PALATNIK, L.S.; ATROSHCHENKO, I.V.; GAL'CHINETSKIY, L.P.; KOSHKIN, K.M.

Effect of deviation from stoichiometry in the semiconductor In_2Te_3. Dokl. AN SSSR 165 no.4:809-812 D '65.

(MIRA 18:12)

1. Khar'kovskiy politekhnicheskiy institut im. V.I.Lenina.
Submitted April 19, 1965.

YEFREMOV, V. V. and KOSHKIN, K. T.

Remontnyye Trebovaniya Konstruktsii Avtomobilya (Overhaul requirements according to design), 47 pp., 1951.

KHARITONOV, L.G., dotsent, kandidat tekhnicheskikh nauk [reviewer]; KOSHKIN, K.T.; YEGREMOV, V.V. [authors].

"Repair requirements in the construction of automobiles." K.T.Koshkin, V.V. Efremov. Reviewed by L.G.Kharitonov. Vest.mash. 33 no.11:105-106 N '53. (MLRA 6:12)
(Automobiles--Repairing)

KOSHKIN, K., kandidat tekhnicheskikh nauk.

Reconditioning parts is one of the basic resources in the automobile repair industry. Avt. transp. 34 no.8:20-23 Ag '56. (MLRA 9:10)

(Automobiles--Repairing)

KOSHKIN, Konstantin Timofeyevich; RUMYANTSEV, S.I., redaktor; KOGAN, F.L., tekhnicheskiy redaktor

[Routing used in repairing automobile parts] Marshrutnaia tekhnologiia remonta detalei avtomobilia. Moskva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1957. 174 p. (MLRA 10:7)
(Automobiles--Maintenance and repair)

KOSHKIN, K., dotsent

Selective assembling is the basis of high quality repair. Avt.-transp. 40 no.2:27-30 F '62. (MIRA 15:2)
(Motor vehicles--Maintenance and repair)

KOSHKIN, K.T.; OLEYNIK, L.K., red.

[Technological bases for the organization of the repair of motor vehicles: dismantling and washing, routing used in reconditioning parts, assembly by the selective part matching] Tekhnologicheskie osnovy organizatsii avtoremontnogo proizvodstva; razborochno-moechnye raboty, marshrutnaia tekhnologiia vosstanovleniia detalei, sborka po metodu selektivnogo podbora detalei. Moskva, Rosvuzizdat, 1963. 78 p. (MIRA 17:4)

20370
S/058/61/000/003/010/027
A001/A001

9,2110 (1001, 1043, 1331)

Translation from: Referativnyy zhurnal, Fizika, 1961, No. 3, pp. 300-301, # 3E181

AUTHOR: Koshkin, L. I.

TITLE: On the Problem of Frequency Dependence of Varikond Capacitance

PERIODICAL: "Uch. zap. Kuybyshevsk. gos. ped. in-t", 1959, No. 29, pp. 103-112

TEXT: The author measured frequency dependences of varikond capacitances within the range 10 cps-90Mc in the weak field. The measurements at low frequencies were carried out by the method of imbalanced bridge, at high frequencies by means of Q-meters. At high frequencies, a capacitor whose capacitance (19.9 picofarad) did not depend on frequency was connected in series with the varikond. It is asserted that the measurements were reliable and the error did not exceed 8-10%. At room temperature and liquid air temperature the capacitance of varikonds decreases slightly with frequency within the range 10 cps-2Mc. Further on, from 15 to 25-30 Mc, the capacitance of varikonds decreases by 15-20%, in the range of frequencies 30-80 Mc it grows by 20-70%, and with the further growth of frequencies from 80 to 90 Mc the capacitance drops sharply. It is pointed out that these

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S/058/61/000/003/010/027
A001/A001

On the Problem of Frequency Dependence of Varikond Capacitance

changes in varikond capacitance cannot be explained by errors alone. At temperatures above 200°C one batch of varikond specimens showed considerable reduction of capacitance with the growth of frequencies from 100 to 200 cps, which is explained by thermal ionic polarization.

V. Petrov

Translator's note: This is the full translation of the original Russian abstract.

44

Card 2/2

L 16698-65 EWT(1)/EWP(e)/EPA(s)-2/EWT(m)/EPF(n)-2/EPA(w)-2/EEC(t)/EWP(t)/EEC(b)-2/EWP(b) Pab-10/Pt-10/Pu-4/Pl-4 IJP(c)/ESD(gs)/AFETR/ASD(a)-5/ASD(m)-3/AS(mp)-2 JD/GG/WH

ACCESSION NR: AR5000797 S/0058/64/000/010/E046/E046

SOURCE: Ref. zh. Fizika, Abs. 10E363

AUTHORS: Koshkin, L. I.

TITLE: Investigation of the relaxation polarization in the VK material and in a mixture of barium titanate with strontium titarat by the constant field method

CITED SOURCE: Uch. zap. Kuybyshevs. gos. ped. in-t., vyp. 42, 1964, 37-59

TOPIC TAGS: barium titanate, strontium titanate, titanate, relaxation polarization, temperature dependence, electric conductivity, dielectric loss, absorption polarization / VK-1, VK-2

TRANSLATION: The relaxation polarization of the materials VK-1, VK-2, and a mixture of barium and strontium titanates was investigated in the temperature range 100--260C. The temperature dependences of the total effective charge are given and the effect of the charging time on these curves is shown. The electric conductivity of the samples is

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L 16698-65
ACCESSION NR: AP5000797

measured and the activation energy of the free carrier is determined. The dielectric losses were measured at frequencies 1--50 Mcs. The relaxation polarization, which depends strongly on the time, temperature, and frequency is regarded as consisting of two components -- reversible relaxation polarization and irreversible absorption polarization. From the approximate estimates for VK-1, only ~ 0.01% of impurity ions that are weakly bound to the lattice make a contribution to the reversible relaxation polarization. N. Ivanov.

SUB CODE: SS

ENCL: 00

Card 2/2

L 62258-65 EWT(1)/EEC-4/EWA(h)

ACCESSION NR: AR5004626 S/0274/64/000/011/A068/A068

621.317.34

SOURCE: Ref. zh. Radiotekhn. i elektrosvyaz'. Sv. t., Abs. 11A375

AUTHOR: Koshkin, L. I.; Kurushin, Ye. P.; Shcheglov, O. S.; Nedovesov, V. N.

TITLE: Calculation and investigation of electromagnetic fields in the ferrite-dielectric-loaded waveguides

CITED SOURCE: Uch. zap. Kuybyshevsk. gos. ped. in-t, vyp. 42, 1964, 75-80

TOPIC TAGS: waveguide, ferrite loaded waveguide

TRANSLATION: An experimental method is suggested for finding the field configuration in the waveguides with ferrite slugs of arbitrary shapes. A lossy probe is introduced in the waveguide; the probe movement causes a variation in the waveguide transfer ratio proportional to the square of the tangential field component at the point of location of the probe. The probe shape and size depend on the mode. Results are cited of a verification of the method on the waveguides with a known field distribution; high accuracy is noted. An outfit for accurate measurement of low losses is described. Bibliography: 5 titles.

dm

Card 1/1 SUB CODE: EC ENCL: 00

L 18961-65 EWT(d)/EWT(l)/EPA(s)-2/EEC(k)-2/EEC-4/EEC(t)/EEC(b)-2/EWA(h) Po-4/Pq-4/Pg-4/Pt-10/Pk-4/Pl-4/Peb IJP(c)/SSD/AFETR/RAEM(a)/AS(mp)-2/AFWL/ASD(a)-5/AEDC(b)/RAEM(c)/ESD(gs)/ESD(t)

ACCESSION NR: AR5000811 S/0058/64/000/010/H033/H033

SOURCE: Ref. zh. Fizika. Abs. 10Zh229

AUTHORS: Koshkin, L. I.; Kurushin, Ye. P.; Shcheglov, O. S.; Nedovesov, V. N.

TITLE: Contribution to the calculation and investigation of electromagnetic fields in waveguides with ferrodielectric inserts

CITED SOURCE: Uch. zap. Kuybyshevsk. gos. ped. in-t., vyp. 42, 1964, 75-80

TOPIC TAGS: ferrodielectric, ferrite insert, waveguide measurement, electromagnetic field, electric loss

TRANSLATION: An experimental method is proposed for finding the field configuration in waveguides with ferrite inserts of arbitrary form. It consists of introducing into the waveguide a probe with

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L 18964-65
ACCESSION NR: AR5000811

appreciable losses. Motion of the probe causes the transfer coefficient of the waveguide to vary in proportion to the square of the tangential component of the field at the location of the probe. Results of tests of this method in waveguide with known field distribution are presented, and it is noted that the accuracy of the method is high. A diagram is proposed of an installation for exact measurement of low losses. G. Postnov.

SUB CODE: EC, EM ENCL: 00

Card 2/2

L 41218-65 EWT(1)/EED-2

ACCESSION NR: AR5005660 S/0058/64/000/012/E070/E070

SOURCE: Ref. zh. Fizika, Abs. 12E576

AUTHORS: Koshkin, L. I.

TITLE: Temperature dependence of the galvanomagnetic effect of the ferrite AMI(8)

CITED SOURCE: Uch. zap. Kuybyshevsk. gos. ped. in-t, vyp. 42, 1964, 81-88

TOPIC TAGS: galvanomagnetic effect, ferrite, temperature dependence, Curie point/ AMI(8)

TRANSLATION: A study is made of the longitudinal and transverse galvanomagnetic effects of one brand of ferrite used in contemporary radio devices. It is shown that the longitudinal and transverse galvanomagnetic effects are negative. At the Curie temperature the transverse effect greatly exceeds the longitudinal effect. At temperatures below the Curie point the transverse galvanomagnetic effect has a nonlinear dependence on the field intensity.

SUB CODE: EC, SS ENCL: 00

Card 1/1

L 62258-65 EWT(1)/EEC-4/EWA(h)

ACCESSION NR: AR5004026 S/0274/64/000/011/A068/A068

621.317.34

33 B

SOURCE: Ref. zh. Radiotekhn. i elektrosvyaz', Sv. t., Abs. 11A375

AUTHOR: Koshkin, L. I.; Kurushin, Ye. P.; Shcheglov, O. S.; Nedovesov, V. N.

TITLE: Calculation and investigation of electromagnetic fields in the ferrite-dielectric-loaded waveguides

CITED SOURCE: Uch. zap. Kuybyshevsk. gos. ped. in-t, vyp. 42, 1964, 75-80

TOPIC TAGS: waveguide, ferrite loaded waveguide 25

TRANSLATION: An experimental method is suggested for finding the field configuration in the waveguides with ferrite slugs of arbitrary shapes. A lossy probe is introduced in the waveguide; the probe movement causes a variation in the waveguide transfer ratio proportional to the square of the tangential field component at the point of location of the probe. The probe shape and size depend on the mode. Results are cited of a verification of the method on the waveguides with a known field distribution; high accuracy is noted. An outfit for accurate measurement of low losses is described. Bibliography: 5 titles.

dm

Card 1/1 SUB CODE: EC ENCL: 00

L 31178-66 EWT(1)/ETC(f)/EWG(m)/T IJP(c) AT
ACC NR: AP6006834 SOURCE CODE: UR/0181/66/008/002/0478/0483

45
B

AUTHOR: Koshkin, L. I.; Strygin, Yu. F.

ORG: Pedagogical Institute im. V. V. Kuybyshev, Kuybyshev (Pedagogicheskiy institut)

TITLE: Thermoelectrically induced magnetic anisotropy in polycrystalline ferrites 21,44,55 21,44

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 478-483

TOPIC TAGS: magnetic anisotropy, magnetic hysteresis, ferrite, thermoelectric phenomenon, polycrystal

ABSTRACT: The authors study the effect of an electric field on the properties of Perminvar ferrites with the structural formula $41NiO \cdot 3ZnO \cdot 1CoO \cdot 55Fe_2O_3$ which have a slightly higher iron content than the stoichiometric composition. Specimens in the form of rings and plates were subjected to thermoelectric treatment by placing them between the plates of a capacitor and heating at 200-250°C for about two hours. The magnetic properties of the specimens (hysteresis, static and dynamic magnetic permeability, induction, coercive force, resonance absorption, etc.) were measured in various directions before and after treatment. The hysteresis loop for treated

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ACC NR: AP6006834

specimens shows pronounced asymmetry. The same order of asymmetry is observed with respect to remanence. It is shown that hysteretic asymmetry may be compensated by a static magnetizing field. The intensity of this field may be increased to change the sign of asymmetry. Hysteretic asymmetry disappears at temperatures of approximately -196°C, although this phenomenon is reversible. Small spherical specimens (1.6-2.4 mm in diameter) were tested for resonance anisotropy. Thermoelectrically treated specimens showed two axes of preferred magnetization oriented at right angles to one another. The unfavored axis of magnetization is at an angle of the order of 45° to the axes of preferred magnetization. The specimens also show an axis of intermediate magnetization which is sometimes unilateral. The curves for anisotropy of the resonance field show pronounced asymmetry. The resonance anisotropy and hysteretic asymmetry were found to be stable phenomena. Thermoelectrically induced magnetic anisotropy may be caused by ordered diffusion of electrically charged magnetic moment carriers. It is also possible that induced anisotropy may be due to redistribution of nonhomogeneities, directed asymmetry of octahedral sites or magnetic ordering in the magnetite phase. Further research is needed to establish the exact mechanism responsible for the experimentally observed phenomena. Orig. art. has: 5 figures.

SUB CODE: 20/ SUBM DATE: 02Nov64/ ORIG REF: 013/ OTH REF: 006

Card 2/2 IC

KOSHKIN, L.N.

27045

Vospityvat' sovetskikh inzhenerov na osnove peredovoy teorii tekhnologii, (S Primech. Red.) Vestnik vyssh. shkoly, 1949, No. 7. S. 18-23

SO. LETOPIS' NO. 34

USSR/Physics - Automatization of Pro... May/Jun 51
duction

"Conditions Governing the Realization of an Automatic System of Machines in the Production of Articles," L. N. Koshkin

"Avtomat i Telemekh" Vol XII, No 3, pp 201-215 1951

Classifies the technological processes in operating machines and establishes the connection among the various classes of processes and operating machines and among the various forms of machinization of production. Concludes that the forms of machinization of production, especially, conclude that the forms of machinization of production are connected with definite classes of technological processes and operating machines. Submitted 13 Jul 50.

215T60

KOSHKIN, L.N.

215T60

1. KOSHKIN, L.N.

2. USSR (600)

4. Foundi ng

7. Classification of technological processes and operating machines, Lit.proizv. no. 4, 1953.

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

KOSHKIN, L.N.

USSR/Miscellaneous - Production equipment

Card 1/1 Pub. 128 - 8/25

Authors : Koshkin, L. N.

Title : Comments on A. F. Zhukhovitskiy's articl

Periodical : Vest. mash., Vol 35, No. 1, 49-51, Jan 1955

Abstract : A review is presented of A. F. Zhukhovitskiy's article entitled "Problems of Increasing the Introduction of Automatic Equipment", published in "Vest. mash." No. 7, 1954, concerning studies of the automation and mechanization of industrial production in machine construction plants and the influence of the above mentioned processes on labor productivity and efficiency. Diagrams.

Institution : .....

Submitted : .....

KOSHKIN, L.N

25(1,5) PHASE I BOOK EXPLOITATION SOV/2294

Moscow. Dom nauchno-tekhnicheskoy propagandy imeni F.E. Dzerzhinskogo

Novoye v tekhnologii vysokoproizvoditel'noy listovoy shtampovki; sbornik trudov konferentsii (New Features in the Methods of High-productivity Sheet Metal Stamping; Collection of Conference Transactions) Moscow, Mashgiz, 1959. 228 p. 8,000 copies printed.

Sponsoring Agency: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR.

Resp. Ed.: V.T. Meshcherin, Doctor of Technical Sciences, Professor; Eds.: V.D. Golovlev, Candidate of Technical Sciences, Docent, and Ye.N. Lanskoy, Candidate of Technical Sciences, Docent; Ed. of Publishing House: G.N. Sokolev; Tech. Ed.: B.I. Model'; Managing Ed. for Literature on Heavy Machine Building (Mashgiz): S.Ya. Golovin, Engineer.

PURPOSE: This collection of papers is intended for engineers and technicians in sheet metal stamping. It may also be useful to

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students of vuzes and tekhnikums.

COVERAGE: This collection deals with the design and features of some current problems in sheet metal stamping. Also discussed are processing methods still in the experimental stage. Several articles deal with the mechanization and automation of stamping processes and describe recently developed methods, such as explosion forming, the use of automatic rotary transfer lines, and press blocking with the use of radioactive isotopes. No personalities are mentioned. References follow several of the articles.

TABLE OF CONTENTS:

The author discusses labor productivity, shapes of workpieces, the materials used, stamping operations and technique, production lines, working speed, and the correct meaning of basic operational time.

Pikhtovnikov, R.V. [Doctor of Technical Sciences, Professor, Khar'kovskiy aviatsionnyy institut (Khar'kov Aircraft Institute)]. Use of an Explosive Wave for Drawing and Forming Medium and Large Parts in Small-scale Production 22

The author discusses experimental fabrication of shallow dish-type parts of an explosive wave caused by gunpowder, gasoline, or natural gas.

Koshkin, L.N. [Candidate of Technical Sciences]. New Possibilities in the Development of Sheet Metal Stamping in Connection With the Use of Automatic Rotary Transfer Machines 31

Mechanical and hydraulic rotary transfer machines are described. The flexibility of these machines allows facility of control, inclusion of chemical and heat treatment in the process, and smooth transition into fully automatic lines.

AVAILABLE: Library of Congress

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10-21-59

KOSHKIN, L.N.

25(5) PHASE I BOOK EXPLOITATION SOV/2394

Moscow. Dom nauchno-tekhnicheskoy propagandy imeni F.E. Dzerzhinskogo

Kompleksnaya avtomatizatsiya i mekhanizatsiya v mashinostroyenii; sbornik statey (Overall Automatization and Mechanization in Machine Manufacturing; Collection of Articles) Moscow, Mashgiz, 1959. 312 p. 8,000 copies printed.

Additional Sponsoring Agency: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR.

Ed.: A.N. Malov, Candidate of Technical Sciences; Tech. Ed.: B.I. Model'; Managing Ed. for Literature on Metalworking and Toolmaking (Mashgiz): N.D. Beyzel'man, Engineer.

PURPOSE: This collection of articles is intended for engineering and technical personnel of plants manufacturing machine and instruments.

COVERAGE: This book acquaints industrial workers with devices and equipment necessary for the overall mechanization and automatization of technological processes in machine manufacturing. Individual articles deal with general problems of automatization and mechanization of processes in preparatory, machine, and assembly shops and with problems arising from the introduction of transfer lines. The book also includes examples of devices and equipment tested and used under actual plant conditions. The source of [illegible] processes held in 1957 by the Moskovskiy Dom nauchno-tekhnicheskoy propagandy imeni F.E. Dzerzhinskogo (Moscow House for Scientific and Technical Propaganda imeni F.E. Dzerzhinskiy). No personalities are mentioned. Several of the articles are followed by references.

Card 4/5

KOSHKIN, L. N.

PHASE I BOOK EXPLOITATION SOV/4896

Moskovskiy dom nauchno-tekhnicheskoy propagandy imeni F. E. Dzerzhinskogo

Avtomaticheskiye rotornyye linii - sredstvo kompleksnoy avtomatizatsii proizvodstva. (Rotary-Transfer-Machine Lines-a Means of Full Automation of Production) Moscow, Mashgiz, 1960. 221 p. 10,000 copies printed.

Ed.: L. N. Koshkina; Ed. of Publishing House: I. Vasil'yeva; Tech. Ed.: G. V. Smirnova; Managing Ed. for Literature on Metalworking and Machine-Tool Making: V. I. Mitin, Engineer.

PURPOSE: The book is intended for technical personnel in the machinery industry.

COVERAGE: This collection of articles explains the principles of full automation based on the use of rotary transfer machines in various industries. The rotary operational transfer machines used for basic processing are discussed, and also the special power equipment and accessories for these machines and (Production) lines. No personalities are mentioned. There are no references.

VK/dwm/os
4/24/61

Card 4/4

KOSHKIN, L. N.

PHASE I BOOK EXPLOITATION SOV/5291

Soveshchaniye po kompleksnoy mekhanizatsii i avtomatizatsii tekhnologicheskikh protsessov v mashinostroyenii. 2d, Moscow, 1956

Avtomatizatsiya mashinostroitel'nykh protsessov. t. III: Obrabotka rezaniyem i obshchiye voprosy avtomatizatsii (Automation of Machine-Building Processes. v. 3: Metal Cutting and General Automation Problems) Moscow, Izd-vo AN SSSR, 1960. 296 p. (Series: Its: Trudy, t. 3) 4,700 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya.

Resp. Ed.: V. I. Dikushin, Academician; Ed. of Publishing House: V. A. Kotov; Tech. Ed.: I. F. Kuz'min.

PURPOSE: This collection of articles is intended for technical personnel concerned with the automation of the machine industry.

COVERAGE: This is Volume III of the transactions of the Second Conference on the Full Mechanization and Automation of Manufacturing Processes in the Machine Industry, held September 25-29, 1956. The transactions have been published in three volumes. Volume I deals with the hot pressworking of metals, and volume II, with the actuation and control of machines. The present volume deals with the automation of metal machining and workhardening, and with general problems encountered in automation. The transactions on the automation of metal-machining processes were published under the supervision of F. S. Demyanok and A. M. Karatygin, and those on the automation of workhardening processes, under the supervision of E. A. Satel' and M. O. Yakobson. No personalities are mentioned. There are no references.

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KOSHKIN, L.N.

PHASE I BOOK EXPLOITATION SOV/4718

Sovremennoye sostoyaniye i napravleniya razvitiya tekhnologii mashinostroyeniya i priborostroyeniya (Present State of the Manufacturing Processes in the Machine and Instrument Industries and Trends for Development) Moscow, Mashgiz, 1960. 563 p. 5,000 copies printed.

Ed.: Anatoliy Nikolayevich Gavrilov, Doctor of Technical Sciences, Professor; Managing Ed. for Literature on Machine Building and Instrument Construction (Mashgiz): N.V. Pokrovskiy, Engineer; Ed. of Publishing House: O.F. Kochetova, Engineer; Tech. Eds.: V.D. El'kind and A.Ya. Tikhanov.

PURPOSE: This book is intended for technical and scientific personnel in the machine and instrument industries and for students and teachers of schools of higher education.

COVERAGE: The book deals with current theory and practice in the manufacturing processes of the machine and instrument industries and includes discussions on trends for development. The physical nature of the processes and their technical-economic features and possibilities are considered. Particular attention is given to new and progressive processing (supersonic machining, electric machining, cold pressworking, precision casting, precision pressing, new methods of welding, etc.). The book consists of papers presented at the All-Union

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Scientific-Industrial Conference on "Advanced Machine and Instrument Manufacturing Processes," held in 1958. The papers have been revised in the light of recent developments in the field. A chapter is devoted to the automation and mechanization of the industry. Soviet and non-Soviet references accompany some of the chapters.

TABLE OF CONTENTS:

Card 2/11

S/118/60/000/010/001/008
A161/A026

AUTHOR: Koshkin, L. N., Candidate of Technical Sciences

TITLE: Rotary Automated Production Lines and Their Applications

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1960, No. 10, pp. 1-6

TEXT: Subject "rotary lines", or rotary transfer machines, are being used in the USSR for various cold-stamping operations, local or full heat treatment of parts, degreasing, varnishing, coating, as well as for auxiliary machining operations like deburring or trimming. They are coming into more extensive use - in foundries for dosing and pouring liquid metal and for trimming castings; in the manufacture of plastics (pelletizing, heating of pellets, etc.). In some economic areas, as of the Moscow and Odessa sovnarkhozes, production processes are being analyzed to decide what machine parts are suitable for machining in rotary lines, i. e. for what series parts it would be feasible to design special lines. The article presents a general review of existing rotary line designs and their present and possible future applications in view of the importance of the "rotary line" machines for automation. The lines are of two types - really "rotary" with the working tools and drives placed on rotating drums (Fig. 1), or flexible-chain

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Rotary Automated Production Lines and Their Applications

conveyers (Fig. 2). If a part is produced in too small numbers to fully occupy a line, the machines in this line may be fitted with different tools for machining parts of different shape or dimensions. Transfering elements between the working rotors being moved by single drive may leave the form of rotors or endless chains. Rotors with mechanical drive are used for light-pressure operations; for heavy-pressure and assembly operations the rotors are provided with hydraulic (or combined hydro-mechanical) drives. There are 10 figures.

Figure 1:

Mechanical one-sided rotor.
(1 - rotor shaft; 2 - drum; 3 - slipper; 4 - slide roller; 5 - stationary curve; 6 - tool block; 7 - punch; 8 - die; 9 - reception disc)

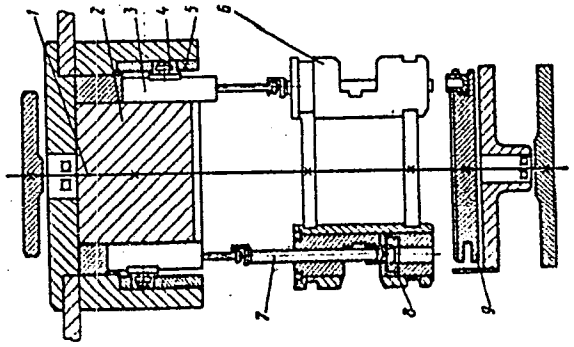

Рис. 1. Схема механического односторонного ротора:

Rotary Automated Production Lines and Their Applications

Figure 2:

Chain type machine. (1 - tool block; 2 - stationary curve)

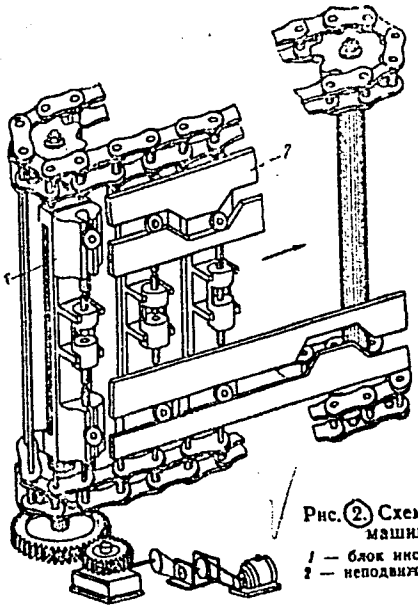

Рис. (2.) Схема цепной машины:
1 — блок инструмента;
2 — неподвижная кривая.

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Rotary Automated Production Lines and Their Applications

Figure 6:

A transferring rotor varying the transfer motion speed. (I - a working rotor with small pitch; II - a working rotor with large pitch; 1 - slipper; 2 - stationary curve; 3 - workpiece; 4 - tie rod holding the stationary curve; h - small pitch; H - large pitch)

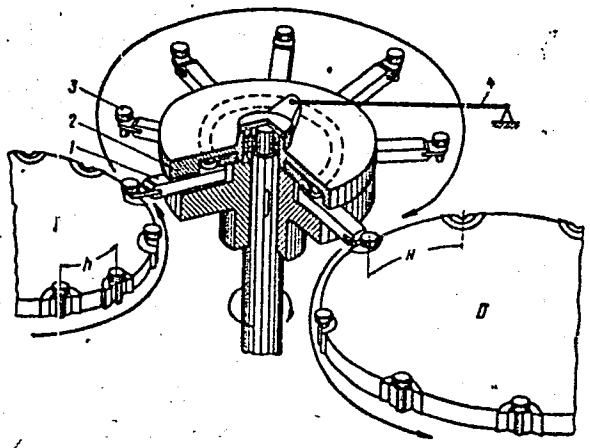

Рис. 6. Схема транспортного ротора, изменяющего скорость

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Rotary Automated Production Lines and Their Applications

Figure 7:
A two-sided mechanical rotor. (1 - shaft; 2 - drum; 3 - slipper; 4 - roller; 5 - punch; 6 - stationary curve; 7 - block housing; 8 - die; 9 - block holder; 10 - drive gear)

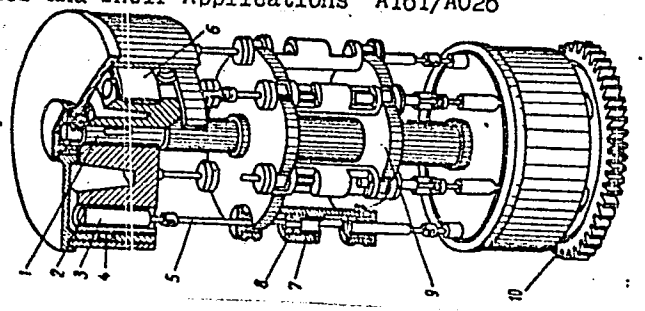


Рис. 7. Схема двустороннего механического ротора:

Figure 8:
A two-sided hydraulic rotor. (1 - distributing box; 2 - cylinder block; 3 - piston; 4 - tie rod; 5 - shaft; 6 - tool block; 7 - block holder; 8 - drive gear.

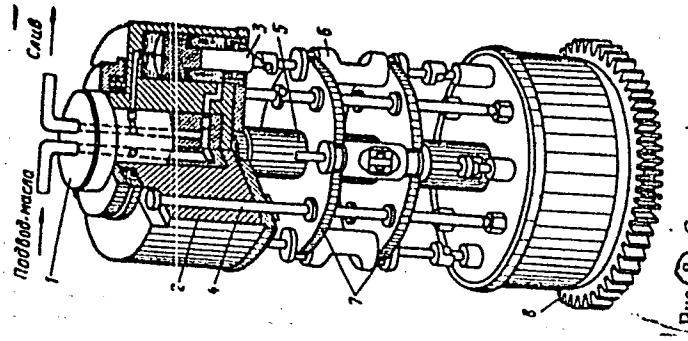


Рис. 8. Схема двустор. него гидравлического рото-

Card 5/5

KOSHKIN, L.

Lines leading into tomorrow. Izobr.i rats. no.10:8-11 0'60. (MIRA 13:10)

1. Nachal'nik i glavnyy konstruktor TSentral'nogo konstruktorskogo byuro Gosudarstvennogo komiteta Soveta Ministrov SSSR.
(Machinery, Automatic)

KOSHKIN, L.N.

21

Automation of Cold [Metal] Stamping Production 807/5580

COVERAGE: The collection contains reports delivered at the Kiyev Scientific and Technical Conference by workers of machine and instrument plants, design organizations, and scientific research and educational institutes. The Conference was sponsored by the Kiyevskoye oblastnoye pravleniye Nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti (Kiyev Oblast Administration of the Scientific and Technical Society of the Machine-Building Industry) and by the Ukrainskoye respublikanskoye pravleniye Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti (Ukrainian Republican Administration of the Scientific and Technical Society of the Instrument-Making Industry). The purpose of the Conference was to discuss the achievements and practical experience (especially at the Gor'kiy Automobile Plant, the VEF Plant, and Leningrad factories) in the automation of stamping production. The Conference also served to acquaint a wide number of machine and instrument builders with the present state of automation in these fields and with the prospects for its further development. Papers dealing with experience in the design and operation of automatic devices, presses, and automatic production lines used in stamping production were discussed. 35 personalities are mentioned. References accompany most of the articles.

TABLE OF CONTENTS:

21

PHASE I BOOK EXPLOITATION 807/5580

Golubev, T.N., Doctor of Technical Sciences, Professor, and I.P. Tartakovskiy, Candidate of Technical Sciences, Docent, eds.

Avtomatizatsiya kholodnoshtampovochnogo proizvodstva (Automation of Cold [Metal] Stamping Production) Moscow, Mashgiz, 1961. 282 p. 6,000 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov UkrSSR Institut tekhnicheskoy informatsii. Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Kiyevskoye oblastnoye pravleniye. Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti. Ukrainskoye respublikanskoye pravleniye.

Ed.: M.S. Sorokin; Tech. Ed.: M.S. Gorodetskaya; Chief Ed.: (Southern Dept. Mashgiz): V.K. Serdyuk, Engineer.

PURPOSE: This collection of articles is intended for workers at machine and instrument plants and scientific research and design institutes.

Card 1/5

Card 3/5

KOSHKIN, L., kandidat tekhn.nauk, laureat Stalinskoy premii

Over-all automation of production and automatic rotary lines. NTO 2 no.5:29-32 My '60. (MIRA 14:5)
(Automation)

PHASE I BOOK EXPLOITATION SOV/5771

Koshkin, Lev Nikolayevich

Avtomaticheskiye rotornyye linii (Rotary Transfer-Machine Lines) Moscow, Izd-vo "Znaniye," 1960. 44 p. (Series: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy. Seriya IV, 1961: Nauka i tekhnika, no. 9) 42,000 copies printed.

Scientific Ed.: V.F. Preys; Ed.: T.F. Islankina; Tech. Ed.: Ye.V. Savchenko.

PURPOSE: This booklet is intended for engineers, technicians, and skilled workers; it may also be useful to students in mechanical-engineering institutes and tekhnikums.

COVERAGE: Fundamental problems encountered in the development of rotary transfer-machine lines are discussed along with the principles and characteristic features of the operation of rotors for processing and transferring products. Attention is given

Card 1/3

to the construction of the basic types of rotors with mechanical and hydraulic actuation and to rotors for heat and chemical treatment. No personalities are mentioned. There are 7 references, all Soviet.

TABLE OF CONTENTS:

Card 2/3

KOSHKIN, L.N., inzh.

Using transfer machines in assembly lines. Vest.mash. 42 no.3:63-68 Mr '62. (MIRA 15:3)
(Assembly-line methods)

KOSHKIN, L.N., kand.tekhn.nauk

Extend the use of transfer machines for assembling operations.
Mashinostroitel' no.3:20-22 Mr '62. (MIRA 15:3)
(Assembly-line methods)

KOSHKIN, L.N., inzh.

Transfer-machine lines and the outlook for their development.
Vest.mashinostr. 42 no.6:47-50 Je '62. (MIRA 15:6)
(Machine tools) (Automation)

KOSHKIN, L.N.; PREYS, V.F.; ROMANOVSKIY, V.P., kand.tekhn.nauk, red.; KUREPINA, G.N., red.izd-va; BARDINA, A.A., tekhn.red.

[Automatic transfer-machine lines for stamping] Avtomaticheskie rotornye linii v shtampovochnom proizvodstve. Pod obshchei red. V.P.Romanovskogo. Moskva, Mashgiz, 1962. 48 p. (Bibliotechka shtampovshchika, no.2) (MIRA 16:1)
(Machinery, Automatic) (Forging)

KOSHKIN, Lev Nikolayevich, laureat Gosudarstvennoy premii, kand. tekhn. nauk; BEREZHNOY, Yuriy Nikolayevich, inzh.; FEDCHENKO, V., red.; NYRKOVA, N., tekhn. red.

[Whirling motion creates machines] Vikhr' rozhdaet mashiny. Moskva, Molodaia gvardiia, 1962. 78 p. (MIRA 16:2)
(Machinery, Automatic)

KOSHKIN, L.N., kand.tekhn.nauk

Introduce transfer-machine lines more widely. Mekh.i avtom. proizv. 16 no.11:34-40 N '62. (MIRA 15:12)
(Automation)
(Machine tools)

KOSHKIN, L.N., doktor tekhn. nauk; KAUFMAN, L.M., prof., doktor tekhn. nauk, retsenzent; MALOV, A.N., prof., red.

[Overall automation of industrial production based on transfer-machine lines] Kompleksnaia avtomatizatsiia proizvodstva na baze rotornykh linii. Moskva, Mashinostroenie, 1965. 277 p. (MIRA 18:8)

KOSHKIN, L.V.; MUSABEKOV, Yu.S.

Characteristic features of the conjugation of the electron pair of nitrogen. Zhur.ob.khim. 33 no.12:4030-4032 D '63. (MIRA 17:3)

KOSHKIN, L.V.; MUSABEKOV, Yu.S.

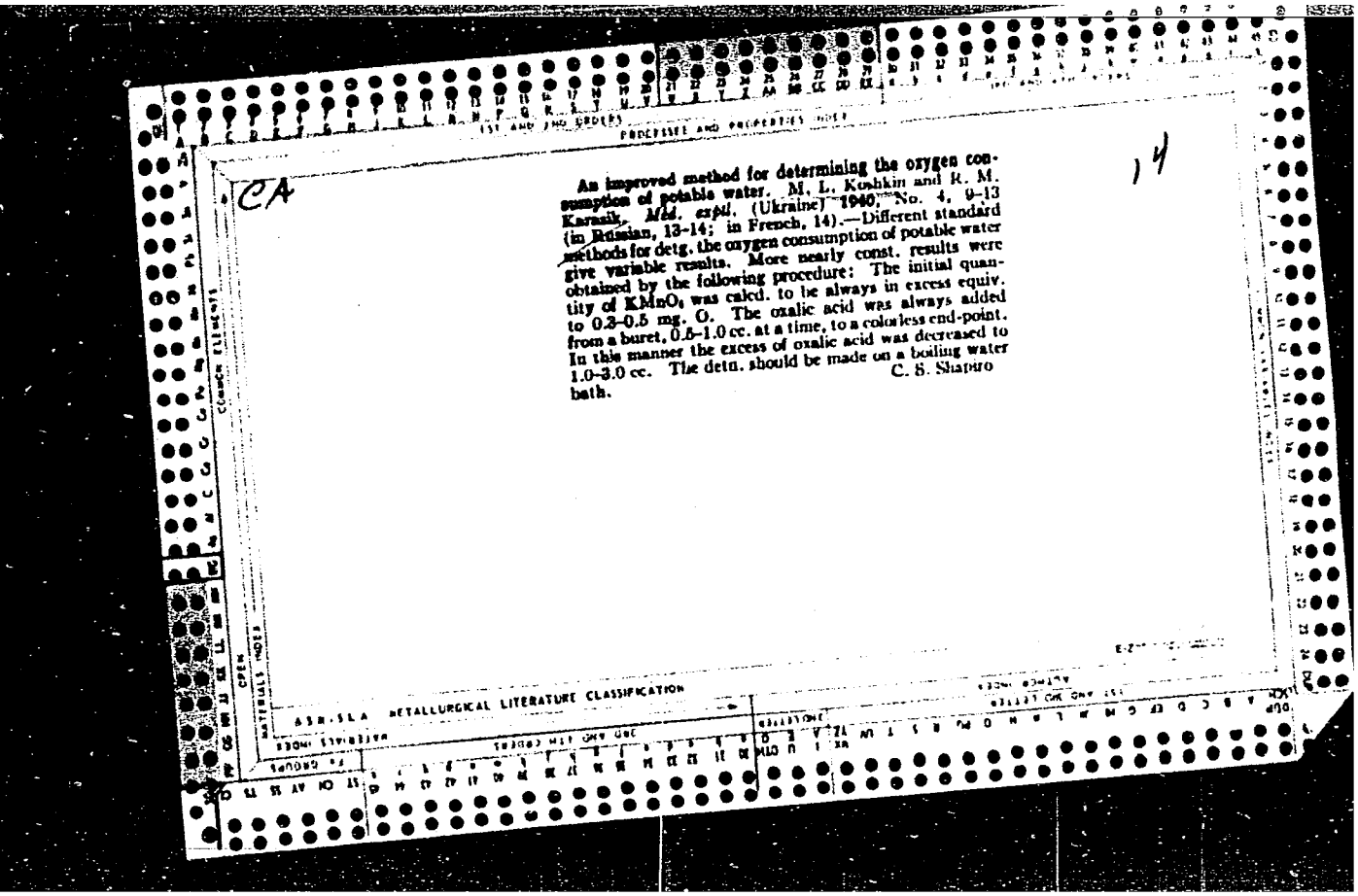
Development of the science of biradicals. Khim. i khim. tekh. 1:263-282 '62. (MIRA 17:2)

MUSABEKOV, Yu.S.; KOSHKIN, L.V.

Origin and development of the theory of radicals. Trudy Inst. ist.est.i tekh. 35:245-292 '61. (MIRA 14:9)
(Radicals (Chemistry))

KOSHKIN, L.V.; MUSABEKOV, Yu.S.

Evolution of the methods for studying free organic radicals.
Trudy Inst.ist.est.i tekh. 39:141-175 '62. (MIRA 16:2)
(Radicals (Chemistry))



CA

14

An improved method for determining the oxygen consumption of potable water. M. L. Kushkin and R. M. Karasik. *Med. expl.* (Ukraine) 1940, No. 4, 9–13 (in Russian, 13–14; in French, 14).—Different standard methods for detg. the oxygen consumption of potable water give variable results. More nearly const. results were obtained by the following procedure: The initial quantity of $KMnO_4$ was calcd. to be always in excess equiv. to 0.3–0.5 mg. O. The oxalic acid was always added from a buret, 0.5–1.0 cc. at a time, to a colorless end-point. In this manner the excess of oxalic acid was decreased to 1.0–3.0 cc. The detn. should be made on a boiling water bath.

C. S. Shapiro

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Superchlorination and ammoniation. M. L. Koshkin, A. G. Ilina and P. I. Lagunova. *Vodosnabzhenie i Sanit. Tekh.* 15, No. 2 3, 85 9(1940). Compds. of NH_3 decrease the absorption of small doses of Cl (1-2 mg./l.) but at larger concns. begin to absorb it themselves. The consumption of Cl in the presence of NH_3 is not uniform. Absorption of Cl by PhOH is decreased by NH_3, even when Cl is present in large quantities. Preammoniation of water thus becomes inexpedient in superchlorination, ammoniation being effective only after the excess of Cl has been eliminated. B. Gutoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KOSHKIN, M. L.

37518. Koshkin, M. L. nekotoryye itogi i perspektivy primeneniya ul'trafioletovoy radiatsii dlya obluchenita pomeshcheniy. v sb: xll vsesoyuz. s"yezd gigiyenistov, epidemiologov, mikrobiologov i infektsionistov. T. I. M., 1949, s 114-18

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

PA 163T32

USSR/Medicine - Ultraviolet Rays Jan/Feb 50
Radiation Effects

"Exposure of a Scarlet Fever Ward to Ultraviolet Radiation," Prof M. L. Koshkin, Docent, F. M. Moselevskiy, R. I. Eru, Chair of Gen Hygiene, Chair of Children's Infections, Khar'kov Med Inst

"Pediatriya" No 1, pp 30-38

Tests effect of subject radiation on bacterial contamination of the air and various objects in a scarlet fever ward and effect of radiation on patients. Finds radiation reduces number of bacteria, especially streptococci. Observes no harmful results

163T32

USSR/Medicine - Ultraviolet Rays Jan/Feb 50
(Contd)

in patients of subject ward. Definite decrease in complications is apparent. Includes five tables. Chief Chair of Gen Hygiene: Prof M. L. Koshkin. Chief, Chair of Children's Infections: Docent A. I. Pevzner.

163T32

KOSHKIN, M. L.; PROF

KOSHKIN, M.L., professor; GIL', S.A., dotsent; IDLINA, A.G., kandidat meditsinskikh nauk

Catarrh of the upper respiratory tract in premature infants in wards irradiated with ultraviolet rays. Pediatriia no.1:8-15 Ja-F '55. (MLRA 8:5)

1. Iz kafedry obshchey gigiyeny Khar'kovskogo meditsinskogo instituta (dir. dotsent I.F.Kononenko) i otdela fiziologii rebenka Ukrainskogo instituta okhrany materinstva i mladenchestva imeni N.K.Krupskoy (dir. kandidat meditsinskikh nauk A.I.Kornikova).

(RESPIRATORY TRACT, diseases,
in premature inf., prev. by ultraviolet irradiation of tents)
(ULTRAVIOLET RAYS,
prev. of resp. tract dis. in premature inf., irradiation of tents)

KOSHKIN, M.L.

AID P - 3665

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 11/19

Authors : Koshkin, M. L., Prof., Karut, T. A., Kand. Med. Sci., Kandyba, S. G., Assistant

Title : Acid-resisting saprophytes as a test for the sensitivity of tuberculosis bacilli to ultraviolet radiation

Periodical : Gig. i. san., 11, 44-46, N 1955

Abstract : Describes experiments with various saprophyte cultures as substitutes for tuberculosis bacilli. Mercury uviol lamps, mass-produced in the USSR and very efficient for the disinfection of the air and different objects, were used in these tests with best results. 1 reference.

Institution : Chair of General Hygiene, Khar'kov Medical Institute and Ukrainian Institute of Vaccines and Serums im. I. I. Mechnikov.

Submitted : Ap 24, 1954

KOSHKIN, M.L., prof.; SHEYNIN, B.Ya., kand.med.nauk; IDLINA, A.G., kand.med. nauk; BUDCHENKO, L.I.

Natural ultraviolet radiation inside buildings and the disinfectant effect of daylight. Vrach.delo no.1:69-72 Ja '58. (MIRA 11:3)

1. Kafedra obshchey gigiyeny Khar'kovskogo meditsinskogo instituta.
(AIR--PURIFICATION) (ULTRAVIOLET RAYS)

NOVACHENKO, N.P.; KOSHKIN, M.L., prof.; SINEL'NIKOV, R.D., prof. (Khar'kov)

With the aid of Kharkov medical circles. Vrach.delo no.1:1241-1242 D '58. (MIRA 12:3)

1. Chlen-korrespondent AMN SSSR (for Novachenko)
(UKRAINE--MEDICINE--PERIODICALS)

KOSHKIN, M.L., prof. IDLINA, A.G., kand.med.nauk, ROYTMAN, T.A., KHODOVA, R.Z. DUDCHENKO, I.I.

Effect of BUV-15 lamps on children of kindergarten age [with summary in English]. Pediatriia 36 no.6:67-73 Je '58 (MIRA 11:6)

1. Iz kafedry obshchey gigiyeny Khar'kovskogo meditsinskogo instituta i Khar'kovskogo oblastnogo doma rebenka No.1.
(ULTRAVIOLET RAYS, eff.
indirect, on bhild develop. (Rus))
(ANTISEPTSIS AND ASEPSIS,
ultraviolet irradiation in prev. of aerogenic infect. in schools (Rus))
(AIR, microbiology,
ultraviolet prev. of aerogenic infect. in schools (Rus))

KOSHKIN, M. L., VELIKOVA, V. K., MOSTOVA, R. S.

"Irradication of Quarters with Natural and Artificial Ultraviolet Radiation as a Method of Preventing Aerogenic Infections."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

KOSHKIN, M.L., prof.; DUDCHENKO, I.I.

Bactericidal effect of ultraviolet rays. Vrach.delo no.5:507-509 My '60. (MIRA 13:11)

1. Kafedra boshchey gigiyeny (zav. - prof. M.L.Koshkin) Khar'kovskogo meditsinskogo instituta.
(ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)

S/196/61/000/009/019/052
E194/E155

AUTHORS: Koshkin, M.L., Finkel'shteyn, V.Ye., and Dudchenko, I.I.

TITLE: Reflection of ultraviolet radiation from screens with coloured limewash

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.9, 1961, 21, abstract 9V 192. (Sb. nauchn. rabot Khar'kovsk. med. in-ta i N.-i in-ta vaktsin i syvorotok (formerly Tr. Khar'kovsk med. in-ta), no.53, 1960, 183-187)

TEXT: The use of ultraviolet irradiation of premises to disinfect the air and contents is becoming more extensively used as a prophylactic measure. For indirect ultraviolet irradiation of rooms, which is the usual method, the lamp is installed 1.8 - 2.0 metres above the floor. An aluminium reflector directs the ultraviolet radiation upwards so that the upper part of the room is irradiated directly and the lower part only receives radiation reflected from the walls and ceilings. With this method irradiation can be carried out with people present because the

Card 1/2

Reflection of ultraviolet radiation... S/196/61/000/009/019/052
E194/E155

dispersed flux of radiation reflected from the walls and ceilings is much less than the direct radiation and causes no pathological effects, even after many hours' irradiation per day. To attain a better bactericidal effect it is desirable to irradiate the upper zones by the most intensive possible flux of ultraviolet irradiation. According to instructions of the Sektsiya po ul'travioletovomu izlucheniyu (Ultraviolet Irradiation Section) of the Institut biofiziki AN SSSR (Biophysics Institute AS USSR) the radiation level in zones where people are present should not exceed 0.5 microwatts/cm^2 and the daily dose should not be more than 240 microwatts.min/cm^2.

[Abstractor's note: Complete translation.]

Card 2/2

27.1220

39529
S/240/62/000/003/002/003
I015/I215

AUTHOR: Koshkin, M. L. Professor

TITLE: Studies on the effect of small doses of ultra-violet rays upon the protective-adaptive functions of the organism

PERIODICAL: Gigiyena i sanitariya, no. 3, 1962, 70–76

TEXT: The author reports his studies on the effect of UV rays on the phagocytic activity of leukocytes, the stimulation of which is one of the main factors determining the increased immunity of organinsms following UV irradiation, especially in small doses. The author describes in vitro experiments on the phagocytic activity of leukocytes from irradiated animals in *Staphylococcus aureus* cultures. This activity was greater following small doses than after large doses, although larger doses of UV also brought about an increase in phagocytosis as compared with the non-irradiated controls. The author concluded from another series of experiments that small UV doses stimulate the adreno-sympathetic system thus explaining the great variety of effects shown by UV-rays. The author assumes that small doses of UV-rays serve as a trigger mechanism on the complex, adreno-sympathetic system. He proposed to apply small doses of UV-rays in pediatrics for mass-prophylaxis and concludes that the role of the pituitary-adrenocortical system in the effect of UV, stressed by Selye, deserves serious attention and extensive studies. There are 3 tables.

Card 1/2

ASSOCIATION: Kafedra obshchey gigiyeny Khar'kovskogo meditsinskogo instituta (Chair of General Hygiene, Institute of Medicine, Khar'kov)

SUBMITTED: July 1, 1961

Card 2/2

KOSHKIN, M. L., prof.; GIL'MAN, B. I.; DUDA, M. N.; DUDCHENKO, I. I.; ZVYAGINTSEVA, L. I.; SLASHCHOVA, K. V.

Preventive irradiation of preschool and younger school-age children with small (non-erythematic) doses of ultraviolet irradiation. Vrach. delo no.6:127-132 Je '62. (MIRA 15:7)

1. Kafedra obshchey gigiyeny (zav. - prof. M. L. Koshkin) Khar'kovskogo meditsinskogo instituta.

(ULTRAVIOLET RAYS--THERAPEUTIC USE)
(SCHOOL HYGIENE)

LEVIN, Mark Mironovich, prof.; ZADOROZHNYY, B.A., dotsent, red.;
BELOUSOV, V.A., prof., red.; BOKARIUS, N.N., prof., red.;
VOROB'YEV, F.P., assistent, red.; GRISHCHENKO, I.I., prof., red.;
DERKACH, V.S., prof., red.; KORSUN', A.Ya., dotsent, red.;
KOSHKIN, M.L., prof., red.; KUDINTSEV, V.I., dotsent, red.;
PIKIN, K.I., prof., red.; PRIKHOD'KOVA, Ye.K., prof., red.;
POPOV, I.D., dotsent, red.; SOLOV'YEV, M.N., prof., red.;
SHTEYNBERG, S.Ya., prof., red.; KHARCHENKO, N.S., prof., red.

[Repeated surgery in stomach diseases following operations]
Povtornye operatsii pri zabolevaniiakh operirovannogo zheludka.
Khar'kov, Izd-vo Khar'kovskogo gos.univ., 1961. 177 p.
(Kharkov. Medychnyi institut. Trudy, vol.58). (MIRA 16:2)
(STOMACH--SURGERY)

KOSHKIN, Moisey L'vovich, prof.; GABOVICH, R.D.[Habovych, R.D.], red.

[Arkadii Ivanovych IAkobii, outstanding Soviet Hygienist] Arkadii Ivanovych IAkobii - vydatnyi vitchyznianyi higienist. Kyiv, Zdorov'ia, 1965. 31 p. (MIRA 18:9)

KOSHKIN, M.S., prof.

Revision of existing standards of artificial illumination.
Gig. i san. 23 no.8:53-54 Ag '58 (MIRA 11:9)

1. Iz Khar'kovskogo meditsinskogo instituta.
(ILLUMINATION,
standards (Rus))

GOLOVKIN, N., prof.; KOSHKIN, N.; BATURINA, L.

Studying the conditions of food product storage in a chamber with dynamic insulation. Mias.ind.SSSR 33 no.2:47-51 '62. (MIRA 15:5)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti (for Golovkin, Koshkin). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti (for Baturina).
(Leningrad—Cold storage warehouses) (Food—Preservation)

1. KOSHKIN, N.A.

2. USSR (600)

4. Baraba Steppe - Reclamation of Land

7. Carry out directives of the 19th Party Congress on draining and reclaiming swamps in Baraba. Korm. baza 3. no. 11. 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified

COUNTRY : USSR
CATEGORY : Soil Science. Tillage. Improvement. Erosion. J

ABS. JOUR. : RZhBiol., No. 3 1959, No. 10727

AUTHOR : Gantimurov, I. I., Koshkin, N. A.
INST. : Ubinskaya Experiment and Soil Improvement Station
TITLE : Measures for the Reclamation and Improvement of Low-Fertility Lands in the Regions of Barabe.

ORIG. PUB. : Byul. nauchne-issled. i opytn. melior. st., 1957, No. 2, 9-12
ABSTRACT : No abstract.

CARD: 1/1

49

NAZAROV, G.I.; KOSHKIN, K.Ye., inzh.

Automatic control in grain drying. Mekh.i elek.sots.sel'khoz. 16 no.5:39-42 '58. (MIRA 11:11)

1. Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva. 2. Chlen-korrespondent Vsesoyuznoy Akademii sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Nazarov).
(Grain, Drying) (Automatic control)

BORODIN, I.F., kand.tekhn.nauk; KOSHKIN, K.Ye., inzh.

New electric equipment for agriculture. Mekh.i elek.sots.sel'-khoz. 17 no.5:53-55 '59. (MIRA 12:12)
(Electric apparatus and appliances)

KOSHKIN, K. Ye., Cand Tech Sci (diss) -- "Electroautomation of the technological process of grain drying". Moscow, 1960. 22 pp (Min Agric USSR, Moscow Inst of Mechanization and Electrification of Agric), 150 copies (KL, No 10, 1960, 131)

ZHURAVLEV, P.N.; KOSHKIN, K.Ye.

Electric power in agriculture. Biul.tekh.-ekon.inform. no.8:63-66 '61. (MIRA 14:8)

(Rural electrification)

112-57-8-16149

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 8, p 13 (USSR)

AUTHOR: Koshkin, L. I.

TITLE: The Second Temperature Maximum of Permittivity of Barium Titanate (Vtoroy temperaturnyy maksimum dielektricheskoy pronitsayemosti titanata bariya)

PERIODICAL: Uch. zap. Leningr. gos. ped. in-ta (Scientific Notes of the Leningrad State Pedagogical Institute), 1955, Nr 103, pp 295-303

ABSTRACT: The effect of temperature on DC capacitance and permittivity ε has been determined by means of a ballistic galvanometer with charging times of 0.8, 2.5, and 8 seconds; the galvanometer swing period was 14.9 seconds. Samples were prepared from: (1) $BaTiO_3$ with 2.5% excess of TiO_2; (2) 0.95 $BaTiO_3$ — 0.05 $PbTiO_3$; (3) 0.9 $BaTiO_3$ — 0.1 S_2TiO_3. Measurements have been made at field strengths of 0.36-0.42 kv/cm. If charging is made through a resistance of about 10^7 ohms at a temperature of about 200°, i.e., above the Curie point, the second maximum of ε appears; its value may go as high as 28,000 (for $BaTiO_3$) with a charging time of 2.5 seconds, or over 36,000 with

Card 1/2

112-57-8-16149

The Second Temperature Maximum of Permittivity of Barium Titanate

a charging time of 8 seconds. The second maximum does not appear if charging is made directly from the source, without additional resistance. In addition, with the temperature above the Curie point, a steady-state direct current observable on the galvanometer appears in the discharge circuit. The author believes that the second maximum is due to a special mechanism of polarization, which differs from the mechanism effective below the Curie point. Bibliography: Six items.

D. M. K.

Card 2/2

KOSHKIN, L.I.

On the Pulse-Ballistic Method of Analyzing Dielectrics (Cont.)

with a ballistic galvanometer. The connections diagram permits measuring capacitance with the ballistic method at various voltages and various values of τ. Checking with air, mica and ceramic capacitors proved that the measured and the rated capacitances coincide with an accuracy up to 10% at the time $\tau = 10^{-7}$ sec. Applying this sytem, it is difficult to obtain a time τ greater than 10^{-4} sec. Using the described method the author found that barium titanate possesses at least 3 mechanisms of polarization: the first is characterized by a time of 10^{-6} sec., the second by a time of 10^{-4} sec., and the third by a time of the order of a few seconds. Bibliography: 4 titles.

D.M.K.

Card 2/2

USSR/Soil Science. Tillage. Land Reclamation. Erosion. J-5

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24814.

Author : Koshkin, N.A ; Starodubets, A.V.
Inst :
Title : Experiment on Ploughing Virgin Land Long-Fallow and with Ploughs With Helical Mold-Boards.

Orig Pub: Biul. nauchno-issled. i opytn. rabot. Ubinsk. opytn. melior. st., 1957, No 2, 59-61.

Abstract: No abstract.

Card : 1/1

[illegible], N.

Bee Culture - Equipment and Supplies

Paper insulating cushions. Pchelovodstvo 29, No. [illegible], 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

KOSHKIN, N.I.; NOZDREV, V.F.; TOPCHIYEV, A.V., akademik.

Investigation of the absorption of ultrasound in a series of saturated hydrocarbons, using the impulse method. Dokl.AN SSSR 92 no.4:793-796 O '53. (MLRA 6:9)

1. Akademiya nauk SSSR (for Topchiyev). 2. Moskovskiy oblastnoy pedagogicheskiy institut (for Koshkin and Nozdrev).
(Ultrasonic waves) (Hydrocarbons)

KOSHKIN, N. I.

USSR/Physics

Card 1/1

Authors : Yakovlev, V. F; Koshkin, N. I., and Nozdrev, V. F.

Title : Use of the impulse method in the study of ultra-sound adsorption in benzene and some of its halogen derivatives close to their solidification point.

Periodical : Dokl. AN SSSR 96, Ed. 2., 273 - 276, May 1954

Abstract : Report describes an impulse ultrasonic arrangement and the method of measuring the absorption in benzene and some of its halogen derivatives. This installation was successfully used for measuring the absorption close to solidification point. Results obtained through measuring the absorption of ultra sound in benzene, chlorobenzene and bromobenzene close to their solidification point are included. Six references; 4 USSR since 1949. Table, Graphs.

Institution : The Moscow Regional Pedagogical Institute

Presented by : Academician V. V. Shuleykin, March 22, 1954

KOSHKIN, N. I., NOZDREV, V. F., SOBOLEV, V. D., YAKOVLEV, V. F. and SHIRKEVICH, M. G.

"Impulse Method of Fixed Distances, Its Physical Basis and Practical Application". Abstracted for inclusion in the Second International Congress on Acoustics, Cambridge, Mass., 17-24, Jun 1956

Moscow State University

KOSHKIN, N I

USSR/Acoustics - Ultrasonics, J-4

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35575

Author: Koshkin, N. I., Nozdrev, V. F., Sobolev, V. D., Shirkevich, M. G., ~~Yakovlev, V. F.~~

Institution: None

Title: The Fixed-Distance Pulse Procedure, Its Physical Foundations, and Practical Application

Original Periodical: Akust. zh., 1956, 2, No 2, 161-166

Abstract: A substantiation is given for a newly developed procedure for pulse measurements of absorption of ultrasonic waves. Unlike the present widely-used procedure, in which it is necessary to move the radiator and the reflector relative to each other, the radiator and reflector remain stationary in this method. This circumstance not only simplifies to a considerable extent the construction of the measuring chamber and accelerates the measurement process, but leads also to a more successful utilization of the pulse method in the

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KOSHKIN, N. I.

USSR / Physics - Physical chemistry

Card 1/1 Pub. 147 - 32/35

Authors : Koshkin, N. I.; Zalivchiy, V. N.; Zipir, A. D.

Title : Study of ultra sound absorption in ortho- and metaxylenes

Periodical : Zhur. fiz. khim. 30/1, 230-231, Jan 1956

Abstract : The absorption of ultra-sound was investigated in isomers such as ortho-and metaxylenes when the nature of the bonds between individual atom groups remains almost uniform. The investigation was made at temperatures ranging from 17°C up to temperatures close to critical. The measurements, carried out by means of a special impulse installation, were along the line of saturation at frequencies of 7.6 and 15.1 mc. The results obtained are presented in a table. Five USSR references (1948-1955). Table.

Institution : Moscow Oblast Pedagogical Inst.

Submitted : June 22, 1955

KOSHKIN, N. I.

MIKHAYLOV, I. G., KOSHKIN, N. I., LUTOVININ, V. S., NOZDREV, V. F. and STAROSTINA, O.

"Absorption of Sound in Acetates."

report presented at the 6th Sci. Conference on the Application of Ultrasound in the investigation of Matter, 3-7 Feb 1958, organized by Min. of Education RSFSR and Moscow Oblast Pedagogic Inst. im N . K. Krupskaya.

KOSHKIN, N. I.

GORBUNOV, M. A. and KOSHKIN, N. I.

"Absorption of Sound in the Region of Transition from Liquid to Crystals."

report presented at the 6th Sci. Conference on the Application of Ultrasound in the Investigation of Matter, 3-7 Feb 1958, organized by Min. of Education RSFSR and Moscow Oblast Pedagogic Inst. im. N. K. Krupskaya.

KOSHKIN, N. I.

KOZDREV, V. F., KOSHKIN, N. I., and GORBUNOV, M. A.

"Study of Physic-Chemical Properties of Complex Thermodynamical Systems by Ultrasonic Methods."

paper presented at 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.

NOZDREV, V.F.; YAKOVLEV, V.F.; KOSHKIN, N.I.; GORBUNOV, M.A.

Certain new possibilities for using ultrasonic pulses for investigating substances. Izv. vys. ucheb. zav.; radiotekh. no.1:35-42 '58. (MIRA 11:4)

1. Rekomendovana kafedroy obshchey fiziki Moskovskogo oblastnogo pedagogicheskogo instituta.
(Ultrasonics) (Liquids)

SOV/124-59-9-9840

Translation from: Referativnyy zhurnal, Mekhanika, 1959, Nr 9, p 38 (USSR)

AUTHORS: Koshkin, N.I., Gorbunov, M.A.

TITLE: A Method Worked out for Measuring the Absorption of Supersonic Waves in the Liquid-Solid Transition Range

PERIODICAL: V sb.: Primeneniye ul'traakust. k issled. veshchestva, Nr 6, Moscow, 1958, pp 199 - 208

ABSTRACT: The authors describe different variants of the pulse method for studying the supersonic absorption (frequency of the order of 10^6 cps) by liquids at temperatures being close to the crystallization temperature. The conditions, which must be fulfilled for applying the pulse method to investigating the properties of matter within the transition range between liquid and solid crystalline state, are formulated: 1) application of a solid acoustic delay line; 2) using two quartz converters for reducing the acoustic range; 3) operation within millimeter distances. A glassy measuring chamber is described, which provides for the following properties:

Card 1/2 a) uniformity of the crystallization process over the entire volume

SOV/124-59-9-9840

A Method Worked out for Measuring the Absorption of Supersonic Waves in the Liquid-Solid Transition Range

of the chamber; b) possibility of a direct observation of the course of a process; c) exclusion of possible chemical interactions between the investigated liquid and the chamber walls. The authors recommend to record two series of measurements with different distances between the radiating and receiving quartzes. It is necessary to record also the initial value of the sounding pulse equal for the two measurement series. The measurements must be carried out at temperatures different from the crystallization temperature by 1 - 1.5°C. The results from measuring the sound absorption coefficient of benzol at a frequency of 6.35 Mc within the temperature range from 4 to 8°C are presented graphically. Bibl. 12 titles.

B.B. Kudryavtsev

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5(2,4)

AUTHORS: Gorbunov, M. A., Koshkin, N. I. SOV/153-58-4-8/22

TITLE: Measurement of the Absorption of Ultra-Sonic Waves in Organic Liquids in the Transition Zone, Liquid-Crystal (Izmereniye pogloshcheniya ul'trazvukovykh voln v organicheskikh zhidkostyakh v oblasti perekhoda zhidkost'-kristall)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 4, pp 49 - 54 (USSR)

ABSTRACT: The study of the properties of matter in the transition zone, liquid-crystal, is of particular importance today, especially in connection with the artificial growth of crystals for various industrial purposes, as well as for the production of pure substances. A survey of literature is given (Refs 1-10, 14-16). The problem mentioned in the title was, as far as the authors know, not investigated. The authors used the impulse -method for measurements in the transition zone. The main problem was to determine

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whether the impulse would penetrate the medium in the transition zone with low sound intensities: if not, the natural process of crystallization would be disturbed. (Refs 3,11). Eventually, the authors succeeded in constructing the chamber outlined in figure 1. The construction and functioning of this chamber are described. Tests were carried out with benzene (consolidation point +5°) and its derivatives of various kinds: o-xylene, chlorobenzene, benzyl alcohol, and carbon tetrachloride. The latter served for comparisons since its molecular structure differs considerably from that of benzene and its derivatives. The authors refrain from entering into a theoretical discussion of the general problem of transition between liquids and solids and confine themselves to a discussion of the results of measurements of the absorption in benzene and benzyl alcohol. It follows from the results obtained that: 1) there coexist in the transition zone 2 modifications which

are in static equilibrium; this fact also seems to determine the presence of an absorption maximum, its position and width. b) The transition does not take place at a certain temperature, but within a range of temperature determined by the structural properties of the substance. There are 3 figures and 16 references, 15 of which are Soviet.

ASSOCIATION: Moskovskiy oblastnoy pedagogicheskiy institut (Moscow Oblast Pedagogical Institute)Kafedra obshchey fiziki (Chair of General Physics)

SUBMITTED: October 12, 1957

KOSHKIN, N. I.

PHASE I BOOK EXPLOITATION SOV/4342

Vserossiyskaya konferentsiya professorov i prepodavateley pedagogicheskikh institutov.

Primeneniye ul'traakustiki k issledovaniyu veshchestva; trudy konferentsiy, vyp. 9 (Application of Ultrasonics in the Study of Substances, No. 9) Moscow, Izd. MOPI, 1959. 245 p. Errata slip inserted. 1,000 copies printed.

Eds.: V. F. Nozdrev, Professor, and B. B. Kudryavtsev, Professor.

PURPOSE: This collection of articles is intended for scientists specializing in ultrasonics, and for those interested in the application of ultrasonics to the study of the properties of materials, and to the quality control of machined parts and structural elements.

COVERAGE: The collection constitutes the transactions of the All-Russian Conference of Professors and Teachers of Pedagogical Institutes. The articles report on recent theoretical and experimental investigations in the field of ultrasonics and discuss the application of ultrasonics to the study of

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Application of Ultrasonics (Cont.) SOV/4342

Kudryavtsev, B. B. [Moscow Pedagogical Institute imeni Krupskaya]. Application of Ultrasonic Methods in the Investigation of Liquids 147

Bethhardt, Ludwig [GDR (German Democratic Republic)]. Dynamic Equation of the State of Viscous Liquids 181

Glinskiy, A. A. Acoustic Dispersion in Liquids Having One of the Possible Types of Structural Nonhomogeneities 191

Koshkin, N. I., and M. A. Gorbunov [Moscow Oblast' Pedagogical Institute imeni Krupskaya]. Investigation of the Liquid - Solid System by the Ultrasonic Method 197

Kaspar'yants, A. A. [Odesskiy gos-t imeni I. I. Mechnikova (Odessa University imeni I. I. Mechnikov)]. Propagation of Sound Waves in Van der Waals Gases and Liquids 209

Application of Ultrasonics (Cont.) SOV/4342

Yermolov, I. N. [TsNIITMASh (Central Scientific Research Institute of Technology and Machinery)]. Investigation of the Dependence of Amplitude of Echo-Signal of the Pulse Defectoscope on the Disposition and Dimensions of the Flat Reflector 217

Semkevich, A. A. [Moscow Oblast' Pedagogical Institute imeni Krupskaya]. Ultrasonic Bulk Viscosity as Transport Effect 227

[No author] Lectures of Professor J. Lamb [Royal College, London]. 241
This news item describes lectures delivered by Prof. J. Lamb at the Laboratoriya molekulyarnoy akustiki MOPI (Laboratory of Molecular Acoustics of the Moscow Oblast' Pedagogical Institute) April 6-14, 1959.

AVAILABLE: Library of Congress (QC244.V82)

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JA/wrc/ifh
2/9/61

ZALIVCHIY, V.N.; KOSHKIN, N.I.; NOZDREV, V.F.

New possibilities of the pulse method of two fixed distances.
Akust.zhur. 5 no.4:493-495 '59. (MIRA 14:6)

1. Moskovskiy oblastnoy pedagogicheskiy institut imeni N.K. Krupskoy.
(Ultrasonic waves)

KOSHKIN, Nikolay Ivanovich; SHIRKEVICH, Mikhail Grigor'yevich; SAKHAROV, D.I., red.; VARPAKHOVSKIY, F.L., red.; MURASHOVA, N.Ya., tekhn.red.

[Handbook on elementary physics] Spravochnik po elementarnoi fizike. Pod red. D.I.Sakharova. Moskva, Gos.izd-vo fiziko-matem. lit-ry, 1960. 208 p. (MIRA 13:8)

(Physics)

Kishkin, N.I.

USSR (cont'd)	KUDRYAVTSEV, B. B., and BALIAN, S. A., Laboratory for Molecular Acoustics, Moscow Oblast Institute for Pedagogics - "The relationship between viscosity and velocity of sound in a liquid" MAKAROV, V. I., and KISHKIN, S. N., State University of Moscow - "Study of sound dispersion in solid bodies, plates, and shells by means of an optical process in a dark field" MALYUZHINETS, G. D., Acoustics Institute, USSR Academy of Sciences, Moscow - (1) "The Sommerfeld integrals and curve tasks in cuneate areas"; (2) "Development of curve phenomena presentations" MERKULOV, L. G., Leningrad Electrical Engineering Institute im. V. I. Ulyanov-Lenin - "Absorption of ultra-short waves with frequencies of up to 1000 MHz in crystals" NAUGOL'NYKH, K. A., and ROMANENKO, E. V., Acoustics Institute, USSR Academy of Sciences, Moscow - "The propagation of spherical and cylindrical waves of finite amplitude" NOZDREV, V. F., Laboratory for Molecular Acoustics, Moscow Oblast Institute for Pedagogics - "Physical bases for the technical application of molecular acoustics of small amplitudes" ______, V. F., MELIKHEKAYA, L. G., and BELINSKIY, B. A. - "Study of supersonic wave absorption in the esters of acetic acid at high frequencies" NOZDREV, V. F., KAL'IANOV, B. K., and SHIRKEVICH, M. G. - "Studies of supersonic wave absorption in liquids at high temperatures and pressures" NOZDREV, V. F., KOSHKIN, N. I., and GORBUNOV, M. A. - "Study of the system of liquid-proof bodies by means of ultra-acoustical methods" NOZDREV, V. F., YAKOVLEV, V. F., PEREPECHKO, Yu. G., and SENKEVICH, A. A. - "Dispersion of ultrasonic sound in thin gases" POLYAKOVA, A. L., Acoustics Institute, USSR Academy of Sciences, Moscow - "Absorption of ultimate amplitude sound waves in relaxing media" RIMSKIY-KORSAKOV, A. V., Acoustics Institute, USSR Academy of Sciences, Moscow - "Statistical properties of broad-casting signals" ROY, N. A., and FROLOV, D. P., Acoustics Institute, USSR Academy of Sciences, Moscow - * ROZENBERG, L. D., Acoustics Institute, USSR Academy of Sciences, Moscow - "Studies of the physical processes in industrial applications of supersonic sound" SAMOYLOVA, I. K., Sechenov Institute of Evolutionary Physiology, USSR Academy of Sciences, Leningrad - "Preceding masking of short tone signals" SLAVIN, I. I., and ILYASHUK, Yu. M., Laboratory for Combating Noise, Institute for Labor Protection, Leningrad - "The Soviet system of standards for industrial noise and the Soviet Union's experiences with the system"
Hungary	BIRCZY, D., Szekesfehervar - "Contribution to the theory of sound radiation" SZILARD, J., Budapest - "Ultrasound intensity measurement by compensated calorimeter"
Poland	KUCZERA, F., OPILSKI, A., and SZYMA, S., Chair of Physics, Higher School of Agriculture, Olsztyn - "Concerning a new acoustic method of determining intermediate molecular forces in liquids and liquid mixtures"
Germany (Democratic Republic)	JACOB, H. P., Institute for Theoretical Physics, University of Rostock - "The significance of sound velocity measurements for the physics of ternary solutions"

* "Generation of sound by spark discharges in water"

Excerpts from the Program and Information Circular ...

S/058/62/000/002/022/053
A058/A101

AUTHORS: Koshkin, N. I., Obraztsov, V. I., Yakovlev, V. F.

TITLE: Flow method for the ultrasonic cleaning of microwires

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1962, 44, abstract 2G336 (V sb. "Primeneniye ul'traakust. k issled. veshchestva", v. 14, Moscow, 1961, 21-31)

TEXT: There was developed an experimental setup for the ultrasonic cleaning of moving microwire. The setup enables one to carry out cleaning at wire speeds of motion up to 25-30 m/min. Ultrasonic cleaning improves the insulating quality of microwave enamel several times over. It was established that under the conditions of the problem that is set (the degree of contamination of the wire), it is possible to use as the working liquid any organic solvent that more or less satisfactorily dissolves fats of vegetable origin. It is held that in some cases cleaning can be carried out in ordinary tap water. Cleaning in water gives good results especially in those cases when the degree of fat contamination is low.

[Abstracter's note: Complete translation]

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S/194/62/000/004/066/105
D295/D308

9.2165

AUTHORS: Koshkin, N. I., Obraztsov, V. I. and Yakovlev, V. F.

TITLE: Production-line ultrasonic cleaning of microwire

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-5-39zh (V sb. Primeneniye ul'traakust. k issled. veshchestva. no. 14, M., 1961, 21-31)

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TEXT: A method has been developed and an experimental apparatus designed for the ultrasonic cleaning of microwire from films and minute solid particles before coating with enamel. An analysis of cleaning conditions has enabled the required ultrasonic frequency to be determined: 700 - 1000 kc/s. Cleaning is carried out in organic solvents with the wire continuously stretched along the axis of cylindrical radiators of barium titanate. Using a 1.5 kW generator, cleaning is carried out at a rate of 25 - 30 m/min. Ultrasonic cleaning improves by several times the insulation properties of the enamel. Wire, slightly contaminated with grease can be

Production-line ultrasonic ...

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cleaned in tap-water. The construction of the experimental apparatus and the generator are briefly described. Diagrams of the operating chamber and the generators are given. 5 figures. [Abstracter's note: Complete translation.]

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