.I.; KRAMARENKO, I.S.; MIRONOV, L.V.; PRIVALOV, S.S.; LYASKO, M.V.; DUBROV, N.F.; MIRONOV, L.V.; KOKSHAROVA, I.K.; MIKHALEV, M.S.; LAZAREV, E.M.; KUZNETSOVA, I.R.; LAPKIN, N.I.; KRASIL'NIKOV, N.A.; GOL'DSHTEYN, M.I.; GUTERMAN, S.G.; ODINOKOV, Yu.I.; SKRYABIN, N.P.; KORSHCHIKOV, V.D.

Research by the Ural Ferrous Metal Research Institute. Stal' 22 no.7:621,623,638-639,670 Jl '62. (MIRA 15:7)
(Metallurgical research)

KRASIL'NIKOV, N.A.; MELKUMOVA, T.A.

Variability of nodule bacteria inside the nodules of leguminous plants. Izv. AN SSSR Ser. biol. 28 no.5:693-706 S-O'63 (MIRA 16:11)

1. Institute of Microbiology, Academy of Sciences of the U.S.S.R., Moscow.

KRASIL'NIKOV, N.A.; DUDA, V.I.

Nuclear apparatus in the sporogenesis of anaerobes. (MIRA 17:9)
Mikrobiologiia 33 no.1:85-87 Ja-F '64.

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

KRASIL'NIKOVA, N.A.; DUDA, V.I.

Types of the formation of nuclear structures in anaerobic bacteria of the genus Clostridium. Dokl. AN SSSR 154 no.5:1191-1194 F'64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Krasil'nikov).

KRASIL'NIKOV, N.A.; DUDA, V.I.; SOKOLOV, A.A.

External outgrowths in the spores of anaerobic bacteria of the genus Clostridium. Dokl. AN SSSR 152 no.3:735-736 S '63. (MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Krasil'nikov).

KRASIL'NIKOV, N.A.

Micro-organisms and their metabolites in additional feeding of animals. Izv. AN SSSR. Ser. biol. no.6:798-807 N-D '63. (MIRA 17:2)

1. Institute of Microbiology, Academy of Sciences of the U.S.S.R., Moscow.

KRASIL'NIKOV, N.A.; KORENYAKO, A.I.; SOKOLOVA, A.I.; NIKITINA, N.I.; KIRILLOVA, N.F.

Interspecific antagonism as a species characteristic. Mikrobiologiia 32 no.1 87-12 '63 (MIRA 17:3)

1. Institut mikrobiologii AN SSSR.

KRASIL'NIKOV, N.A.; DUDA, V.I.

Transformations of the nuclear structures during sporulation in anaerobic bacteria of the genus Clostridium. Dokl. AN SSSR 152 no.2:454-456 S '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (Krasil'nikov).

KRASILNIKOV, N. A.

"The effect of bacteria on plant growth."

report submitted for Symp on Ecology of Soil Bacteria, Liverpool, UK, 6-10 Sep 1965.

L 08562-67 EWT(1) JK

ACC NR: AP6033276 SOURCE CODE: UR/0020/66/170/004/0970/0973

AUTHOR: Doninova, S. I.; Kulmova, T. F.; Manshikov, G. P.; Krasil'nikov, N. A. (Corresponding member AN SSSR)

ORG: Institute of Experimental and Clinical Oncology, Academy of Medical Sciences, SSSR (Institut eksperimental'noy i klinicheskoy onkologii Akademii meditsinskikh nauk SSSR); Institute of Microbiology, Academy of Sciences, SSSR (Institut mikrobiologii Akademii nauk SSSR)

TITLE: An antiphage, antitumor substance extracted from *Actinomyces globisporus* which specifically reacts with DNA

SOURCE: AN SSSR. Doklady, v. 170, no. 4, 1966, 970-973

TOPIC TAGS: fungus, DNA, bacteriophage, neoplasm, amino acid

ABSTRACT: The antiphage action of a substance present in cultures of *Actinomyces globisporus* (strain 81) on various organic media was studied using special sensitive actinophage strains. This antiphage action is removed by high-molecular-weight DNA of the thymus or DNA from other sources (calf pancreas and herring sperm in these experiments), but low-molecular-weight products of enzymatic or acid hydrolysis of DNA of the thymus, RNA, and albumin do not neutralize the antiphage activity of strain 81. A water-soluble powder extracted from

UDC: 612.396.17

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L 08562-67

ACC NR: AP6033276

Actinomyces globisporus culture fluid was active against gram-positive bacteria (*Staphylococcus aureus* 209, *Bacillus subtilis*, *Bacillus mycoides*, and *Sarcina lutea*), but was inactive with respect to gram-negative bacteria, yeasts, and fungi. It has been demonstrated that preparation 81 retards the growth of some transplanted animal tumors, such as Ehrlich ascites tumors, and cultures of human cancer cells. Analysis of preparation 81 shows the presence of amino acids and the sugars xylose, arabinose, and glucose, suggesting that the substance is a glucoprotein. Orig. art. has: 3 figures and 1 table. [W.A. 50]

SUB CODE: 06/ SUBM DATE: 07Jun66/ ORIG REF: 005/ OTH REF: 002

Card 2/2

KRASIL'NIKOV, N.I.

Investigating the brightness distribution law in the transmitted image using the probability method. Tekh.kino i telev. 4 no.5:21-24 My '60. (MIRA 13:8)
(Television--Transmitters and transmission)

KRASIL'NIKOV, N.N., kandidat tekhnicheskikh nauk.

Evaluating the quality of a television image in relation to fluctuation noises. Tekh.televid.no.5:3-20 '55. (MLRA 10:2)
(Television--Noise)

Krasil'nikov, N. N.

AUTHOR: Krasil'nikov, N.N. 108-8-2/10

TITLE: Taking Account of Integrating Properties of the Eye and the Luminophore of a Screen when Observing a Television Picture in the Presence of Fluctuation Noises. (Uchet integriruyushchikh svoystv glaza i lyuminofora ekrana pri nablyudenii televizionnogo izobrazheniya v prisutstvii fluktuatsionnykh shumov.)

PERIODICAL: Radiotekhnika, 1957, Vol. 12, Nr 8, pp. 14-20 (USSR)

ABSTRACT: The process of averaging fluctuation noise is investigated. This noise is caused by the finite time of postluminescence of the luminophore and the inertia of perception by the eye. Equations are derived by means of which the ratio between the signal and the noise, by taking account of averaging, can be determined. On the basis of these investigations the following may be said:

1.) At the cost of the phenomenon of the averaging of fluctuation - noise the eye of the observer perceives the television picture with the ratio between signal and noise magnified $\varkappa$ times as much as is in reality the case. The quantity kappa varies in the case of the norm of scanning (f_k = 25 c) existing in the USSR between 1,9 and 2,1 in dependence upon the type of television screen used (luminophore).

Card 1/2

Taking Account of Integrating Properties of the Eye and the Luminophore of a Screen When Observing a Television Picture in the Presence of Fluctuation Noises.

2.) Kappa depends largely upon the image field - change - frequency f_k and upon the time constants of the postluminescence of the luminophore. 3.) The time of postluminescence of the luminophore must not be increased at random as this leads to the forming of luminescent "tails" moving objects. 4.) The effect of averaging leads to the decrease of the variable components of the noise, the constant flashing up is conserved and leads to a reduction of contrast. There are 2 figures and 5 Slavic references.

AVAILABLE: Library of Congress.

Card 2/2

SOV/58-59-5-11413

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 5, p 215 (USSR)

AUTHOR: Krasil'nikov, N.N.

TITLE: Allowance for Radio Receiver Fluctuation Noise During Television Image Translation

PERIODICAL: Tr. Leningr. in-t aviats. priborostr., 1958, Nr 18, pp 54 - 66

ABSTRACT: The author analyzes theoretically the effect of the detector on the signal-to-noise ratio in the case of single-link and multi-link radio lines during single-band and double-band transmissions. It is shown that when the linear-detector input signal-to-noise ratio exceeds 13-16, the shape of the noise spectrum does not depend on the input signal magnitude. The author derives calculation formulae for the case when several noise sources are present in the line. He also submits the family of curves for two sources.

A.Ya. Breytbart

Card 1/1

KRASIL'NIKOV, N. N.

В. Л. Крейцер

Передача двух независимых телевизионных программ по общему каналу связи

12 июня

(с 10 до 16 часов)

М. И. Кривошеев

Измерение флюктуационных помех в телевидении.

В. Л. Хохлов

О применении фазового метода синхронизации в вещательных системах цветного телевидения.

С. Д. Родкевич

Перспективы применения фототриодов для регистрации малых световых потоков.

И. Г. Деревягин

Прибор для проверки линейности телевизионного канала.

12 июня

(с 18 до 22 часов)

Б. В. Круссер

Телевизионная передающая трубка суперортикон с памятью.

Ч. Г. [illegible]

Телевизионные системы, использующие [illegible] трубки [illegible]

Н. Н. Красильников

Усилители для двухсигнальных приборов.

В. Э. [illegible],

М. Г. Марголин

О геометрических искажениях растра в телевизионных передающих трубках

7. СЕКЦИЯ ЭЛЕКТРОНИКИ

Руководитель Н. Д. Девятков

9 июня

(с 10 до 16 часов)

Г. И. Рукман,

Г. М. [illegible]

Новые оптико-радиофизические методы в радиоэлектронике.

В. А. Афанасьев

Перспективы снижения коэффициента шума электронных приборов СВЧ.

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORIE), Moscow, 8-12 June, 1959

BR

PHASE I BOOK EXPLOITATION SOV/5905

Krasil'nikov, Nikolay Nikolayevich

Pomekhoustoychivost' televizionnykh ustroystv; flyuktuatsionnyye shumy v televidenii (Noise Immunity in Television Systems; Fluctuation Noise in Television) Moscow, Gosenergoizdat, 1961. 266 p. 15,000 copies printed.

Ed.: D. M. Bruskin; Tech. Ed.: O. S. Zhitnikova.

PURPOSE: The book is intended for engineers in television and radar familiar with the fundamentals of the theory of probability.

COVERAGE: The book discusses the problems of the origin of fluctuation noise in television systems and the passage of fluctuation noise through amplification channels. An expression based on system parameters and the statistical structure of signals and noise is derived for image interference of noise; this expression permits the exact definition of the visibility of noise on the picture. The effects of noise on the visual observation of fine

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Noise Immunity in Television (Cont.) SOV/5905

image details and on the resolution of the television system are analyzed. Problems of signal and noise conversion in the components of a television system and the effect of these conversions on the television picture are treated. The book is based partly on the writings of G. V. Braude, A. M. Khalfin, V. I. Bunimovich, O. Schade, J. M. Barstow, H. N. Christopher, and R. Theile, and partly on the author's own previously published works. There are 80 references: 63 Soviet, 16 English, and 1 German.

TABLE OF CONTENTS:

Card 2/

KRASIL'NIKOV, N.P., inzh.; TEKHMISHCHYAN, A.V., kand.tekhn.nauk; SHLAU, A.V., inzh.

Use of turbo-transmissions on centrifuges. Obog.i brik.ugl. no.11: 36-39 '59. (MIRA 13:6)

(Centrifuges)

(Turbomachines)

TEKHMISHCHYAN, A.V., kand.tekhn.nauk; KRASIL'NIKOV, N.P., inzh.; SHLAU, A.V., inzh.

Experience in the use of safety turboclutches in the drive of worm settling centrifuges. Khim.mashinostr. no.6:34-35 N-D '63. (MIRA 17:2)

USSR/Biology - Antibiotics May/Jun 52

"The Part Played by Microorganisms in the Supplementary Nutrition of Plants," N.S. Krasilnikov, Moscow

"Uspekhi Sov Biol" Vol 33, No 3, pp 321-337

The author describes his research in the biological compn of the topsoil surrounding the roots of various plants. He emphasizes the richness of this microflora, and its influence on the growth and development of the plant, which absorb the mineral and org compds from the rhizosphere, and distribute them through their above-ground tissues (mostly throughout the leaves, seldom in stems) in an organotropic process. The author illustrates his statements with microphotographs, demonstrating the absorption and retention of "biotics" (vitamins) and antibiotics by plants. Detailed data on the resorption of antibiotics by various plants are given. These antibiotics have a definite effect in protecting the plants from infectious diseases.

237T1

PA 237T1

KRASILNIKOV, N. S.

237T1

KRASIL'NIKOV, P.

Prefabrication and specialization are a guarantee of success.
Na stroi. Ros. 4 no.5:5-6 My '63. (MIRA 16:5)

1. Upravlyayushchiy trestom Irkutskalyuminstroy.
(Aluminum plants--Design and construction)
(Precast concrete construction)

KRASIL'NIKOV, P.

Explanation by the administration of Technical Specifications and Standards of the State Committee on Construction of the U.S.S.R. Bet.i zhel.-bet. 9 no.5:239 My '63. (MIRA 16:6)

1. Nachal'nik Upravleniya tekhnicheskogo normirovaniya i standartizatsii Gosstroya SSSR.
(Slag--Standards)

KRASIL'NIKOV, P. A.

35256. Primenenie betona i zhelezobetona v grazhdanskom stroitel'stve. Trudy IV vsesoyoz. Konf-tsii po beton i ahetezobeton. Konstruktsiyam Ch. I. M.-L., 1949, S. 80-84

SO: Letopis 'Zhurnal'nykh Statey Vol. 34, 1949 Maskva

KRASIL'NIKOV, P. A.

24052 KRASIL'NIKOV, P. A. Inzhenernyye resheniya moskovskikh vysotnykh zdaniy. Arkhitektura i stroit-vo, 1949, No. 6, S. 24, 3 (OBL.)

SO: Letopis, No. 32, 1949.

KRASIL'NIKOV, P. A.; DYKHOVICHNAYA, N. A.; LUCHNIKOV, I. A.; SHCHUKIN, S. I.

"The foundation of the highest part of the Dorogomilov Hotel in Moscow," Construction, 1952.

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000826110

SERBINOVICH, P.P. [author]; KRASIL'NIKOV, P.A., dotsent, laureat Stalinskoy premii [reviewer].

"Architectural building construction." Stroi.prom. vol. 31 no.9:46-47 S '53. (MLRA 6:9)

(Architecture) (Building) (Serbinovich, P.P.)

SOV/97-58-8-13/13

AUTHOR: ~~Krasil'nikov, P.~~ A., Section Chief

TITLE: Calculation of Bent and Eccentrically Compressed Reinforced Concrete Elements of "I" Cross-section (O raschete izgibayemykh i vnetsentrenno szhatykh zhelezobetonnykh elementov tavrovogo secheniya)

PERIODICAL: Beton i Zhelezobeton, 1958, Nr 8, p 320 (USSR)

ABSTRACT: In connection with the articles in Beton i Zhelezobeton, 1957, Nr 6 and 1958, Nr 5, entitled "Instructions on Calculations of Cross-sections of Reinforced Elements" (I 123-55), readers Tszyan' Sen'-zhun and G.A. Kiriakidi pointed out discrepancies in the various formulae. The Gosstroy of the USSR instructed the Institut betona i zhelezobetona (Institutefor Concrete and Reinforced Concrete) and Giprotis to look into this matter. They checked and proved that the given formulae were correct.

ASSOCIATION: Gosstroy USSR, Section of Norm Planning and Standards (Otdel norm proyektirovaniya i standartov Gosstroya SSSR)

Card 1/1

USCOMM-DC-61014

SVETLICHNYY, V.I., red.; BABUROV, V.V., red.; DESYATKOV, G.V., red.; KRASIL'NIKOV, P.A., red.; KUDRYAVTSEV, A.O., red.; SVETLICHNYY, B.Ye., red.; SMIRNOV, N.S., red.; SHKVARIKOV, V.A., red.; PEVZNER, A.S., red.izd-va; GILENSON, P.G., tekhn.red.

[Regulations and norms for city planning and construction (SN 41-58)] Pravila i normy planirovki i zastroiki gorodov, SN 41-58. Izdanie ofitsial'noe. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 178 p. (MIRA 12:7)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva.

(City planning)

TEMKIN, L.Ye., inzh., nauchn. red.; OVSYANKIN, V.I., red.; STRELETSKIY, N.S., prof., red.; GVOZDEV, A.A., prof., red.; IVANOV, Yu.M., red.; SEMENTSOV, S.A., kand. tekhn. nauk, red.; GALKIN, Ya.G., red.; KRASIL'NIKOV, P.A., red.; MURASHEV, V.I., red. [deceased]; NIKITIN, N.V., red.; TAL', K.E., kand. tekhn. nauk, red.; VILKOV, G.N., red. izd-va; GARNUKHIN, Ye.K., tekhn. red.

[Papers from the International Conference on Designing Building Elements] Mayerialy Mezhdunarodnogo soveshchaniia po raschetu stroitel'nykh konstruktsii. Moscow, 1958. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 258 p. (MIRA 14:7)

1. Mezhdunaronoye soveshchaniye po raschetu stroitel'nykh konstruktsiy. Moscow, 1958. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Streletskiy, Gvozdev). 3. Chlen-korrospondent Akademii stroitel'stva i arkhitektury SSSR (for Sementsov, Tal')
(Building)

KRASIL'NIKOV, P.A.

Calculations for sprinkler units in buildings without monitors.
Vod.i san.tekh. no.3:32 Mr '62. (MIRA 15:8)

1. Nachal'nik otdela norm proyektirovaniya, standartov i nauchno-issledovatel'skikh rabot Gosstroya SSSR.
(Fire sprinklers)

IMSHENETSKIY, A.A.; KRASIL'NIKOV, I.A.; KRISS, A.Ye.; MEYSEL', M.N.; MISHUSTIN, Ye.N.; RAUTENSHTEYN, Yu.I.; SKRYABIN, C.K.

Boris IAkovlevich El'bert, 1890-1963; an obituary.
Mikrobiologiia 33 no.2:378-379 Mr-Ap '64. (MIRA 17:12)

ZAPLAVNYY, A.Ya; KONDIN, S.R.; KRASIL'NIKOV, P.G.

Some technical and economic data on the massive ore-breaking mining system used at the Sokol'nyy mine. Trudy Alt.GMNII no.2:146-154 '55. (MLRA 10:1)

(Altai Mountains--Mining engineering)

KRASIL'NIKOV, P. I.

"Investigation of Certain Properties of Coatings Applied by the Method of Steel Spraying." Sub 3 Oct 51, Military Aeronautical Engineering Academy imeni Prof. N. Ye. Zhukovskiy

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

KRASIL'NIKOV, P. K.; Fedorov, A.; Il'in, M. M.;

"Mapping of Plant Raw Materials and Raw Material Resources." Compendium Metodika polevogo issledovaniya rastitel'nogo syr'ya /Methods for Field Study of Plant Raw Materials/ 1948, 81-102

(above title appears in a list of published works of M. M. Il'in at the conclusion of an article by I. V. Novopokrovskiy, "Professor M. M. Il'in, His Sixtieth Birthday and Thirty-five Years of Scientific Activity," Botanicheskiy Zhurnal, Vol 35, No 2, pp 208-220, Mar-Apr 1950)

U-5349, p 29, 12 Feb 54

KRASIL'NIKOV, P. K.

Fir

Root system of the Caucasian fir. Trudy Bot.Inst. AN SSSR Ser.3, No. 7, 1951.

9. Monthly List of Russian Accessions, Library of Congress, June 1958, Uncl.

2

KRASIL'NIKOV, P.K.

Accessory roots and the root system of cedar in the Central Sayans.
Bot.zhur. 41 no.8:1194-1206 Ag '56. (MLRA 9:12)

1. Botanicheskiy institut imeni V.L.Komarova Akademii nauk SSSR, Leningrad.
(Sayan Mountains--Cedar) (Roots (Botany))

KRASIL'NIKOV, P.K.

Some new methods of field studies of the root systems of shrubs.
Bot.zhur.42 no.2:249-254 F '57. (MIRA 10:3)

1. Botanicheskiy institut im. V.L. Komarova Akademii nauk SSSR, Leningrad.

(Roots (Botany)) (Botany--Field work)
(Shrubs)

KRASIL'NIKOV, P.K.

Some characteristics of the root system in two-year-old plants of five Evonymus species under conditions prevailing in Leningrad Province. Bot.zhur. 45 no.3:394-397 Mr '60. (MIRA 13:6)

1. Botanicheskiy institut im. V.L. Komarova Akademii nauk SSSR, Leningrad.
(Leningrad Province--Spindle tree)
(Roots (Botany))

KRASII'NIKOV, P.K.

Forest types of the central Sayans and their economic significance (upper reaches of the Kan, Malyy Agul, and Kizir Rivers). Trudy Bot. inst. Ser. 5 no.9:49-150 '61. (MIRA 15:1)
(Sayan Mountains--Forest ecology)

KRASIL'NIKOV, P.K.

Siberian pine of the central Sayans as a fatty oil plant. Trudy Bot. inst. Ser. 5 no.9:251-256 '61. (MIRA 15:1)
(Sayan Mountains--Pine) (Oils and fats)

KRASIL'NIKOV, P.K.

Roots of principal guttiferous milk vetches of the Turkmen S.S.R. and Nakhichevan A.S.S.R. Trudy Bot.inst.Ser.5 no.10:190-255 '62. (MIRA 15:2)
(Turkmenistan--Milk vetches)(Nakhichevan A.S.S.R.--Milk vetches)

KRASIL'NIKOV, P.K.

Classification of underground orggns of trees and shrubs. Probl. bot. 6:277-282 '63. (MIRA 16:5)
(Roots (Botany)—Morphology)

KRASIL'NIKOV, P.K.

Some structural characteristics of the subterranean organs of Astragalus retamocarpus Boiss. et Hohen. Bot.zhur. 48 no.2:266-269 F '63. (MIRA 16:4)

1. Botanicheskiy institut imeni V.L.Komarova AN SSSR, Leningrad.
(Turkmenistan—Milk vetch) (Roots (Botany))

KRASIL'NIKOV, P.K.; NIKITIN, A.A.

Estimating the resources of mountain cranberries, whortleberries, bog bilberries, and cranberries in the forest zone of the European part of the U.S.S.R. Rast. res. 1 no.1:130-149 '65.
(MIRA 18:6)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad.

KORCHAGIN, A.A.; KRASIL'NIKOV, P.K.

Conference on the geographical characteristics of fruiting in forest trees, shrubs and berry-bearing plants (Moscow, November 28-30, 1964). Rast. res. 1 no.2:303-306 '65.

(MIRA 18:11)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

KRASIL'NIKOV, Petr Kuz'mich; MASLOV, Roman Platonovich; TSARENKO, A.P., redaktor; BOBROVA, Ye.N. tekhnicheskiy redaktor

[Organization of shipper's special destination trains with separate railroad car units; the work practice of the Uzlovaya section of the Moscow-Kursk-Donbass line] Organizatsiia otpravitel'skikh marshrutov iz razroznennogo vagonopotoka; opyt raboty Uzlovskogo otdeleniia Moskovsko-Kursko-Donbasskoi dorogi. Moskva, Gos. transp. zhel-dor. izd-vo, 1957. 23 p. (MLRA 10:4)

(Railroads--Making up trains)

KRASIL'NIKOV, P.Ye., assistent

Report on the work of the Alekseyevskoye District Hospital in the Tatar A.S.S.R. Kaz.med. zhur. no.3:104-106 My-Je '63. (MIRA 16:9)

1. Kafedra organizatsii zdravookhraneniya s istoriyey meditsiny (zav. - prof. T.D.Epshteyn) Kazanskogo meditsinskogo instituta.
(ALEKSEYEVSKOYE DISTRICT--HOSPITALS)

KHASIL'NIKOV, R. I., FITINGOF, S. N.,1, SHUR, I. V., YAKOVLEV, L. A.,2, KUKHARKOVA, L. L., 3, FREYDLIN, E. M., PEROVA, P. V., IL'YASHENKO, M. A.,4, TARDOLYUBOVA, G. B., RUSANOV, R. S., KONUSPAYEVA, U. S., MITROFANOV, V. N., and KAPERNAUMOVA, N. P.,5, (1 Senior Scientific Workers), (2 Professors), (3 Director of the Laboratory of Microbiology and Veterinary Sanitary Inspection of VNIIMP [All-Union Scientific Research Institute of the Meat Industry), (4 Candidates of Veterinary Sciences,) (5 Junior Scientific Workers).

"Sanitary Appraisal of Mutton from Sheep Infected by Brucellosis."
Veterinariya vol. 38., no. 11., November 1961., p. 60

KUKHARKOVA, L.L., starshiy nauchnyy sotrudnik; FREYDLIN, Ye.M., kand.veter. nauk; PEROVA, P.V.; IL'YASHENKO, M.A.; TRUDOLYUBOVA, G.B., mladshiy nauchnyy sotrudnik; PLOTNIKOV, V.I.; KRASIL'NIKOV, R.I., starshiy nauchnyy sotrudnik; FITINGOV, S.N., starshiy nauchnyy sotrudnik; RUSANOV, R.S., mladshiy nauchnyy sotrudnik; KONUSPAYEVA, U.S., mladshiy nauchnyy sotrudnik; Prinimali uchastiye: YAKOVLEV, L.A., prof.; MITROFANOV, V.N.

Sanitary evaluation of the meat of sheep affected with brucellosis. Trudy VNIIMP no.14:87-95 '62. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti (for Kukharkova, Freydlin, Perova, Il'yashenko, Trudolyubova, Plotnikov). 2. Kazakhskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta myasnoy promyshlennosti (for Krasil'nikov, Fitingov, Rusanov, Konuspayeva). 3. Saratovskiy zooveterinarnyy institut (for Yakovlev). 4. Saratovskaya oblastnaya veterinarnaya bakteriologicheskaya laboratoriya (for Mitrofanov).

(Meat inspection) (Brucellosis in sheep)

SHUR, I.V., prof.; YAKOVLEV, L.A., prof.; KUKHARKOVA, L.L.; FREYDLIN, Ye.M., kand. veterin. nauk; PEROVA, P.V., kand. veterin. nauk; IL'YASHENKO, M.A., kand. veterin. nauk; KRASIL'NIKOV, R.I., starshiy nauchnyy sotrudnik; FITINGOF, S.N.; starshiy nauchnyy sotrudnik; TRUDOLYUBOVA, G.B., mlr shiy nauchnyy sotrudnik; RUSANOV, R.S., mladshiy nauchnyy sotrudnik; KONUSPAYEVA, U.S., mladshiy nauchnyy sotrudnik; MITROFANO., V.N., mladshiy nauchnyy sotrudnik; KAPERNAUMOVA, N.P., mladshiy nauchnyy sotrudnik.

Sanitary evaluation of meat from sheep with brucellosis. Veterinariia 38 no.11:60-65 N '61 (MIRA 18:1)

1. Rukovoditel' laboratorii mikrobiologii i veterinarno-sanitarnoy ekspertizy Vsesoyuznogo nauchno-issledovatel'skogo instituta myasnoy promyshlennosti (for Kukharkova).

L 17003-66 EWT(1)/EWA(h) SCTB DD

ACC NR: AT6003893 SOURCE CODE: UR/2865/65/004/000/0573/0580

AUTHOR: Maystrakh, Ye. V.; Il'yutkin, G. N.; Konstantinov, V. A.; Yeremenko, I. V.; Krasil'nikov, S. A.; Lysenko, O. Yu.; Matsatsa, V. F.; Privezentsev, V. I.

66
B+1

ORG: none

TITLE: Automatic apparatus to create reversible and controllable hypothermia for possible use in space flight

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 573-580

TOPIC TAGS: cybernetics, hypothermia, space physiology, physiologic parameter, space flight

ABSTRACT: The authors designed and tested an apparatus consisting mainly of a set of sensors of physiological functions and a logical device to process the readings of the sensors and to issue the appropriate commands for heating or cooling should the established parameters (e. g., rectal temperature, skin temperature, depth of respiration, arterial pressure, motor activity) be exceeded. The apparatus functioned very efficiently in experiments on 16 dogs with a body temperature of 22-

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L 17003-66
ACC NR: AT6003893

-25°C. The apparatus cooled the body to the prescribed level, maintained the desired level of hypothermia and state of anesthesia for up to 24 hours, and restored normal body temperature. The authors recommend a continuation of research with a view to perfecting the sensing elements, increasing the amount of information to be processed (brain and heart biopotentials), and providing the logical and control system with means of self-instruction and self-organization. Orig. art. has: 2 figures, 1 table.

SUB CODE: 06/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

Card 2/2

MIKOYAN, A.I.; MARINENKO, A.Ya., inzh.; RAPPOPORT, A.M., inzh.; SLEPNEV, K.V., inzh.; SYROVOY, P.Ye., inzh.. Prinimali uchastiye: BORODIN, D.D., inzh.; ZHARKOV, M.A., inzh.; SHIPUNOV, B.G., inzh.; KURAKOV, V.Ya., tekhnik. STRAKHOV, L.G., otv.red.; KOMPANTSEV, N.N., otv.red.; KRASIL'NIKOV, S.D., red.; ZUDAKIN, I.M., tekhn.red.

[The MIG-17PF and MIG-17F airplanes; instructions for operation and maintenance] Samolety MiG-17PF i MiG-17F; instruktsiia po tekhnicheskoi ekspluatatsii i obsluzhivaniiu. Moskva, Gos.izd-vo obor.promyshl., 1957. 143 p. diagrs.

1. Russia (1923- U.S.S.R.) Ministerstvo oborony. (Fighter planes) (Jet planes, Military)

KRASIL'NIKOV, S.D.

BYKOV, Leonid Tikhonovich; YEGOROV, Mikhail Spiridonovich; TARASOV, Pavel Vasil'yevich; GRISHANOV, N.G., kand.tekhn.nauk inzhener-polkovnik, retsenzent; KRASIL'NIKOV, S.D., inzh., red.; PETROVA, I.A., red.; ROZHIN, V.P., tekhn.red.

[Equipment for planes plying at high altitudes] Vysotnoe oborudovanie samoletov. Moskva, Gos. izd-vo obor. promyshl., 1958. 392 p. (MIRA 11:5)
(Airplanes)

KRASIL'NIKOV, S.D.

KRASNOV, Nikolay Fedorovich; ARZHANIKOV, N.S., prof., retsenzent; SHUMYATSKIY, B.Ya., kand. tekhn. nauk, retsenzent; KUZNETSOV, S.I., kand. tekhn. nauk, retsenzent; KRASIL'NIKOV, S.D., inzh., red.; TUBYANSKAYA, F.G., izd-va red.; PUKHLIKOVA, N.A., tekhn. red.

[Aerodynamics of rotating bodies] Aerodinamika tel vrashcheniia. Moskva, Gos. izd-vo obor. promyshl., 1958. 560 p. (MIRA 11:10)
(Aerodynamics)

TAPTUN, Andrey Savel'yevich, dotsent, kand.tekhn.nauk; VEREMEYCHUK, I.S., dotsent, kand.tekhn.nauk, retsenzent; KRASIL'NIKOV, S.D., inzh., red.; VINOGRADSKAYA, S.I., izdat.red.; ROZHIN, V.P., tekhn.red.

[Manufacture of artillery systems; the mechanical treatment of gun barrels] Proizvodstvo artilleriiskikh sistem; mekhanicheskaia obrabotka orudiinykh stvolov. Moskva, Gos.nauchno-tekhn. izd-vo Oborongiz, 1960. 336 p. (MIRA 14:3)
(Ordnance)

GRIGOR'YEV, Vasiliy Prokhorovich, prof., doktor tekhn.nauk; LUK'YANOV, B.V., dots.,kand.tekhn.nauk, retsenzent; GORBUNOV, M.N., dots., kand.tekhn. nauk, retsenzent; KRASIL'NIKOV, S.D., inzh., red.; ANIKINA, M.S., izdat.red.; GARNUKHINA, L.A., tekhn.red.

[Technology of airplane manufacture] Tekhnologiia samoleto-stroeniia. Moskva, Gos.izd-vo obor.promyshl., 1960. 542 p. (MIRA 13:2)

1. Moskovskiy aviatsionnyy tekhnologicheskiy institut (for Luk'yanov, Gorbunov).

(Airplanes--Design and construction)

AM 10551-66 EWT(m)/EWP(w)/EWA(d)/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) JD/HM/EM

ACC NR: AP6000784 UR/0096/65/009/009/0034/0038

AUTHOR: Gorelkin, B.G.(Engineer); Krasil'nikov, S.M.(Engineer); Fedorovich, L.A.(Engineer); Yelizarov, D.P.(Candidate of Tech.Sci.); Fedosov, A.I.(Candidate of Tech.Sci).

ORG: TsNIITMASh; MEI

TITLE: The problem of the stresses acting in a steam pipe made of austenitic steel

SOURCE: Teploenergetika, no.9, 1965, 34-38

TOPIC TAGS: stress analysis, pearlite steel, austenite steel, steam power plant, pipe/1Kh18N12T steel

ABSTRACT: The high temperature coefficient of linear expansion and the low coefficient of thermal diffusivity of austenitic steel bring about, in the wall of the steam pipe, higher temperature and compensation stresses than in steam pipes made of pearlitic steel. In the experiments, the initial pressure of the steam before the turbine was 170 bars and the temperature was from 550 to 570°C. Each block of the unit, with a power up to 150 Mwt, consisted of a turbine and two boilers connected with the turbine by four lines of main steam piping (two from each boiler). The steam piping tested was made of 1Kh18N12T steel and had a diameter and a wall thickness of 219 x 27 mm. Measurements of the stresses at high steam

Card 1/2 UDC: 624.058.5:621.772.4.001.45

L 10551-66

ACC NR: AP6000784

temperatures was effected with type MEI mechanical tensometers. The tangential stresses were evaluated by calculation and, knowing the tangential stress, it is possible to calculate the tangential deformation. Finally, the axial stress can then be calculated. A series of tests was run to determine the dependence of the tangential stresses on the rate of heating of the pipe up to a temperature of 550°C. Results are shown graphically. If the "rate" stresses are added to the static stresses measured with the tensometers, the authors arrive at a value on the order of 15 kg/mm^2 which is close to the standard yield point for 1Kh18N12T steel. In conclusion, the proposition is advanced that one possible reason for the failure of welded joints in austenitic steel steam pipes is the increased magnitude in the sum of the stresses brought about by the superposing of significant "rate" stresses, connected with variations in the steam temperature, on top of the static stresses. Orig. art. has: 4 formulas and 5 figures.

SUB CODE: 11,13 SUBM DATE: 00 ORIG REF: 003 OTH REF: 000

Card 2/2

KRASIL'NIKOV, S.N.

MARYGANOV, I.V., polkovnik; KRASIL'NIKOV, S.N., doktor voyennykh nauk, professor, general-leytenant, redaktor; RUDIN, M.Z., podpolkovnik, redaktor; MEZHERITSKAYA, N.P., tekhnicheskiy redaktor.

[Progressive character of Soviet military science] Peredovoi kharakter voennoi nauki. Pod red. S.N.Krasil'nikova. Moskva, Voennoe izd-vo Ministerstva oborony SSSR, 1953. 149 p. (MLRA 7:10)
(Military art and science)

KRASIL'NIKOV, S.N.

DZHEVETSKIY, Yan [Drzewiecki, Jan]; PYURO, Tadeush [Pióro, Tadeusz]; KRASIL'NIKOV, S.N., gen.-leytenant, nauchnyy red.; MEMCHINSKIY, Ya.Q., [translator]; BORISOV, V.V., red.; SOKOLOVA, G.F., tekhn.red.

[Problems in the development of the military art] Problemy razvitiia voennogo iskusstva. Pod nauchnoi red. S.N.Krasil'nikova. Moskva, Voen.izd-vo M-va obor. SSSR, 1958. Translated from the Polish. 111 p. (MIRA 11:12)
(Military art and science)

KRASIL'NIKOV, S.N., zasl. deyatel' nauki prof., doktor voyennykh nauk, general-leytenant, red.; MATVEYEV, S.P., inzh.-polkovnik, red.

[The atom and weapons; scientific and technological progress and military affairs] Atom i oruzhie; nauchno-tekhnicheskii progress i voennoe delo. Sbornik statei. Moskva, Voenizdat, 1964. 339 p. (MIRA 17:12)

ACCESSION NR: AT4025321 S/0000/63/000/000/0292/0299

AUTHORS: Ivanov, D. P.; Krasil'nikov, S. S.

TITLE: Measurement of distribution of conductivity in a plasma pinch

SOURCE: Diagnostika plazmy* (Plasma diagnostics); sb. statey. Moscow, Gosatomizdat, 1963, 292-299

TOPIC TAGS: plasma pinch, plasma conductivity, high frequency plasma, gas jet, plasma confinement

ABSTRACT: It is proposed to determine the radius of a plasma pinch from the distribution of its conductivity, by superimposing an additional high-frequency component on the voltage exciting the discharge, such that the reactance of the pinch relative to the supplementary frequency is much larger than the resistance. The inductance and consequently also the geometrical dimensions of the pinch can

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ACCESSION NR: AT4025321

then be determined from the ratios of the amplitudes of the supplementary component on the circuit voltage and on the derivative of the current. A similar method was used by K. V. Donskoy et al. for investigation of conductivity in gas jets (Zh. tekhn. fiz. v. 32, 9, 1095, 1962). The plasma pinch is assumed to be axially symmetrical. The dependence of the measured inductance on the frequency of the supplementary oscillations is qualitatively estimated for different distributions of the conductivity over the cross section of the plasma pinch and it is concluded that the method can be used for estimates of the conductivity in the outer zone of the plasma pinch and of irregularities in the distribution of the conductivity over the cross section, and for approximate measurements of the internal high-conductivity zone. The approximate radius of the current and its time variation can be derived from these estimates. It is emphasized that the results are still preliminary. Orig. art. has: 4 figures and 4 formulas.

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ACCESSION NR: AT4025321

ASSOCIATION: None

SUBMITTED: 19Oct63	DATE ACQ: 16Apr64	ENCL: 02
SUB CODE: ME	NR REF SOV: 002	OTHER: 001

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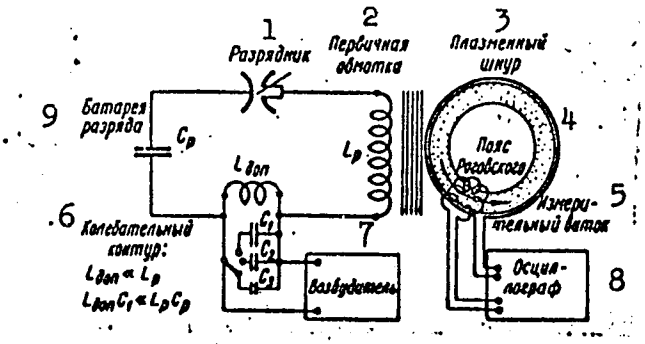
ACCESSION NR: AT4025321 ENCLOSURE: 01

Measurement set-up:



1 - discharge gap
2 - primary winding
3 - plasma pinch
4 - Rogowski loop
5 - measuring turn
6 - tank circuit
7 - exciter
8 - oscilloscope
9 - discharge capacitor bank

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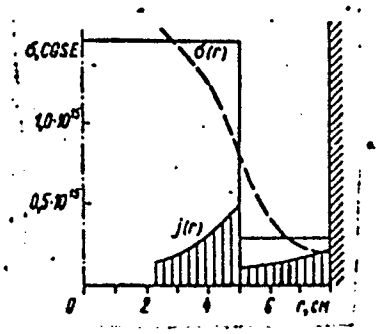
ACCESSION NR: AT4025321

ENCLOSURE: 02



Distribution of conductivity and density of additional alternating current over the cross section of the pinch

Card 5/5

KRASIL'NIKOV, V.

Economic councils and industrial hygiene. Okhr.truda i sots.strakh. 3 no.3:30-32 Mr '60. (MIRA 13:7)

1. Starshiy inzhener po tekhnike bezopasnosti Belorusskogo sovnarkhoza.
(White Russia--Industrial hygiene)

SOV/124-59-7-7492

Translation from: Referativnyy zhurnal, Mekhanika, 1959, Nr 7, p 54 (USSR)

AUTHOR: Krasil'nikov, V.A.

TITLE: An Investigation of the Motion of Air in the Duct of a Centrifugal Compressor Rotor

PERIODICAL: Tr. Kazansk. aviats. in-ta, 1958, Vol 33 - 34, pp 317 - 327

ABSTRACT: The author describes the method and the results of an experimental investigation of the stream in the model of a centrifugal compressor at low velocities. Graphs of the distribution of the relative velocity in some cross sections over the height of the guiding duct are presented.

L.G. Naumova

√B

Card 1/1

S/123/59/000/008/041/043
A004/A002

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 8, p. 369, # 31561

AUTHOR: Krasil'nikov, V. A.

TITLE: On the Disk Losses in Centrifugal Compressors 23

PERIODICAL: Tr. Kazansk. aviats. in-ta, 1958, Vol. 33-34, pp. 329-343

TEXT: Bibliographic entry

Card 1/1

S/124/62/000/004/010/030
D251/D301

24.4300
24.2120

AUTHORS: Vinogradov, B. S., Krasil'nikov, V. A., Alemasova, N. A. and Novikov, A. L.

TITLE: Investigating the working process and the characteristics of centrifugal compressors

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1962, 39, abstract 4B235 (Tr. kazansk. aviats. in-ta, 1960, no. 56

TEXT: Existing methods of calculating the flow part of a centrifugal compressor with the application of results of experimental investigations conducted in the Kazanskiy aviatsionnyy institut (Kazan Aviation Institute) between 1949-1959 were described and discussed. The described experiments were carried out on the basis of two compressors of types ТК-19 (TK-19) and АМ-35А (AM-35A) with straight radial blades having two variants of the working wheels (closed and semi-closed) and two variants of the diffusors (with and without blades). The work consists of five chapters. In the first are described the known basic dependences between the para-

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Investigating the working ...

meters of a centrifugal compressor obtained with the help of one-dimensional jet calculation theory. The second chapter is devoted to the experimental investigation of the flow of air in a working wheel. The distribution of the flow parameters is measured at various radii and in the outlet section with respect to the breadth of the inter-blade channel and the blade height for the closed and semi-closed wheels. Numerous graphs are given. The well-known lack of coincidence between the actual distribution of the parameters and the theoretical distribution for the uninterrupted flow of an ideal liquid is confirmed, and for some regimes the dip in the curve of pressure distribution with respect to the channel breadth is shown. The influence of the air circulation is analyzed for the working of a wheel of semi-closed type. All investigations in this chapter are carried out for small subsonic velocities of rotation. In the third chapter an appraisal is made of the experimental investigation of the air flow in bladeless and bladed diffusors, also carried out for small subsonic velocities, and a comparison made with previously published data. Graphs are given for the distribution of the parameters along the breadth and length of

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the channel. Possibilities are considered of improving the characteristics of the compressors with a project of a bladed diffusor taking into consideration the structure of the running current, and corresponding recommendations are given for the design and set-up of a bladed diffusor. It is affirmed, in contrast to recommendations wide-spred in the literature, that the directing blades ought to be set up with a minimum distance between the wheel and the forward edge of the blade. The entry angle of the blade, it is recommended, should be made as small as possible, and even equal to zero. In the fourth chapter the construction of the characteristics is considered of the compressor, the most convenient coordinate system is discussed, and the influence on the characteristics of various similarity criteria. The possible displacement is discussed and the deformation of the curves of the characteristics due to different atmospheric conditions at the entry. In the fifth chapter an approximation method is proposed for the evaluation of the characteristic of the centrifugal compressor with revolution of the blades of the entry directing apparatus, if the characteristics are known for some given angle of the blade set-up. A method is

Investigating the working ...

recommended for compressors with regularized entry directing apparatus. It is necessary to point out that each form of the experiments of the KAI was carried out only for one type of compressor, which makes the wide generalization of the data difficult. 51 references. [Abstracter's note: Complete translation.]

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L 44164-65 EWG(k)-2/EWT(l)/EEC(b)/T Pz-4/Pz-6 IJP(c) GG/AT

ACCESSION NR: AP5008473 S/0070/65/010/002/0252/0255

AUTHOR: Belyayev, L. M.; Kresil'nikov, V. A.; Lyamov, V. Ye.; Panova, V. P.; Sil'vestrova, I. M.; Smirnov, [illegible]; Sil'vara, A. B.

TITLE: Interaction of ultrasonic waves with conduction electrons in cadmium sulfide

SOURCE: Kristallografiya, v. 10, no. 2, 1965, 252-255

TOPIC TAGS: cadmium sulfide, ultrasonic wave, photoconductivity

ABSTRACT: The strong interaction of conduction electrons with acoustic waves along definite crystallographic axes in CdS, together with the photoconductivity of this semiconductor material, which facilitates changing the electron concentration, make cadmium sulfide an excellent material for studying the interaction of ultrasonic waves with conduction electrons. These interactions take the form of attenuation, amplification or modulation of the ultrasonic wave, a change in the voltage-current characteristics of the crystal in a strong electric field, or an electroacoustic effect. All these effects were studied in CdS crystals grown from a melt. The specimens were cut into bars 4 x 5 x 7-8 mm. The hexagonal axis of the crystal was oriented both parallel with and perpendicular to the long dimension of the bar. Dark conduction was 10^{-10}-10^{-4} ohm^{-1}cm^{-1}. Illumination reduces the conductivity to

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L 4015-65

ACCESSION NR: AP5008473

10^{-4}-$5 \cdot 10^{-3}$ Ω^{-1} cm^{-1}. The ends of the specimens were coated with indium by vacuum deposition. It was found that the maximum change in elasticity and in the damping constant takes place at maximum photoconductivity. Amplification of ultrasonic pulses was observed in some specimens when measuring attenuation with the application of an external electric field. The amplification amounted to 2.5-3 db/mm for a frequency of 24 Mc and a field strength of 1200 v/cm. Voltage-current characteristics show a deviation from linearity (current saturation) when the drift rate of the electrons is greater than the speed of the transverse or longitudinal ultrasonic waves (depending on the orientation of the specimen). Nonlinearity increases with the conductivity of the crystal. Drift mobility was found to be 130-150 cm^2/v·sec. The sign of the photoconductivity corresponds to n-type conductivity in CdS. The pulse amplitude of the acoustic amplification on the order of dozens of millivolts. Orig. art. has: 3 figures.

ASSOCIATION: Institut fizicheskikh issledovaniy AN SSSR (Institute of Crystallography, Academy of Sciences, USSR)

SUBMITTED: 20May64 ENCL: 00 SUB CODE: SS, EC

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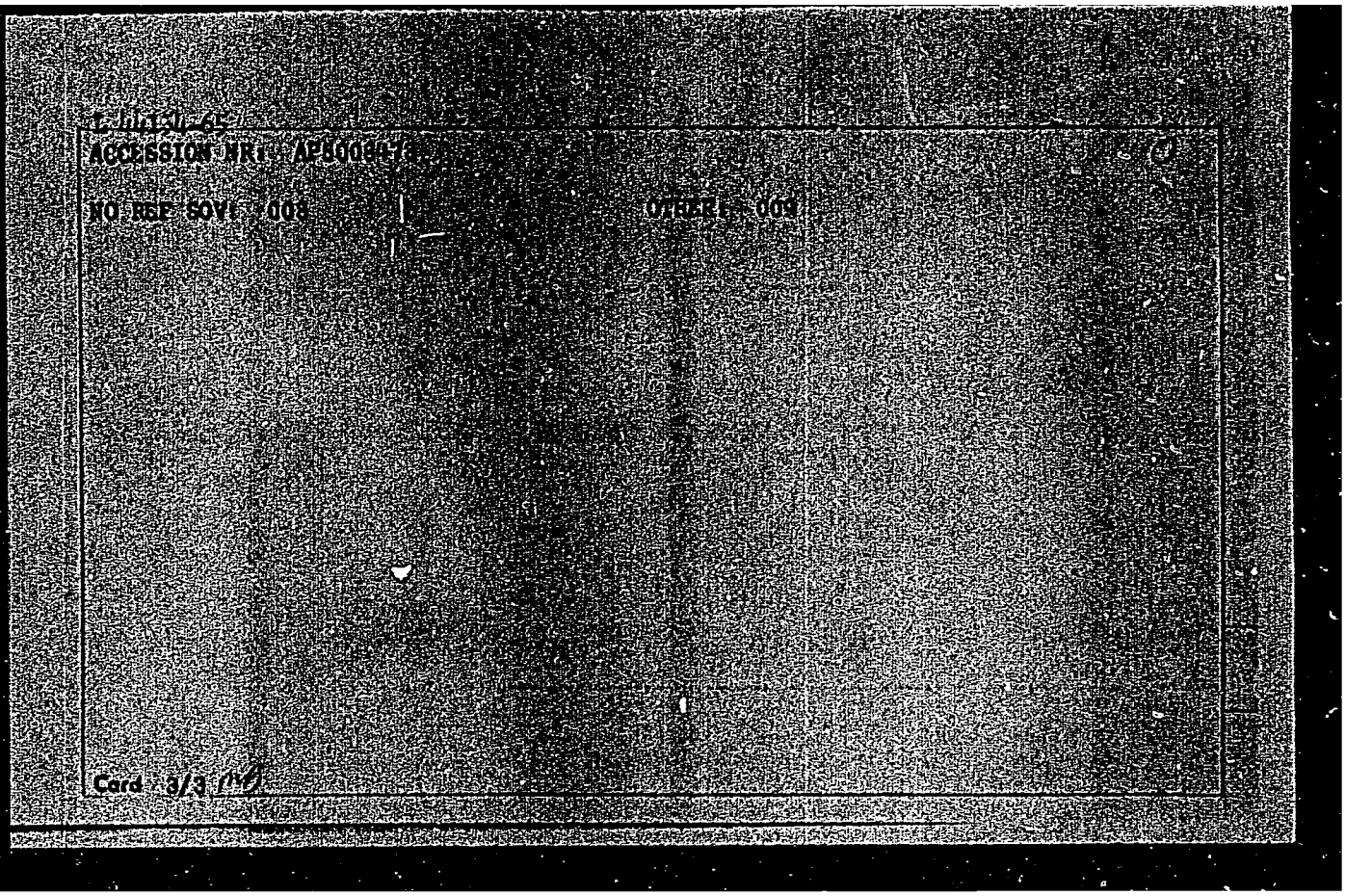

GUN SYU-FEN' [Kung Hsiu-fen]; ZAREMBO, L.K.; KRASIL'NIKOV, V.A.

Nonlinear interaction of elastic waves in solids. Akust. zhur. 11 no.1:112-115 '65. (MIRA 18:4)

1. Kafedra akustiki Moskovskogo gosudarstvennogo universiteta.

ACC NR: AR6035054 SOURCE CODE: UR/0058/66/000/008/E072/E072

AUTHOR: Krasil'nikov, V. A.; Belyayev, L. M.; Lyamov, V. Ye.; Sil'vestrova, I. M., Uchastkin, V. I.

TITLE: Investigation of the acoustical-electrical effect in cadmium sulfide monocrystals

SOURCE: Ref. zh. Fizika, Abs. 8E550

REF SOURCE: Sb. Nekotoryye vopr. vzaimodeystviya ul'trazvyk, voln s elektronami provodim. v kristallakh. M., 1965, 95-110

TOPIC TAGS: crystal, cadmium sulfide, monocrystal, acoustical electrical effect

ABSTRACT: A study was made which showed that within the frequency range of 20—-75 Mc, the Weinrich formula is satisfied (at least qualitatively) in piezo-semiconductors for the acoustic electric effect (AEE). In cadmium sulfide mono-crystals AEE is considerable and because of its linear dependence on ultrasound may be used to measure ultrasound intensity in solids. The spectral characteristics of acoustic-electric emf (AEMF) do not agree with the theoretical (see

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reference 8E549 in the issue). The sharp increase in AEMF under nonuniform illumination of a sample makes it possible to use this method for increasing the sensitivity of acoustic-electrical meters in practical applications of AEE. [Translation of abstract] [SP]

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Zarembo, Lev Konstantinovich; Krasil'nikov, Vladimir Aleksandrovich

Introduction to nonlinear acoustics; sound and ultrasonic waves of high intensity (Vvedeniye v nelineynuyu akustiku; zvukovyye i ul'trazvukovyye volny bol'shoy intensivnosti) Moscow, Izd-vo "Nauka," 1966. 519 p. illus., biblio. Errata slip inserted. 5,000 copies printed.

TOPIC TAGS: acoustics; sound; sound propagation; ultrasonic wave; ultrasonic wave propagation; cavitation

PURPOSE AND COVERAGE: This book is said to represent the first attempt at a generalization of a large quantity of work in nonlinear acoustics. The book is intended for students of higher courses at universities and for aspirants, engineers, and physicists working in the field of acoustics and hydroacoustics, hydrodynamics, the theory of elasticity, and solid state physics. References are given with each chapter.

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