ARANE, M.E.

TANDEYEV, L.I., dots.; ARANE, M.E.; BILITE, I.V. [Bylyte, I.V.]

Observations on synthomycin therapy in syphilis [with summary in English]. Vest.derm. i ven. 31 no.6:32-36 N-D '57. (MIRA 11:3)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - dotsent L.I.Tandeyev) Kaunasskogo meditsinskogo instituta (dir. - prof. Z.I.Yanushkyavichus) i Kaunasskogo kozhno-venerologicheskogo dispansera (glavnyy vrach V.G.Shmuylite)

(CHLORAMPHENICOL, ther. use
syphilis)
(SYPHILIS, ther.
chloramphenicol)

NEKRICH, Ye.I.; ARANE, M.Yu.; SMIRNOV, N.A., prof., red.; SHILLING, V.A., red. izd-va; GVIRTS, V.L., tekhn. red.

[Overall mechanization and automation in housing construction combines] Kompleksnaia mekhanizatsiia i avtomatizatsiia na domostroitel'nykh kombinatakh. Pod obshchei red. N.A.Smirnova. Leningrad, Leningr. dom nauchno-tekhn.propagandy, 1961. 34 p. (Bibliotechka stroitelia po mekhanizatsii i avtomatizatsii stroitel'stva, no.3) (MIRA 15:8)
(Leningrad--Precast concrete) (Apartment houses) (Automation)

POPOVA, Dobra; ARANGELOV, Arangel

Application of heterosis method to melons and watermelons.
Selskostop nauka 1 no.10:1087-1090 '62.

ARANICKI, M., prof. dr.; GAON, J., prof. dr.

On a new approach in the eradication of typhus in endemic foci. Med. arh. 16 no.6:15-23 N-D '62.

1. Epidemioloski institut Medicinskog fakulteta u Sarajevu (Sef: prof. dr M. Aranicki).
(TYPHUS)

5

ARANICKI, M.

Main problems of the control of infectious diseases in the communes. Bul sc Youg 7 no.1/2:10-11 F-Ap '62.

1. Epidemioloski institut Medicinskog fakulteta, Sarajevo.

ARANICKI, Milos, prof. dr., Sarajevo

Improvement in notification of communicable diseases by rendering fees. Narodno zdrav., Beogr. 10 no.9:265-268 1954.
(COMMUNICABLE DISEASES, prev. & control
Yugosl., notification fees)

ARANICKI, Milos, Prof. dr.

Problem of tactics in the fight against typhus fever in relation to late recurrences (Brill-Zinsser's disease). Higijena, Beogr. 7 no.1-4:84-94 1955.

1. Medicinski fakultet, Sarajevo.
(TYPHUS prev. & control
Brill's dis. in Yugosl. (Ser))

ARANICK, MILOS

Contents, Vol 15, No 2, Feb 61

1. "My Will Power" Vaccination to Repeated Milk Vaccine Fever in Milos ARANICK; pp 1-4.
2. "Rehabilitation - Return to Life" Prof Dr Fedor LUKAC, pp 4-7.
3. "Vaccination of Children Against Diphtheria in the Past Protection Against This Disease" Prof Dr Jakob A. GADD; Faculty of Medicine, Sarajevo; pp 7-9.
4. "Regarding the Spontaneous Loss of Hair" Primarius Dr Veljko KOSANOVIC; pp 10-13.
5. "Dishes May Transmit Diseases" Dr Horia SPANIC; pp13-15.
6. "Inflammation of Ovaries and Oviducts" Dr Petca DODINA, Gynecologist; pp 15-16.
7. "More About Epilepsy" Dr Ivan MILAKOVIC, Neuropsychiatrist; pp 18-21.
8. "Congenital Dislocation of the Hip and its Treatment" Docent Dr Mihailo F. PROTIC; pp 21-23.
9. "The Thyroglav Gut Gives Battle Against Tuberculosis" Milan R. PAVLOVIC; pp 25-28.
10. "The Crossing Weather and Health" Dr Sreten STEPANOVIC pp 28-29.
11. "Alcohol Present and Important Problem of Public Health" Dr Veljko KOSANOVIC; pp 29-32.

1-Watermarked facsimile.

— 1/2 —

ARANICKI, Milos; JAKOB, Gaon; SERSTNEV, E.

Recent epidemiology studies on endemic nephorpathies in People's Republic of Bosnia and Hercegovina. Med. arh. 15 no.3:99-130 My-Je '61.

1. Epidemioloski institut Medicinskog fakulteta u Sarajevu (Sef: prof. dr Milos Aranicki) Cnetralni higijenski zavod u Sarajevu (Direktor: dr Ante Jamnicki).
(KIDNEY DISEASES epidemiol)

R. ARANITOVIC

"Active assets of enterprises." p. 468. (FINANSIJE, Vol. 7, no. 9/10, Sept./Oct. 1952, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions, L. C., Vol. 2, No. 7, July 1953, Uncl.

GALANKIH, N.K.; MALYAVIN, G.T.; ARANOV, A.D.; KLEMENOVA, Ye.S.

Repeated surgery in the tetralogy of Fallot. Grud.khir. no.4:25-32 Jl-Ag '62. (MIRA 15:10)

1. Iz Instituta khirurgii imeni A.V.Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) AMN SSSR.
(TETRALOGY OF FALLOT)

AKANOV, M. M.

"Tactical Navigation," Naval Fleet, Military Publishing House, 1938.

ARANOVICH, A., (Engr-Col)

Author of the article, "Shell for the Pneumatic Gun," illustrating the construction of a shell to be used in the pneumatic gun described in his article, " Making New Devices for Teaching Firing on the Move." (Tankist, Moscow No. 4, Apr. 54)

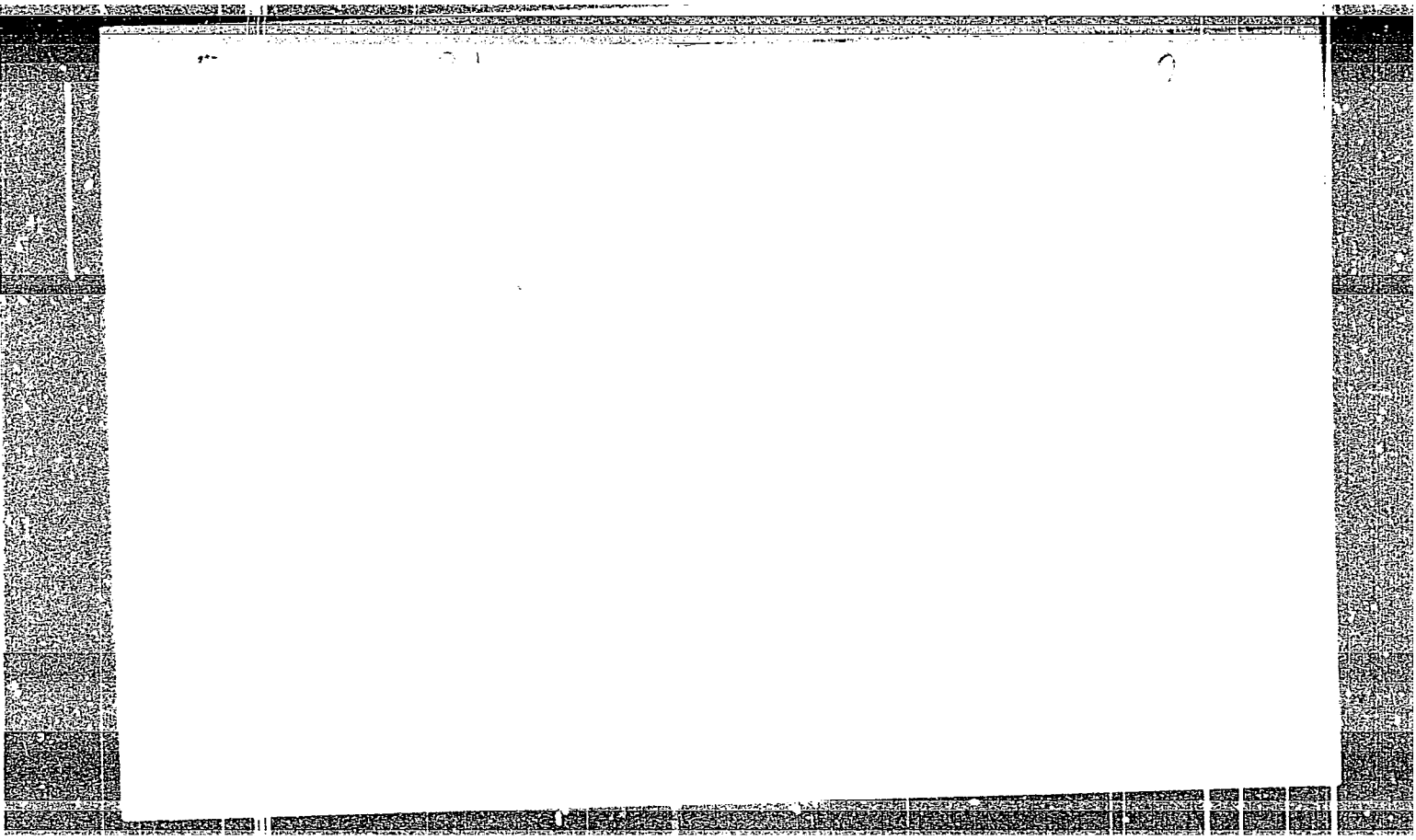
SO: SUM No. 239, 13 Oct. 1954

ORRO, P.I., kand. tekhn. nauk; SAVIN, G.A., inzh.; ARANOVICH, A.V., inzh.

Permissible deformations during pipe drawing on a floating mandrel. Proizv. trub. no.12:51-56 '64. (MIRA 17:11)

AGRANOVSKIY, I.; ARANOVICH, B.; BELYAYEVA, V.; BOL'SHAKOV, A.; GRUZDEV, V.; DICH, S.; ZELENTSOV, I.; KONKIN, A.; LEVIT, R.; MIKHAYLOV, N.; MOGILEVSKIY, Ye.; SERKOV, A.; SMELKOV, G.; SNETKOV, N.; SOROKIN, Ya.; SHIFRIN, L.

In memory of Vladimir Sergeevich Smurov, 1897-1965. Khim. volok. no.2:78 '65. (MIRA 18:6)



APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101910014-4"

ARANOVICH, B.I.

BOGORODITSKIY, N.P., professor; VASIL'YEV, D.V., professor; BAYDA, L.I. dotsent; ODINTSOV, G.V., dotsent; SEMENKOVICH, A.A., dotsent; FATEYEV. A.V., dotsent; YURGENSON, R.I., dotsent; ARANOVICH, B.I., starshiy prepodavatel'; GEKTOR, D.S. starshiy prepodavatel'; POVOLOTSKIY, Ya.A., prepodavatel'.

Development of automatic control and telemechanics in the fifth five-year plan. Avtom. i telem. 14 no.2 238-240 Mr-Ap '53. (MLRA 10:3)

1. Leningradskiy elektrotekhnicheskiy institut im. V.I.Ul'yanova (Lenina)

(Automatic control) (Remote control)

TIMOFEYEV, Vladimir Andreyevich, prof., doktor tekhn.nauk; MORDOVIN, B.M., prof., retsenzent; RYABININ, I.A., dots., kand. tekhn. nauk, inzh.-kapitan III ranga, retsenzent; GAKKEL', Ye.Ya., doktor tekhn. nauk, prof., retsenzent; ARANOVICH, B.I., dots., kand. tekhn. nauk, retsenzent; GORBENKO, B.M., st. prepodavatel', retsenzent; GEKTOR, D.S., retsenzent; VOL'PE, L., red.

[Fundamentals of the theory of automatic control] Osnovy teorii avtomaticheskogo regulirovaniia; uchebnoe posobie. Leningrad, Severo-Zapadnyi zaochnyi politekhnicheskii in-t. No.2. 1962. 195 p. (MIRA 17:1)

1.Voyenno-morskaya akademiya korablestroyeniya i vooruzheniya imeni A.N.Krylova (for Mordovin,Ryabinin).

ARANOVICH, B.I., dots., kand.tekhn.nauk

[Parametric current and voltage stabilizers; lectures] Parametricheskie stabilizatory toka i napriazheniia. Pismennye lektsii. Leningrad, 1958. 37 p. (Osnovy telemekhaniki i avtokontrolia, no.1) (MIRA 12:2)
(Electric controllers)

28 (1) PHASE I BOOK EXPLOITATION SOV/2748

Aranovich, B.I., Docent, Candidate of Technical Sciences

Osnovy telemekhaniki i avtokontrolya; pis'mennyye lektsii. Vyp. 1. Parametricheskiye stabilizatory toka i napryazheniya (Fundamentals of Remote Control and Automatic Inspection; Written Lecutres. No. 1. Parametric Current and Voltage Regulators) Leningrad, 1958. 37 p. 1,000 copies printed.

Sponsoring Agency: Severo-Zapadnyy zaochnyy politekhnicheskiy institut.

No contributors mentioned.

PURPOSE: The booklet is intended as part of a textbook for students of the Servo-zapadnyy zaochnyy politekhnicheskiy institut (North-western Correspondence Polytechnic) of the Ministry of Higher Education of the USSR.

COVERAGE: The booklet presents a systematic treatment of parametric current and voltage regulators. The treatment of this as well as other problems of remote

Card 1/3

control and automatic inspection was found inadequate in existing texbooks for the purposes of the course on the Fundamentals of Remote and Automatic Inspection at the North-western Polytechnic. No personalities are mentioned. There are 3 references: all Soviet.

TABLE OF CONTENTS:

ARANOVICH, Boris Il'ich; TIMOFEYEV, V.A., doktor tekhn.nauk, prof., red.; TELYASHOV, R.Kh., red.izd-va; GVIRTS, V.L., tekhn.red.

[Contactless electromagnetic relay devices for regulating and automating industrial drives] Beskontaktnye elektromagnitnye releinye ustroistva dlia upravleniia i avtomatizatsii promyshlennykh privodov. Leningrad, 1962. 20 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Pribory i elementy avtomatiki, no.12)
(MIRA 16:3)

(Electric relays) (Electric driving) (Automatic control)

PEREPELKIN, K.Ye.; ARANOVICH, B.S.; KOVIN, P.D.

Two-step oxidation of waste gases from carbon disulfide production.
Khim.volok. no.2:38-40 '62. (MIRA 15:4)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.
(Carbon disulfide) (Oxidation)

L 25573-66 EWT(d)/EWP(c)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l)

ACC NR: AM6010192 Monograph UR/

Aranovich, Boris Il'ich; Shamray, Boris Viktorovich

Electromagnetic automation devices (Elektromagnitnyye ustroystva avtomatiki) Moscow, Izd-vo "Energiya", 1965. 484 p. illus., biblio. 23,000 copies printed.

TOPIC TAGS: automatic control equipment, electric relay, electromagnetic component, direct current, electromechanic converter, parametric converter, magnetic amplifier

PURPOSE AND COVERAGE: This book is intended for students in schools of higher education in courses on automation, telemechanics, electrical measurements, computers, and the electrification of industrial enterprises. It can also be used by technical personnel in industrial enterprises or design offices dealing with automation problems. The authors thank Doctor of Technical Sciences [illegible]. I. Yurevich and Docents V. I. Nefedova and Ye. B. Yelagin for [illegible] advice, and Assistant G. N. Kabanova for helping in the compilation of the manuscript.

TABLE OF CONTENTS:

Card 1/11 UDC 523.2

L 25573-66

ACC NR: AM6010192

Card 2/11

L 25573-66

ACC NR: AM6010192

Card 3/11

L 25573-66

ACC NR: AM6010192

Card 1/11

ACC NR: AM6010192

L 25573-66

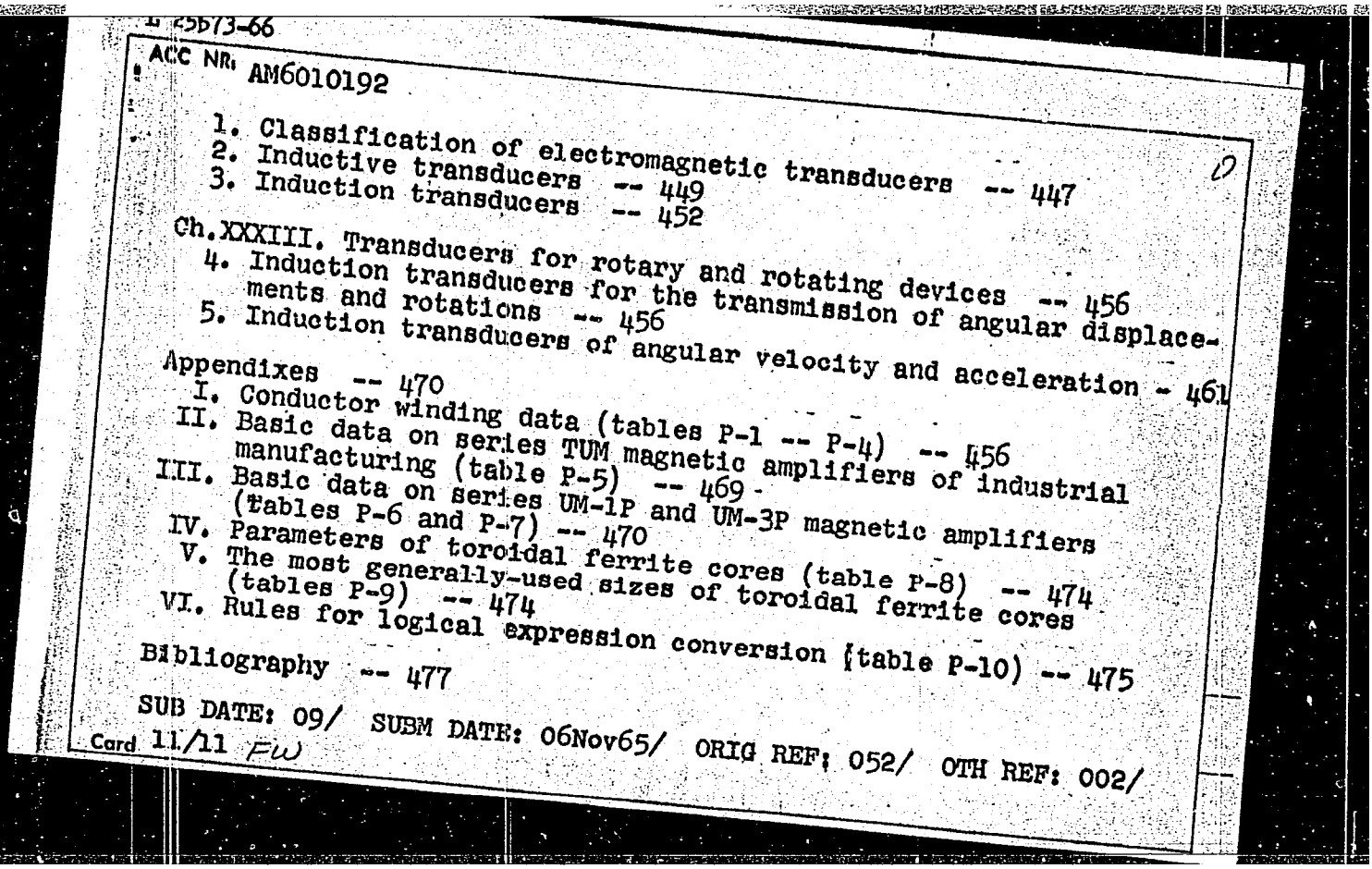
ACC NR: AM6010192

Card 9/11

L 25573-66

ACC NR: AM6010192

Card 10/11



L 25673-66

ACC NR: AM6010192

SUB DATE: 09/ SUBM DATE: 06Nov65/ ORIG REF: 052/ OTH REF: 002/

Card 11/11 FW

ARANOVICH, D., kandidat iskusstvoznaniya.

Architecture of small structures ("Architectural metal fences" by S.G. Rosenblium "Fountains" by P.A. Spyshnov). Reviewed by D.Aranovich. Gor.khoz.Mosk. 25 no.8:39-40 Ag '51. (MLRA 10:1)
(Fountains) (Fences)
(Rosenblium, S.G.) (Spyshnov, P.A.)

ARANOVICH, D. M.

"Choice of building site for industrial enterprises." A. S. Vaintsveyg. Reviewed by D. M. Aranovich. Gig. i san. no. 8, 1952

SO: MIRA, December 1952.

ARANOVICH, D. M.

"Building ceramics. Catalog-handbook." A. V. Vlasov, ed. Reviewed by D. M. Aranovich. Gor. khoz. Mosk. 26, No. 6, 1952.

SO: MLRA, Spetember 1952

ARANOVICH, D. [author]; MASHINSKIY, L. [reviewer].

Non-fulfilment of a task ("Landscape gardening of cities." D.Aranovich. Reviewed by L.Mashinskii). Zhil.-kom. khoz. 3 no.6:29-30 Je '53.
(MLRA 6:7)
(Landscape gardening)

ARANOVICH, D.M.

"Distribution of industrial enterprises in the city." V.E. Yakovlev. Reviewed by D.M. Aranovich. Gig.i san. no.6:58-60 Je '53. (MLRA 6:6)
(City planning) (Yakovlev, V.E.)

MUSIYENKO, P.N. [author]; ARANOVICH, D. (M) [reviewer].

Closer ties with the building industry ("Ceramics in architecture and building." P.N.Musienko. Reviewed by D.Aranovich). Stek.i ker. 10 no.9:31-32 S '53. (MLRA 6:8)

(Ceramics) (Building materials)

ARANOVICH, D.

("Farm buildings" by G.I. Katel'va. Reviewed by D. Aranovich). Sel'. stroi. 9 no.5:3 of cover Ag '54. (MIRA 13:2)
(Farm buildings) (Katel'va, G.I.)

ARANOVICH, D. M.

USSR/Miscellaneous - Book review

Card 1/1 : Pub. 104 - 14/14

Authors : Aranovich, D. M.

Title : Glass in architecture

Periodical : Stek. i ker. 10, 30-31, Oct 1954

Abstract : Critical review of a book entitled, "Artistic Glass and its Application in Architecture", published by the Academy of Architecture, USSR is presented.

Institution : ...

Submitted : ...

Aranovich, D.M.

USSR/ Miscellaneous - Building ceramics

Card 1/1 Pub. 104 - 13/14

Authors : Aranovich, D. M.

Title : Covering the facades of buildings with ceramics

Periodical : Stek. i ker. 11/3, 30-31, Mar 1954

Abstract : A review is made of the book, "Covering the Facades of Buildings with Ceramics", by V. I. Zheludkov, published by PROMSTROYIZDAT, and containing 120 pages. The book is divided into two parts. Part I deals with the general technical characteristics of facade ceramics and the basic data on the technology of their application. Part II explains the operations and methods in the actual application of the ceramics to the buildings. Some defects are pointed out in the book but generally it is given a good rating.

Institution: .....

Submitted: .....

ARANOVICH, D. M., kandidat tekhnicheskikh nauk.

Review of A.A.Poliakov's book "City traffic and street planning."
Gor.khoz.Mosk. 28 no.7:38 Jl '54. (MLRA 7:7)
(City traffic) (Traffic engineering)

Subject : USSR/Engineering AID P - 2728

Card 1/1 Pub. 78 - 25/27

Author : Aranovich, D.

Title : Titkov, V. I., Bogdanov, V. N. and Makarov, A. I. Proyektizovaniye i stroitel'stvo neftebaz planning and building of oil-bases 1953 (Review)

Periodical : Neft. khoz. v. 33, #6, 92-94, Je 1955

Abstract : The reviewed book deals with all the aspects of planning oil depots, small and large, and in its second part treats construction materials and building procedures, also plans of various types of oil storage and tanks.

Institution : None

Submitted : No date

ARANOVICH, D., kandidat tekhnicheskikh nauk.

"Manual on agricultural construction." Reviewed by D. Aranovich. Sel'.stroi. 11 no.9:32-33 S '56. (MLRA 9:11)

(Building)

ARANOVICH, D., kandidat iskusstvovedeniya.

Stone carvers. Prom.koop. no.5:38 My '57.
(Stonecutting) (MLRA 10:8)

ARAMOVICH, D., arkhitektor.

Realization of plans. Sel'. stroi. 11 no.4:31 '56 [i.e. '57].
(Building)
(MLRA 10:6)

ARANOVICH, D.M.

"Main city highways" by M.I.Eroshevskii. Reviewed by D.M.Aranovich.
Gor.khoz.Mosk. 31 no.12:37-38 D '57. (MIRA 10:12)
(Road construction) (Eroshevskii, M.I.)

ARANOVICH, D.M.

Study and plan the development of city traffic ("Problems in the development of transportation in large cities" by A.A. Poliakov. Reviewed by D.M. Aranovich). Gor. khoz. Mosk. 33 no.7:38-39 Jl '59. (MIRA 12:10)

(Traffic engineering)

ARANOVICH, D.M.

Rush-hour traffic flow and the distribution of residential areas. Gor. khoz. Mosk. 35 no.1:12-13 Ja'61. (MIRA 14:2)
(Moscow—City planning)
(Moscow—Traffic engineering)

ARANOVICH, G.L., inzhener.

Tables for calculating the chemical components and verifying chemical analyses of water. Rats. i izobr. predl. v stroi. no.129:22-31 '56. (MLRA 9:9)
(Water--Analysis)

DUBROVSKIY, V.V., inzh.; ARANOVICH, G.L.; SUREN'YANTS, S.Ya.

Technical specifications SN 14-57 for the design and construction of bore holes for water. Vod. i san. tekh. no.1:33-34 Ja '62. (MIRA 15:6)

(Boring)

GOLUBEV, Vladimir Vasil'yevich; MARKUSHEVICH, A.I., red.; ARAMANOVICH, I.G., red.; SOLOMENTSEV, Ye.D., red.; ARANOVICH, I.G., red.; MURASHOVA, N.Ya., tekhn. red.

[Single-valued analytic functions; automorphic functions] Odnoznachnye analiticheskie funktsii, avtomorfnye funktsii. Vstup. stat'ia A.I.Markushevicha. Moskva, Gos. izd-vo fiziko-matem.lit-ry, 1961. 455 p. (MIRA 15:1)
(Functions, Analytic) (Functions, Automorphic)

GURARI, N., inzh.; ARANOVICH, L., inzh.

"Ostankino P-8", automatic meat stuffing machinery for making dumplings. Mias.ind.SSSR 31 no.1:10-12 '60. (MIRA 13:5)

1. Gipromyaso.
(Moscow--Packing houses--Equipment and supplies)

ARANOVICH, Lev Mikhaylovich; LOSEVA, Aleksandra Arturovna; ZYUZENKOV, I.P., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Without paper and distance; principles of radio engineering] Bez bumagi i rasstoianii; osnovy radiotekhniki. Moskva, "Znanie," 1960. 31 p. (Radio) (MIRA 14:4)

ARANOVICH, M.A.

Organizatsiia potoka na mashinostroitel' nom zavode. Moskva, Mashgiz, 1950. 126 p.

Organization of assembly lines in a machine-building plant.

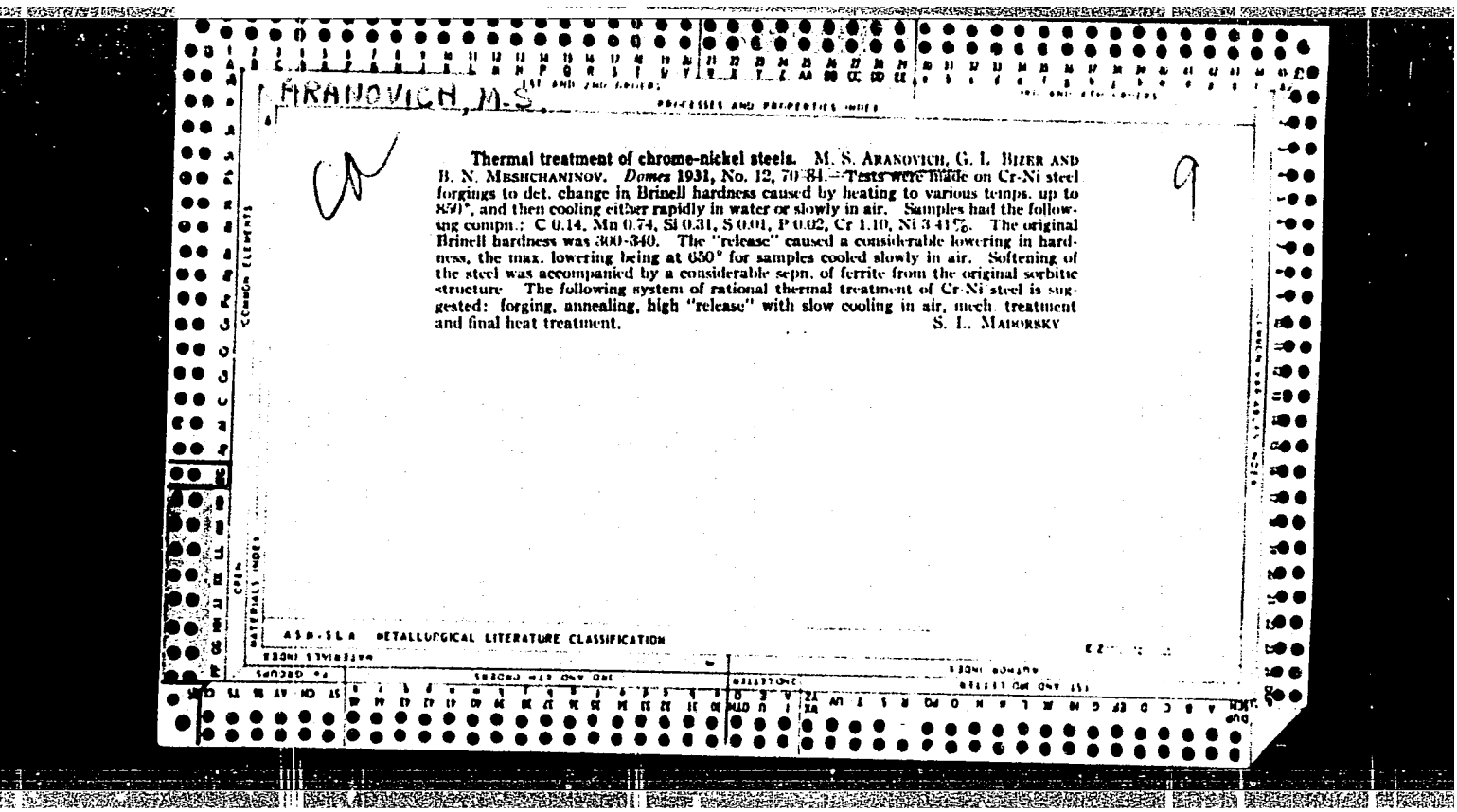
SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

MILLER, A.D.; ARANOVICH, M.I.

Dithizone method of determining low concentrations of cyanides. Zav.lab. no.4:426-429 '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut mekhanicheskoy obrabotki poleznykh iskopayemykh i Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki.

(Cyanides) (Dithizone)



ARANOVICH, M.S.

Thermal treatment of chrome-nickel steels. M. S. Aranovich, G. I. Bizer and B. N. Meshchaninov. *Domez* 1931, No. 12, 70-84.—Tests were made on Cr-Ni steel forgings to det. change in Brinell hardness caused by heating to various temps. up to 850°, and then cooling either rapidly in water or slowly in air. Samples had the following compn.: C 0.14, Mn 0.74, Si 0.31, S 0.01, P 0.02, Cr 1.10, Ni 3.41%. The original Brinell hardness was 300-340. The "release" caused a considerable lowering in hardness, the max. lowering being at 650° for samples cooled slowly in air. Softening of the steel was accompanied by a considerable sepn. of ferrite from the original sorbitic structure. The following system of rational thermal treatment of Cr-Ni steel is suggested: forging, annealing, high "release" with slow cooling in air, mech. treatment and final heat treatment.

S. L. Maiorsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

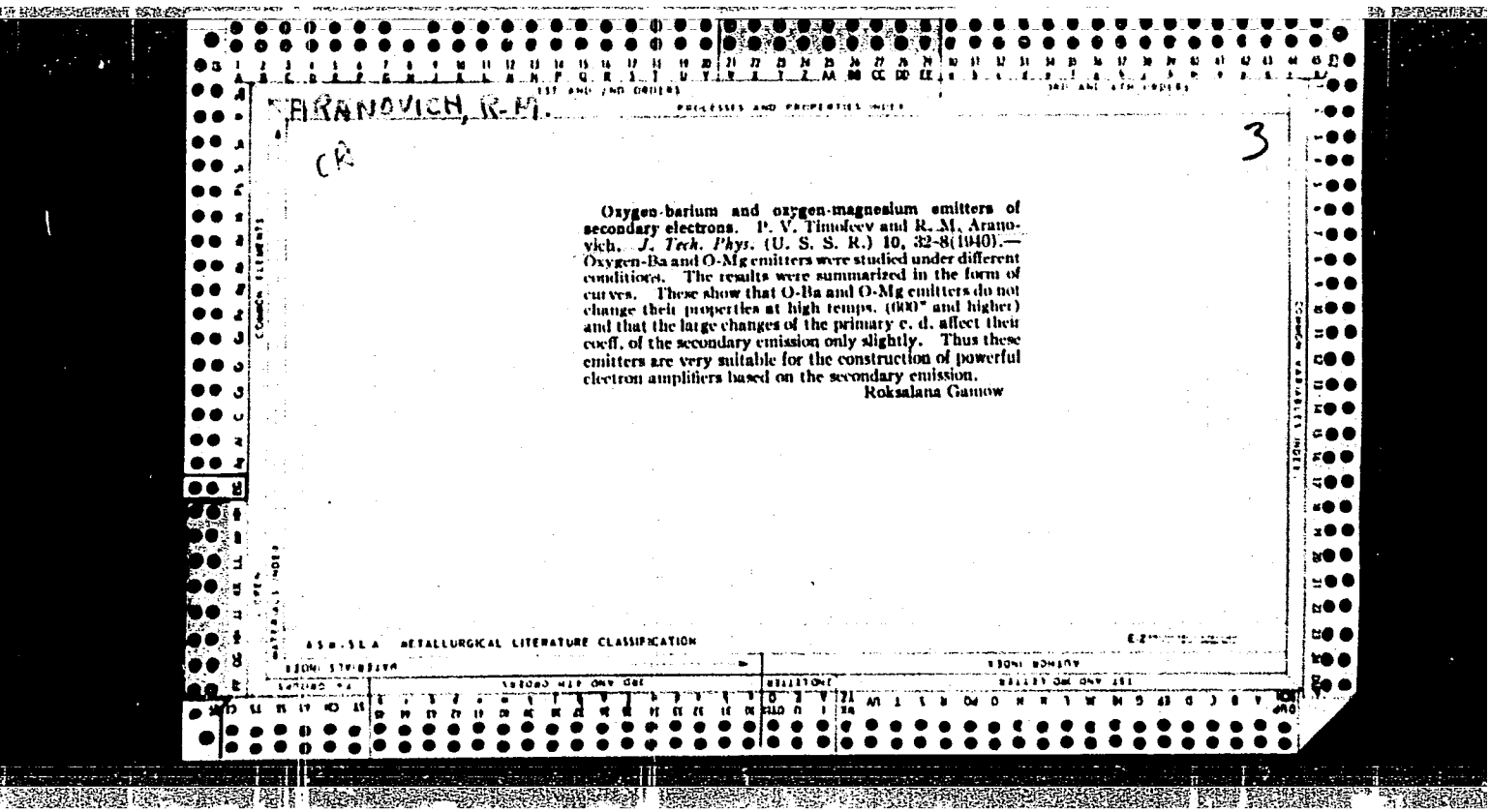
ADRIANOVA, V.P.; ANDREYEV, T.V.; ARANOVICH, M.S.; BARSKIY, B.S.; GROMOV, N.P.; GUREVICH, B.Ye.; DVORIN, S.S.; YERMOLAYEV, N.F.; ZVOLINSKIY, I.S.; KABLUKOVSKIY, A.F.; KAPELOVICH, A.P.; KASHCHENKO, D.S.; KLIMOVITSKIY, M.D.; KOLOSOV, M.I.; KOROLEV, A.A.; KOCHINEV, Ye.V.; LESKOV, A.V.; LIVSHITS, M.A.; MATYUSHINA, N.V.; MOROZOV, A.N.; POLUKAROV, D.I.; RAVDEL', P.G.; ROKOTYAN, Ye.S.; SMOLYARENKO, D.A.; SOKOLOV, A.N.; USHKIN, I.N.; SHAPIRO, B.S.; EPSHTEYN, Z.D.; AVRUTSKAYA, R.F., red. izd-va; KARASEV, A.I., tekhn.red.

[Brief handbook on metallurgy, 1960] Kratkii spravochnik metallurga, 1960. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1960. 369 p. (MIRA 13:7)
(Metallurgy)

LANDSBERG, G.S., akad. [deceased]; MAYANTS, L.S., doktor fiziko-matem. nauk; BATUYEV, M.I., doktor khim. nauk; BARYSHANSKAYA, F.S., kand. fiziko-matem. nauk; STERIN, Kh.Ye., kand. fiziko-matem. nauk; ARANOVICH, P.M., kand. khim. nauk; BYALOVA, V.V., mlad. nauchnyy sotr.; ROTKOVA, S.V., mlad. nauchnyy sotr.; RABINOVICH, N.Ya., mlad. nauchnyy sotr.; BERKGAUT, V.G., red. izd-va; GOLUB', S.P., tekhn. red.

[Scattering of light and infrared spectroscopy; bibliographic index for 1928-1940] Rasseianie sveta i infrakrasnaia spektroskopiia; bibliograficheskii ukazatel' 1928-1940. Moskva, Izd-vo Akad. nauk SSSR, 1961. 451 p. (MIRA 14:11)

1. Akademiya nauk SSSR. Komissiya po spektroskopii. Sektor seti spetsial'nykh bibliotek.
(Light--Scattering--Bibliography) (Spectrum, Infrared--Bibliography)



ARANOVICH, R.M.

CR

3

Oxygen-barium and oxygen-magnesium emitters of secondary electrons. P. V. Timofeev and R. M. Aranovich. *J. Tech. Phys.* (U. S. S. R.) 10, 32-8(1940).—Oxygen-Ba and O-Mg emitters were studied under different conditions. The results were summarized in the form of curves. These show that O-Ba and O-Mg emitters do not change their properties at high temps. (600° and higher) and that the large changes of the primary e. d. affect their coeff. of the secondary emission only slightly. Thus these emitters are very suitable for the construction of powerful electron amplifiers based on the secondary emission.

Roksalana Gamow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ARANOVICH, R.M.

12

537.533.8 : 621.385 572

Electronic Apparatus with Effective Emitters of Secondary Electrons.—R. M. Aranovich. (*Bull. Acad. Sci. U.R.S.S., sér. phys.*, 1944, Vol. 8, No. 6, pp. 340–351. In Russian.) Emittors prepared by evaporating magnesium and other metals in dry oxygen are briefly discussed. The effects of various gases, of materials used for bases, of the velocity of primary electrons, of the conditions under which the evaporation of the metal is carried out, and of the manner in which the secondary voltage gradient is built up were investigated and experimental curves were plotted. Emitters with $\sigma = 80$ were produced and even with $\sigma = 100$–$10\,000$, although in the last case inertia of secondary emission was observed. The breakdown of the emitters is discussed and microphotographs showing their structure are included. An interpretation of the experimental results is offered. The operating data of a photocell and a valve with one stage of amplification are given.

An abstract in English was noted in 2390 of 1946.

AUTHORS: Aranovich, R. M., Pyatnitskiy, A. I. 48-22-5-6/22

TITLE: Secondary Emission From Composite Emitters at High Coefficients of Secondary Emission (Vtorichnaya emissiya iz slozhnykh emitterov pri bol'shikh koeffitsiyentakh vtorichnoy emissii)(Data From the VIIIth All-Union Conference on Cathode Electronics, Leningrad, October 17-24, 1957) (Materialy VIII Vsesoyuznogo soveshchaniya po katodnoy elektronike, Leningrad, 17-24 oktyabrya 1957 g.)

PERIODICAL: Izvestiya Akademii Nauk SSSR Seriya Fizicheskaya, 1958, Vol. 22, Nr 5, pp. 518-527 (USSR)

ABSTRACT: The high inertia of the autoelectronic current is an essential particularity of the autoelectronic emission. The first one becomes manifest by the fact that the secondary autoelectronic current weakly follows the changes of the primary current. As a retardation (Ref 1) of the formation of the autoelectronic current, which lasts unto 24 hours, makes this effect practically [illegible], the idea has formed to create emitters of an intermediary type in which a normal secondary emission would be intensified or increased by a partly utilisation of the electric field which forms because of the positive charges

Card 1/4

Secondary Emission From Composite Emitters at High Coefficients of Secondary Emission (Data From the VIIIth All-Union Conference on Cathode Electronics, Leningrad, October 17-24, 1957) 48-22-5-6/22

on the surface of the emitter. The first author used two production methods for emitters: a) MgO-coating of the backing by magnesium evaporation in an oxygen atmosphere and b) by pulverisation of finely dispersed MgO. Such emitters had a considerable coefficient of secondary emission (order of 8o); their inertia in the range of sound was not high. An essential deficiency of such emitters was their low operational stability and a certain difficulty of the production of layers which work together with a cesium photocathode. In this work effective emitters were investigated, which consist of thin MgO layers. These layers were faced upon nickle backing as carbonate, which then by annealing in vacuum was decomposed and converted into MgO. The measuring results allow to make some basic conclusions which are necessary for the understanding of the action of the mentioned emitters. 1) The characteristics of the variable component are perfectly different from the curves which were obtained for the total current. In the process of emission one ought to start from the presence of two completely different electron groups. The ratio between those can change

Card 2/4

Secondary Emission From Composite Emitters at High Coeffi- 48-22-5-6/22
cients of Secondary Emission (Data From the VIII th All-Union Conference on Cathode Electronics, Leningrad, October 17-24, 1957)

very much. According to the density of the primary current, the velocity of the primary electrons, the magnitude of the suction voltage, the structure of the layer and other factors. Such a sharp difference of the characteristics of the variable component came surprisingly. From a comparison with references 6-10 the authors come to the conclusion that the component without modulability must consist of autoelectrons which arrived in the vacuum without any high energy loss from the backing of the emitter. The variable component of the current, however, cannot completely be attributed to the so called "true secondary" electrons. A considerable possibility of a direct emission into the vacuum by avoiding the dielectric also exists beneath the main process of the emission of the autoelectrons from the metal through the dielectric into the vacuum. To this contribute many cracks on the emitter after the heating (fig.15 a,b). 2) The characteristics of the variable component are neither the characteristic of the total current nor of the current of the so called "true secondary" electrons. They only characterize the variable component of the secondary electrons

Card 3/4

Secondary Emission From Composite Emitters at High Coefficients of Secondary Emission (Data From the VIIIthe All-Union Conference on Cathode Electronics, Leningrad, October 17-24, 1957) 48-22-5-6/22

which must not be mixed up with the current of the "true secondary" electrons, as it often happens in single cases. In the discussion on this abstract participated: Ye. A. Krasovskiy, I. F. Pes'yatskiy, O. M. Sorokin, L. N. Dobretsov and the first author. There are 15 figures and 12 references, 9 of which are Soviet.

1. Secondary emission---Analysis 2. Secondary emitters---Production 3. Secondary emitters---Effectiveness 4. Magnesium oxides--Applications

Card 4/4

S/024/60/000/006/007/015
E192/E482

7.4110 (1003, 1035, 1140)

AUTHORS: Aranovich, R.M., Ksendzatskiy, I.G. and Timofeyev, P.V., (Moscow)

TITLE: Cold-Cathode Electronic Tubes

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, No.6, pp.143-147

TEXT: The cathodes employed in normal electron tubes produce the emission by virtue of being heated to comparatively high temperatures. Apart from being heated, these cathodes have the disadvantage of a comparatively short life. Consequently, attempts have been made to develop cold cathodes and in 1938 two of the authors (Refs.1,2) discovered that it was possible to obtain a sustained secondary emission from metal cathodes coated with thin layers of high-resistivity materials. Recent years have witnessed the development of an electron tube based on a magnesium oxide cathode (Ref.3). Such cathodes were prepared and investigated also. The base of the cathode was made of nickel which was coated with magnesium carbonate by means of cathophoresis, the thickness of the coating being 50 μ. The cathode was heated in a vacuum so that the magnesium carbonate was decomposed into MgO and

88341
S/024/60/000/006/007/015
E192/E482

Cold-Cathode Electronic Tubes

CO_2 and the layer of the magnesium carbonate on the cathode was converted into a layer of magnesium oxide whose thickness was about 30 μ. The layer of magnesium oxide prepared in this way had a porous structure capable of sustaining electron emission. However, in order to produce the emission, it is necessary to place a grid in the vicinity of the cathode and apply a potential difference between the nickel base of the cathode and the grid. The emission can be obtained if the potential difference is about 120 V, provided the energy of the electrons bombarding the cathode is less than 50 eV. The emission can be initiated by bombarding a cathode with an electron current of 10^{-10} A, provided the electron energies are of the order of a few eV. When the electrons pass through the layer of magnesium oxide the cathode is heated. This effect was investigated experimentally and the results are shown in a figure. The electron emission from magnesium-oxide cathodes is probably due to the field emission from the nickel base of the cathode which is caused by the action of the positive charges produced on the surface layer of the magnesium oxide while this is bombarded by the electron

Cold-Cathode Electronic Tubes

current at the instant of initiating emission. During the operation of the cathode, the positive charge on the magnesium-oxide layer is maintained as a result of the secondary emission from the walls of its pores, which emit the electrons. The magnesium-oxide cathodes were used in constructing an amplifier pentode tube which, apart from the three grids, had a starter electrode consisting of tungsten filaments; the filaments were situated in special holes provided in the anode cylinder. The construction of the tube is shown diagrammatically in Fig.2, where 1 is the magnesium-oxide cathode, 2, 3 and 4 are the grids, 5 is the anode and 6 and 6' are tungsten filaments of the starter. One side of the filaments is connected to the anode, while their remaining terminals are attached to special input pins of the tube; the starter filaments are used as an electron source for bombarding the magnesium-oxide cathode at the instant of switching-on the tube. The tube was constructed of standard components and had the dimensions of the tube type 30П1С (30P1S). The grid-anode characteristics of the tubes were

Cold-Cathode Electronic Tubes

measured. One set of experimental curves is shown in Fig.6, where the anode current I_a is plotted as a function of the voltage U_y applied to the control grid; the voltage of the screen grid was 250 V, while the anode voltage was varied from 180 to 300 V. From these experimental characteristics it is seen that a slope of 0.5 to 0.6 mA/V can be obtained over a comparatively wide linear region. The tubes of this type can operate only if the potentials at all the grids and the anodes are positive with respect to the cathode; the control of the anode currents can only be achieved if the control grid is given a positive potential. Secondly, the tubes have a comparatively large noise level. The tubes can be used as audio frequency amplifiers and their great advantage lies in the fact that their life is almost indefinitely long and their starting time is comparatively short. The experimental tube described in this article cannot be regarded as fully successful since it was not constructed of specially designed components. The authors express their gratitude to V.S.Gorshkov for testing the tubes.

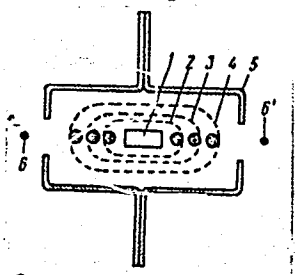
Card 4/5

S/024/60/000/006/007/015
E192/E482

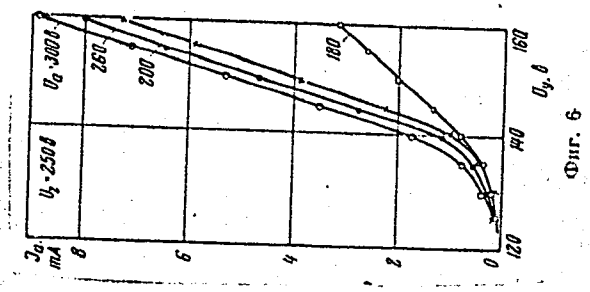
Cold-Cathode Electronic Tubes

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut im. V.I.Lenina (All-Union Electrotechnical Institute imeni V.I.Lenin)

SUBMITTED: September 12, 1960



Фиг. 2. Схематический вид лампы с оксидно-магниевым катодом: *1* — оксидно-магниевый катод; *2*, *3* и *4* — сетки, *5* — анод, *6* и *6'* — вольфрамовые нити стартера



Фиг. 6

Fig.6.

Card 5/5

40397
S/109/62/007/009/006/018
D409/D301

9,3120

AUTHORS: Aranovich, R.M., Ksendzatskiy, I.G., and Timofeyev, P.V.

TITLE: Some emission properties of electron tubes with cold cathodes

PERICDICAL: Radiotekhnika i elektronika, v. 7, no. 9, 1962, 1529 - 1538

TEXT: The changes are studied which take place in electron tubes during the initial period of operation of cold cathodes. It was found that the temperature of the cathode core at I_c = const., as well as the starting time of the cathode, depend on the tube design. All the measurements were carried out on electron tubes, described by the authors (Ref. 4: Izv. AS SSSR, otd. tekhn. n. (Energetika i avtomatika), 1960, 6, 143). A figure shows the dependence of the emission current I_c on the cathode-core temperature, after treatment in an oxygen atmosphere, and after additional treatment in a hydrogen atmosphere. These experiments, however, yielded no defini-

Card 1/3

S/109/62/007/009/006/018
D409/D301

Some emission properties of ...

te conclusions on the role of the oxygen or hydrogen treatment. The free path of electrons in a porous MgO-layer was measured. The experimental setup is described. The free path was found to be ~3 microns. As the MgO-layer is 40-50 microns thick, it follows that the fast electrons which are observed in the self-sustaining emission, are apparently not originating from the metallic cathode-core, but from the adjacent layers. The surface potential of the cold cathode was measured by a convenient method. This method involves the charging of a freely-suspended electrode which receives the electrons, emitted by the cold cathode. It was found that the potential of the free electrode is very close to the potential of the cold cathode face-layer. A figure shows the dependence of the potential and of the grid voltage on the emission current. The above method was used for controlling the surface-layer state at the initial moment of operation of the cathode. The measurements were conducted on a large number of tubes. It was found that the method used, yields a true estimate of the surface state and that changes take place in the cathode during its operation, as a result of which the surface potential is no longer constant. The experiments showed that the self-sustaining processes take place in the surface layer itself, whose

Card 2/3

thickness is comparable with the free path. The obtained results yield the following practical conclusions: It is necessary to insert in the grid circuit of electron tubes with cold cathodes, large ballast resistors and to connect them to the total supply-voltage; it is recommended using a supply-voltage of the order of 500 volt. This leads to stabilization of the emission current. In those cases in which no additional (sustaining) grid is necessary, it is recommended linking all the grids; thereby the tube steepness increases. Thus, the triodes prepared had a steepness of 0.7 - 0.8 mA/v, whereas the steepness of the three-grid tubes was 0.4 - 0.5 mA/v, under the same conditions. The above investigations were carried out for cathodes under transient operating conditions which involve only a drop in the emission current at the initial moment. Further investigations, involving a current rise, are necessary. There are 14 figures. The most important English-language reference reads as follows: A.M. Skellet, B.G. Firth, D.W. Mayer, Proc. I.R.E., 1959, 47, 10, 1704.

SUBMITTED: March 19, 1962

Card 3/3

L 00000-67 EWT(1)

ACC NR: AP6012153 SOURCE CODE: UR/0413/66/000/007/0070/0071

AUTHORS: Pyatnitskiy, A. I.; Nadol'nikov, A. G.; Aranovich, R. M.; Kurnosova, V. M.

33

ORG: none

TITLE: Cryostat for radiation receivers. Class 42, No. 180383 [announced by All-Union Electrical Engineering Institute im. V. I. Lenin (Vsesoyuznyy elektrotekhnicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 70-71

TOPIC TAGS: cryostat, cooling

ABSTRACT: This Author Certificate presents a cryostat for radiation receivers. In its cooling system the coolant is formed by throttling compressed gas which is initially cooled in a helical heat exchanger first by a coolant and then by the return flow of liquefied gas passing through the liquefying chamber. To increase the efficiency and usefulness of the cryostat and to simplify its design, the upper part of the heat exchange helix passes into a heat conducting tube which is placed in the chamber with the liquid coolant (see Fig. 1). The lower part passes through a vacuum tube with the return flow of liquefied gas, which is connected with the liquefying chamber.

Card 1/2 UDC: 621.565.4

L 09000-67

ACC NR: AP6012153

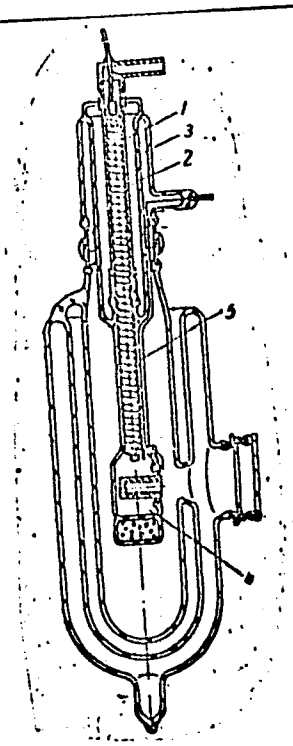


Fig. 1. 1 - heat exchange helix; 2 - heat conducting tube; 3 - chamber with liquid coolant; 4 - liquefying chamber; 5 - return gas flow tube

Orig. art. has: 1 diagram.

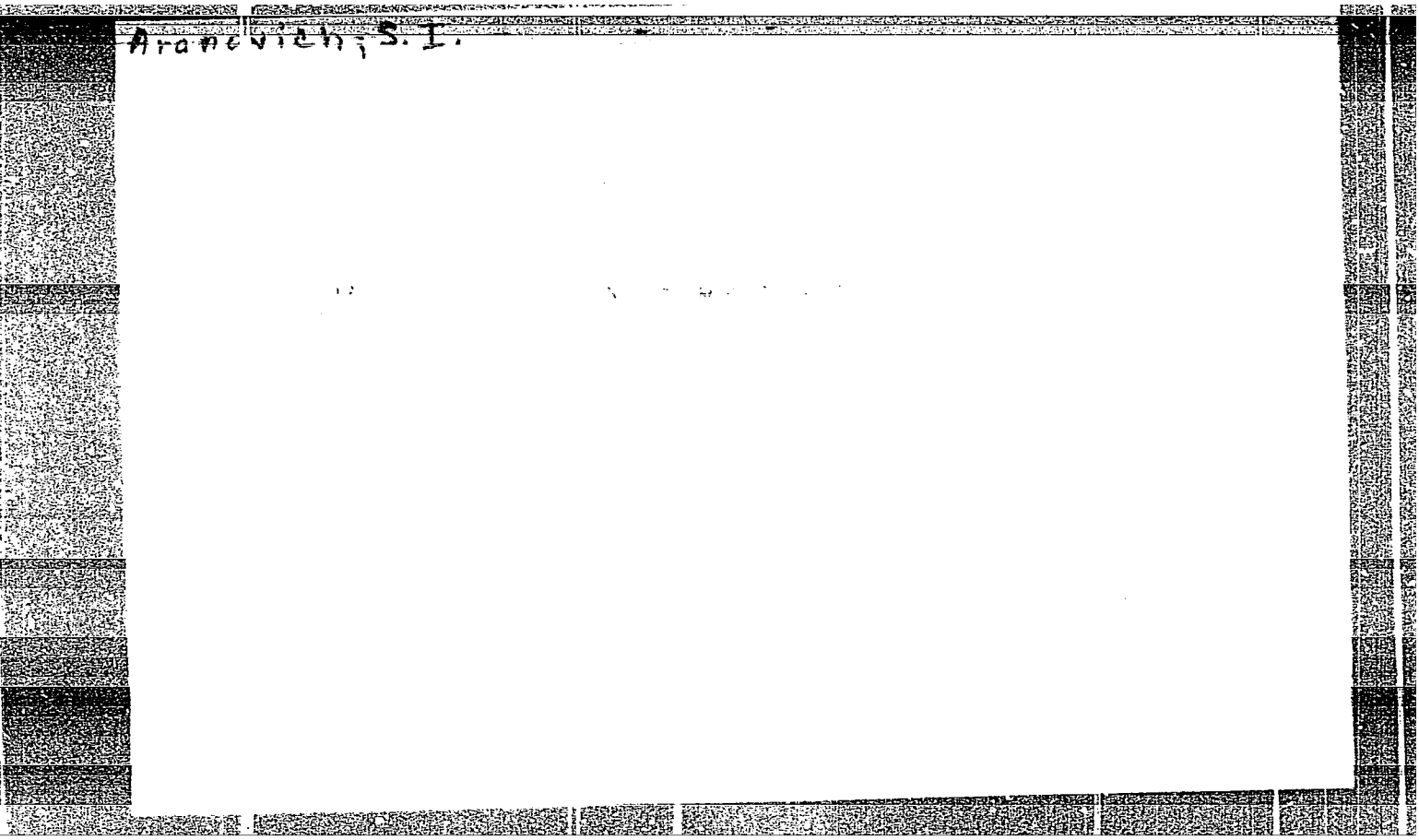
SUB CODE: 20/13/ SUBM DATE: 07Jan65

Card 2/2 mat

ARANOVICH, S.I., inzhener.

Using low temperatures for joining. Energomashinostroenie no.8: 25-27 Ag '56. (MLRA 9:10)

(Metals at low temperatures) (Power presses)



ARANOVICH, T. A.

28019. ARANOVICH, T. A. -- Krovavaya ropozitsiya otlomkov pri nepravil'no srosshikhsya perelomakh, lozhnykh sustavakh i defektakh tela nizhnsy chelyusti ognestrelnogo proiskhozhdeniya. Trudy pervoy nauch. Mezhresp. Konf-tsii po lecheniyu invalidov otechestv. Voyny v sred. Azii. Tashkent, 1949, S. 233-37.

SO: Letopis' Zhurnal'nykh Statey. Vol. 37, 1949.

ARANOVICH, V.

A plan for research work in establishing work norms in industry for 1960. Biul.nauch.inform.: trud i zar.plata 3 no.3:38-42 '60. (MIRA 13:8)
(Production standards)

KAZAKOVSKIY, D.A., prof.; GURICH, A.A., dotsent; ARANOVICH, V.B., inzh.; RUDNEV, L.N., inzh.

Use of sonar in mining. Gor. zhur. no.6:58-62 Je '62. (MIRA 15:11)

1. Leningradskiy gornyy institut.
(Mine surveying)
(Sonar)

ARANOVICH, V.B.; GURICH, A.A.; KROTOV, G.A.; RUDNEV, L.N.

Technical errors in sound ranging measurements in mine surveying. Zap. LGI 46 no.2:117-130 '63. (MIRA 17:6)

ARANOVICH, V.G.; POSTNIKOV, L.V.

Dynamics of a multivibrator on plane semiconductor triodes. Izv.vys. ucheb. zav.;radiofiz. 4 no.6:1156-1170 '61. (MIRA 14:12)

1. Nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom universitete.
(Oscillators)
(Junction transistors)

BABICHENKO, Ye.I., kand. med. nauk; ARANOVICH, V.L.

Treatment of decubitus ulcers in patients with spinal cord injury by free skin autotransplantation. Vop. neirokhir. 27 no.2:13-18 Mr-Ap '63. (MIRA 17:2)

1. Klinika neyrokhirurgii Saratovskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir. - dotsent Ya.N. Rodin).

VERKHOVSKIY, A.V., prof.; GLYAVIN, Yu.V., dots.; LUPANOVA, O.K., dots.; MOKEYEV, I.I., dots.; USPENSKAYA, A.N., dots.; PONOMAREV, M.G., dots.; CHARYSHNIKOV, K.A., st. prepod.; ARANOVICH, V.M., assistent; PLOTNIKOV, G.I., assistent; PELEVINA, T.I., red.

[Handbook for the solution of problems on the strength of materials] Posobie k resheniiu zadach po soprotivleniiu materialov. Volgo-Viatskoe knizhnoe izd-vo, 1965. 319 p. (MIRA 19:1)

1. Gorki. Politekhnicheskiy institut. 2. Kafedra "Soprotivleniye materialov" Gor'kovskogo politekhnicheskogo instituta (for all except Pelevina).

ARAKOVICH, V. V. Cand Tech Sci

Dissertation: "Investigation of Regulating Valves."

28/9/50

Moscow Inst of Chemical Machine Building

SO Vecheryaya Moskva
Sum 71

ARANOVICH, V.U.

J-5(1)
AUTHOR: Zlotin, L. SOV/64-59-5-25/28

TITLE: Conference of Workers of the Synthetic Ethyl Alcohol Industry Branch

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 5, p 499 (USSR)

ABSTRACT: The regular branch conference took place this year in Novokuybyshevsk from July 14th to 17th, to discuss problems of the industry of synthetic ethanol. The conference was convened by Upravleniye kombinatov Soveta Ministrov SSSR po khimii (Administration of the Combines for Chemistry of the Council of Ministers of the USSR) and by the Kuybyshev sovnarkhoz. Delegates from all plants of synthetic alcohol, of the Gosplan program SSSR and of the Gosplan program RSFSR and of the Goskhimkomitet as well as leading workers of the Novokuybyshevsk and of a number of research institutes (Fiziko-khimicheskiy institut imeni Karpova (Institute of Physical and Chemical Sciences), VNIIneftekhim, NIISS and others), of the Kuybyshevskiy industrial'nyy institut (Kuybyshev Institute of Industry), of the Planning Institutes (Giprokauchuk, Giprogazoapprom), of the petroleum refineries, etc. participated in this conference, which

Card 1/3

was attended by 300 persons. It was opened by Comrade I. K. Airov, Secretary of the Kuybyshevskiy obkom KPSS (Kuybyshev oblast' Committee of the KPSU). Lectures were held in the plenary sessions concerning the tasks of the industry of synthetic ethanol (L. I. Zlotin (Goskhimkomitet)), and reports were made on the work of the plants during the year 1958 and during the first quarter of 1959 (I. A. Valashko - Synthetic Alcohol); A. P. Litvin - Groznenskiy khimicheskiy zavod (Groznyy Chemical Plant), I. A. Anisimov - Saratovskiy zavod sinteticheskogo spirta (Saratov Plant of Synthetic Alcohol), A. V. Likhachev - Orskiy zavod sinteticheskogo spirta (Orsk Plant of Synthetic Alcohol), M. M. Ryabova - Ufimskiy zavod sinteticheskogo spirta (Ufa Plant of Synthetic Alcohol), M. Ya. Klisenko - NIISS). Lectures were also held on the following subjects: On the decrease of the price cost of alcohol hydration (Corresponding Member of AS USSR G. K. Boreskov), on foreign investigations concerning the production of synthetic alcohol and their analysis in the USSR (Doctor of Technical Scienc-

Card 2/3

K. A. Palin), on the utilization of by-products of the production of synthetic ethanol (Director of Tatk Orskogo zavoda S. D. Razmovskiy (Central Plant Laboratory of the Orsk Plant tion (L. V. Likhachev - Giprokauchuk), on further automation of alcohol production (L. V. Likhachev - Giprokauchuk), on rust protection (A. I. Bogolepova - Giprokauchuk), on production of ethylene (G. I. Bogolepova - NIISS), on the following problems: Preparing of 5 study groups dispatched production, alcohol production, the economic, automatic and production control. 30 lectures were held. It was decided, among others, to disregard the building of 2-3 new plants and the workers were appealed to accomplish the new 7-Year Plan in 6 years.

Card 3/3

ARANOVICH, Ya.

1. YANUSHEVSKIY, V., Eng.; ARANOVICH, YA, Eng.

2. USSR 600

4. Refrigeration and Refrigerating Machinery

7. Mounting devices for making automatic the work of a refrigeration unit, Moloch. prom, 14, No. 2, 1953.

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

ARANOVICH, YE.

TSentralizatsiia zheleznodorozhnykh stantsii. (Centralization of railroad stations). (Nauka i Tekhnika, 1930, no. 51(414), p.3).

DLC: Slavic unclass.

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

ARANOVICH, Yu.V.

Determining the organic mass and calorific value of the semicoke from the heat refining of shale fine by the solid heat-transfer agent method. Khim. i tekh. gor. slan. i prod. ikh perer. no.10:285-289 '62. (MIRA 17:5)

ARANOVICH, Yu.V.

Determining the constitution water in the mineral part of shale-kukersite. Khim. i tekh. gor. slan. i prod. ikh perer. no.11: 143-147 '62. (MIRA 17:3)

ARANOVICH, Yu.V.; NUDEL'SHTEKHER, N.F. [Nudelstecher, N.]

Studying the composition of gases from the semicoking of oil shales as a possible raw material for organic synthesis. Khim. i tekh. gor. slan. i prod. ikh perer no.13:165-170 '64.
(MIRA 18:9)

TASKAYEV, I.; SOLOV'YEV, I.; KHAIS, A.; ARANOVSKIY, M.; POPOV, A.; ROZENBERG, Kh.

Readers' letters. NTO 3 no.12:45-46 D '61. (MIRA 15:1)

1. Predsedatel' soveta nauchno-tekhnicheskogo obshchestva Odesskogo sudoremontnogo zavoda No.2 (for Khais). 2. Uchenyy sekretar' soveta nauchno-tekhnicheskogo obshchestva kombinata Pechenganikel', pos. Nikel', Murmanskoy obl. (for Aranovskiy). 3. Zamestitel' nachal'nika obshchestvennogo konstruktorskogo byuro pri institute Giproshakht, Leningrad (for Popov). 4. Zamestitel' predsedatelya soveta nauchno-tekhnicheskogo obshchestva Berdichevskogo kozhevennogo zavoda (for Rozenberg). (Technological innovations)

ARANOVSKIY, M.G.; ORLENKO, N.I.; SHTUKIN, L.S.; IYERUSALIMSKIY, A.M., dotsent, redaktor.

[Drafting in machine construction] Chercheznoe khoziaistvo v mashinostroenii. Leningrad, Nauchno-tekhn. izd-vo mashinostroit. lit-ry [Leningradskoe otd-nie] 1953. 103 p. (MLRA 6:10)

(Machinery--Drawing) (Drawing-room practice)

ARANOVSKIY, M.G.

Applying standards to mechanical drawing and drawing equipment. Standartizatsiia 27 no.3:32-36 Mr '63. (MIRA 16:4)
(Mechanical drawing--Standards)

ARANOVSKIY, M. S. Eng.

"Experience in the Integration of Ceramic Cutting Tools in Certain Transport and Heavy Machine Construction Factories," translated portion of book Highly Efficient Methods of Machining Metals by Cutting, published by State Scientific and Technical Publ. House of Machine Construction Literature, Moscow-Leningrad, 1955

D 461550 Translation

ARANOVSKIY, M. E. and SHPIGEL', A.M.

Povyshenie ispol'zovaniia oborudovaniia v mekhanicheskikh tsekhakh. (Vestn. Mash., 1950, no. 10, p. 62-68)

Improvement in the use of machine-shop equipment

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

ARANOVSKIY, M. E.

Obobshchit' opyt skorostnikov po drobleniiu struzhki. (Vestn. Mash., 1951, no. 1, p. 40-46)

General practice of experts in high-speed chip crushing.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

ARANOVSKIY, M.E.

USSR/ Engineering - Tools

Card 1/1 Pub. 128 - 10/34

Authors : Aranovskiy, M.E.

Title : An experiment, on the introduction of cutting tools having mineralo-ceramic cutting edges, in the Transport Machine Construction Factories

Periodical : Vest. mash. 12, 39-43, Dec 1954

Abstract : The soldering of cutting edges to tool holders and the adjusting and sharpening of mineralo-ceramic cutting tools is described, and data are given concerning tool configurations, specifications and designations. Illustrations; diagrams; tables.

Institution : .....

Submitted : .....