Transactions of the Tashkent (Cont.) SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhanova.

PURPOSE : The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

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instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION IN ENGINEERING AND GEOLOGY

L [illegible] [illegible](m)/[illegible](c) [illegible]
ACC NR: [illegible] SOURCE CODE: UR/0166/66/000/003/0068/0070

35

AUTHOR: Staeodubtsev, S. V.; Chubarov, L. B.

ORG: Institute of Nuclear Physics AN ~~Az~~ UzSSR (Institut yadernoy fiziki AN AzSSR)

TITLE: Electrothermal working of quartz plates

SOURCE: AN UzSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 3, 1966, 68-70

TOPIC TAGS: quartz crystal, irradiation damage, electric heat treatment, crystal impurity

ABSTRACT: In view of the use of electrothermal working to rid the quartz of certain impurities, the authors first determine the time required to eliminate impurity ions by passing current through a heated crystal of given dimensions, and find that this time is proportional to the square of the crystal thickness and inversely proportional to the applied voltage. An expression is then derived for the ratio of the current through the crystal to the initial current as a function of the time. This expression agrees with the experimentally observed variation. The experimentally established difficulty of electrothermal working of quartz irradiated by fast neutrons from a reactor or by large does of γ radiation is attributed to formation of structure damage in the quartz crystal, and in particular to weakening and breaking of the Si-O bonds

L 09344-67
ACC NR: AP6028308

and clustering of oxygen atoms in channels parallel to the C axis. Orig. art. has: 2 figures and 8 formulas

SUB CODE: 20/ SUBM DATE: 29Jun64/ ORIG REF: 004/ OTH REF: 002

Card 2/2

CHUBAROV, M.; CHUMAKOV, S.

When such an activity... NTO 6 no.6:35-37 Je '64.
(MIRA 17:8)

1. Zamestitel' predsedatelya Moskovskogo pravleniya Nauchno-tekhnicheskogo obshchestva bumazhnoy i derevoobrabatyvayushchey promyshlennosti (for Chumakov).

CHUBAROV, M.A.

Dynamics of a Frühauf circuit on semiconductor triodes. Izv.vys.ucheb. zav.; radiofiz. 7 no.4:759-770 '64. (MIRA 18:1)

1. Nauchno-issledovatel'skiy fiziki-tekhnicheskiy institut pri Gor'kovskom universitete.

ACCESSION NR: AP5020371 UR/0141/65/008/003/0615/0621
681.142:382.501.24

AUTHOR: Chubarov, M. A.

TITLE: Use of computers for transistor circuit design

SOURCE: IVUZ. Radiofizika, v. 8, no. 3, 1965, 615-621

TOPIC TAGS: transistorized circuit, mathematic analysis, mathematic determinant, mathematic matrix

ABSTRACT: The phase space is divided into linearity regions and the equilibrium state of an arbitrary transistor circuit is investigated, where the characteristics of the transistors are determined by a piece-wise linear approximation. Methods of [illegible] these problems to determinants are given for several simple cases. The [illegible] algorithm may be used to determine an arbitrary order determinant with elements which are polynomials of several variables. The determinant is evaluated by [illegible] Gaussian algorithm. In recording the data, a monomial is represented by two cells, the first containing the coefficient and the second--the symbol indices arranged in a fixed place order. A definite number of places is assigned for each symbol corresponding to the maximum index which it assumes during the intermediate

L 64150-65

ACCESSION NR: AP5020371

2

computations. If the maximum index of some symbol in the j-th column of the determinant is p_j, then the number of places r_l required to specify this symbol is determined from the inequality

$$2^{r_l} > 2 \sum^{n} p_j$$

Thus the number of unknowns in the polynomials which form the elements of the determinant are limited by the relationship $\sum r_l \leq N$, where N is the number of digits in one memory cell. If a computer performs 20,000 operations per second, it takes 10 seconds to evaluate the determinant used by the author. Orig. art. has: 30 equations.

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut pri [illegible] universitete (Scientific Research Physicotechnical Institute at Gorky

[illegible] ENCL: 00 [illegible], MA

SUBMITTED: 008 OTHER: 001

Card 2/2

AGLINTSEV, K.K.; SMIRNOV, V.V.; CHUBAROV, M.N.

Investigating the sensitivity of "Roentgen-X" and "Roentgen-XX" films to electrons. Zhur.nauch.i prikl.fot.i kin. 7 no.6:444-446 N-D '62. (MIRA 15:12)

1. Radiyevyy institut AN SSSR imeni V.G. Khlopina.
(Radiography)
(Photographic sensitometry)

MANDEL'BAUM, Aleksandr Iosifovich, inzh.; ZAKHAYAPIN, Boris Mikhaylovich, inzh.; MORGUNOV, Nikolay Ivanovich, kand. sel'khoz. nauk; CHERNUKHIN, Sholom Yakovlevich, kand. tekhn. nauk; CHUBAROV, N.D., red.; LARIONOV, G.Ye., tekhn. red.

[Industrial production of peat-mineral-ammonia fertilizers] Promyshlennoe proizvodstvo torfomineral'no-ammiachnykh udobrenii i torfianoi podstilki. [By] A.I.Mandel'baum i dr. Moskva, Gosenergoizdat, 1963. 231 p. (MIRA 17:1)
(Fertilizers and manures) (Peat)

CHUBAROV, N. D. PA 47/49T34

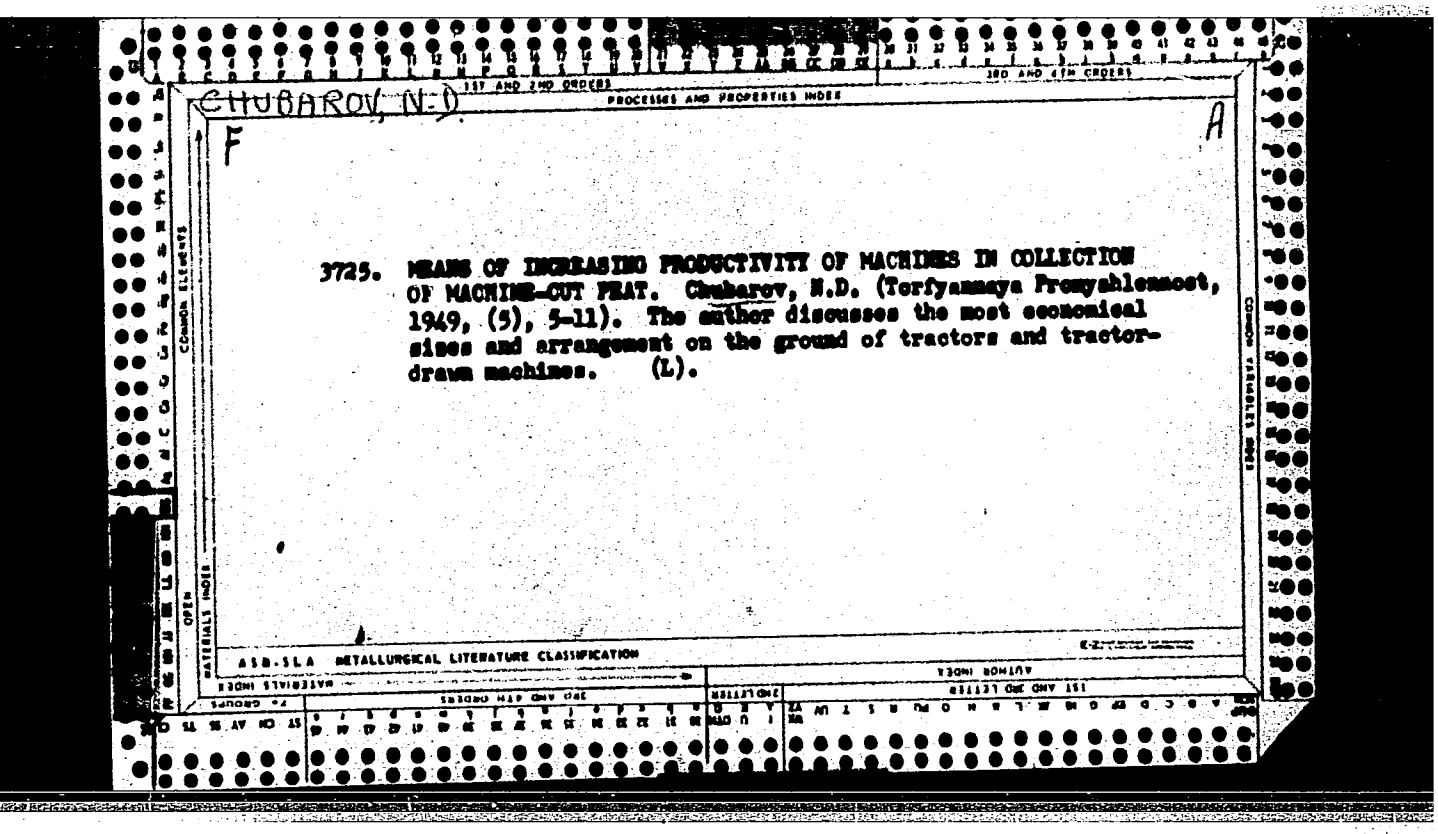
USSR/Engineering Feb 49
Peat
Briquetting

"Performance Indexes for UMPF-4 and FTK Equipment Used at Briquetting Factories," N. D. Chubarov, Engr, 3 pp

"Torf Prom" No 2

Finds performance of UMPF-4 machines more favorable than that of FTK. Suggests various improvements for the latter.

[redacted] 47/49T34


CHUBAROV, N.D.

F

A

3725. MEANS OF INCREASING PRODUCTIVITY OF MACHINES IN COLLECTION OF MACHINE-CUT PEAT. Chubarov, N.D. (Torfyannaya Promyshlennost, 1949, (5), 5-11). The author discusses the most economical sizes and arrangement on the ground of tractors and tractor-drawn machines. (L).

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

Fuel Abstracts CHUBAROV, N.D. Natural Solid Fuels - A

3105. GATHERING MILLED PEAT FROM RIDGES INTO PILES WITH ELECTRIC MACHINES. Preobrazhenskii, V.A. and Chubarov, N.D. (Torf. Prom. (Peat Ind.) Jan. 1952, 5-8).

Chubarov, N. D.

PREOBRAZHENSKIY, V.A. - CHUBAROV, ENG. N. D.

Peat Industry

Some problems in the organization of work of peat dumping machines.
Torf. prom. 30 no. 1, 1953

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

ANTONOV, V.Ya., kand.tekhn.nauk; BEZZUBOV, N.D., kand.tekhn.nauk; BELOKOPYTOV, I.Ye., kand.sel'skokhoz.nauk; BLYUMENBERG, V.V., kand.tekhn.nauk; BOGDANOV, N.N., kand.tekhn.nauk; BRAGIN, N.A., inzh.; VASIL'YEV, Yu.K., inzh.; VINOGRADOV, V.A., inzh.; ROZENBERG, B.I., inzh.; GORGIDZHANYAN, S.A., kand.tekhn.nauk; ZIZA, A.A., kand.sel'skokhoz.nauk; KALABUKHOV, M.V., agronom-meliorator; KOLOTUSHKIN, V.I., inzh.; KORCHUNOV, S.S., kand.tekhn.nauk; KRYUKOV, M.N., dotsent; VAVULO, V.A., inzh.; MAUMOV, D.K., kand.tekhn.nauk; OLENIN, A.S., inzh.; PROVORKIN, A.S., inzh.; PROKHOROV, N.I., dotsent; RASKIN, G.I., inzh.; SAVENKO, I.V., inzh.; SERGEYEV, B.F., kand.tekhn.nauk; STOYLIK, M.A., inzh.; SUKHANOV, M.A., inzh.; TOPOL'NITSKIY, N.M., kand.tekhn.nauk; TYURENOV, S.N., doktor biol.nauk, prof.; FATCHIKHINA, O.Ye., kand.sel'skokhoz.nauk; TSVETKOV, B.I., inzh.; CHUBAROV, N.D., inzh.; MANDEL'BAUM, A.I., inzh.;

(Continued on next card)

ANTONOV, V.Ya.---(continued) Card 2.
YARTSEV, A.K.; SAMSONOV, N.N., inzh., glavnyy red.; BERSHADSKIY, L.S., inzh., nauchnyy red.; VARENTSOV, V.S., kand.tekhn.nauk, nauchnyy red.; VYSOTSKIY, K.P., kand.tekhn.nauk, nauchnyy red.; GORINSHTEYN, L.L., kand.tekhn.nauk, nauchnyy red.; GORYACHKIN, V.G., prof., nauchnyy red.; YEFIMOV, P.N., kand.tekhn.nauk, nauchnyy red.; KUZNMAN, G.I., kand.tekhn.nauk, nauchnyy red.; KULAKOV, N.N., kand.tekhn.nauk, nauchnyy red.; KUTAIS, L.I., prof., doktor tekhn.nauk, nauchnyy red.; MIRKIN, M.A., inzh., nauchnyy red.; SEMENSKIY, Ye.P., kand.tekhn.nauk, nauchnyy red.; SOKOLOV, A.A., kand.tekhn.nauk, nauchnyy red.; KHAZANOV, Ya.N., dotsent, nauchnyy red.; KHALUGO, A.K., inzh., nauchnyy red.; TSUPROV, S.A., dotsent, nauchnyy red.; SHTEYNBOK, G.D., inzh., nauchnyy red.; KOLOTUSHKIN, V.I., red.; SKVORTSOV, I.M., tekhn.red.

[Reference book on peat] Spravochnik po torfu. Moskva, Gos.energ. izd-vo, 1954. 728 p. (MIRA 13:7)

1. Chlen-korrespondent AN BSSR (for Goryachkin).
(Peat--Handbooks, manuals, etc.)

VARENTSOV, Vladimir Semenovich; GORENSHTEYN, Azar Borisovich; PREOBRAZHENSKIY, Valentin Aleksandrovich; CHUBAROV, Nikolay Dmitriyevich; KOLOTUSHKIN, V.I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Milled peat] Frezernyi torf. Moskva, Gos.energ.izd-vo, 1955. 272 p. (Peat) (MLRA 9:4)

CHUBAROV, N.D., inzhener.

Effect of the distance between "caravans" on the peat winning rate of the UPT-2 machine. Torf.prom.32 no.1:4-7 '55.
(MLRA 8:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.
(Peat machinery)

CHUBAROV, N. D.

PEAT), Chubarov, N.D. (Torf. Prom. (Peat Ind., Moscow), [illegible]
(8), 5-6). Numerical data and [illegible]

[illegible] It is proclaimed that the [illegible]
raised from 8% to 10% - 12% [illegible]

Sci. Res.
All-Union Inst. Peat Industry

CHUBAROV, N.D.

Technology of the winning of milled peat with pneumatic harvesting. Torf.prom. 35 no.2:29 '58. (MIRA 11:5)

1. Rukovoditel' laboratorii frezernogo torfa Vsesoyuznogo nauchno-issledovatel'skogo instituta torfyanoy promyshlennosti.
(Peat)

CHUBAROV, N.D., red.; KORCHUNOV, S.S., kand.tekhn.nauk, red.; SOKOLOV, I.D.; KOLOTUSHKIN, V.I., red.; LARIONOV, G.Ye., tekhn.red.

[Results and main trends of research on the cutting method of peat winning; materials of an industry-wide scientific and technical conference] Itogi i osnovnye napravleniia nauchno-issledovatel'skikh rabot po frezernomu sposobu dobychi torfa; materialy otraslevogo nauchno-tekhnicheskogo soveshchaniia. Pod obshchei red. N.D.Chubarova, S.S.Korchunova i I.D.Sokolova. Moskva, Gos.energ.izd-vo, 1959. 253 p. (MIRA 13:8)

1. Leningrad, Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti. 2. Rukovoditel' laboratorii frezernogo torfa Vsesoyuznogo nauchno-issledovatel'skogo instituta torfyanoy promyshlennosti (for Chubarov). 3. Rukovoditel' laboratorii Vsesoyuznogo nauchno-issledovatel'skogo instituta torfyanoy promyshlennosti (for Korchunov, Sokolov).
(Peat)

CHUBAROV, N.D., inzh.

Milled peat winning employing the pneumatic principle. Torf.prom. 36 no.2:3-5 '59. (MIRA 12:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat industry)

YELISEYEV, M.A., inzh.; KIRILLOV, A.A., inzh.; CHUBAROV, N.D., inzh.

New FPU harvester for milled peat. Torf. prom. 37 no.5:29-32 '60. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat machinery)

YELISEYEV, M.A., inzh.; KIRILLOV, A.A., inzh.; CHUBAROV, N.D., inzh.

Modernization of milled peat harvesters. Torf.prom. 37 no.6:10-13 '60. (MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat machinery)

GORENSHTEYN, A.B.; CHUBAROV, N.D.; KOLOTUSHKIN, V.I., red.; LAZAREV, A.V., dots., [illegible] red.; LARIONOV, G.Ye., tekhn. red.

[New machinery for the winning of milled peat] Novye mashiny dlia dobychi torfa frezernym sposobom. Moskva, Gos. energ. izd-vo, 1961. 135 p. (MIRA 15:3)
(Peat machinery)

CHUBAROV, N.D., inzh.

Analysis of the productive capacity and operating system of the new FPU-1 shifting harvester for milled peat. Torf.prom.38 no.2:1-5 '61. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.
(Peat machinery)

PREOBRAZHENSKIY, V.A., kand. tekhn. nauk; CHUBAROV, N.D.

Brush working member of machines for swathing milled peat.
Trudy VNIITP no.18:3-16 '61. (MIRA 17:1)

CHUBAROV, N.D., inzh.

Results of the first year of the industrial exploitation of FFU-1 shifting harvesters for milled peat. Torf. prom. 38 no. 3:14-17 '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat machinery)

SOKOLOV, A.A.; PETRENKO, F.F.; KOVALEV, V.F.; YELISEYEV, M.A.; ROZENPLENTER, N.F.; YANCHUKOVICH, A.E.; CHUBAROV, N.D.; KONTSEVOY, N.S.; PREOBRAZHENSKIY, V.A.; BOCHAROV, M.S.; KASHCHEYEV, G.G.; SELENNOV, G.V.; SAFONOV, K.Ye.; FUNIKOV, S.A.; RASKIN, G.I.; RABKIN, B.M.

Vadim Konstantinovich Gutsunaev; obituary. Torf.prom. 39 no.3:37 '62. (MIRA 15:4)
(Gutsunaev, Vadim Konstantinovich, 1914-1942)

CHUBAROV, N.D., inzh.

Regulation of winning operations and of the moisture of milled peat in pneumatic harvesting. Torf. prom. 40 no.4:1-5 '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.
(Peat machinery)

GORENSHTEYN, Azar Borisovich, kand. tekhn. nauk; LAVROV, Aleksandr Petrovich, inzh.; KHUDSKIY, Nikolay Nikolayevich, inzh.; CHUBAROV, Nikolay Dmitriyevich, inzh.; KOLOTUSHKIN, V.I., red.

[Handbook for using the BPF pneumatic cutter-loaders] Rukovodstvo po ekspluatatsii pnevmaticheskikh kombainov BPF. [By] A.B.Gorenshtein i dr. Moskva, Izd-vo "Energiia," 1964. 183 p. (MIRA 17:8)

STASYUKOV, M.; CHUBAROV, P.; ZAYCHENKO, I., ratsionalizator; RUTSINSKIY, V.; VOLOVIK, A.; KNYSHEV, I.; SHTEYNGART, M.

Why are the suggestions of Dnepropetrovsk metal workers so slowly realized? Izobr.i rats. no.11:24-25 N '58. (MIRA 11:12)

1. Dnepropetrovskiy metallurgicheskiy zavod im. Petrovskogo (for all except Shteyngart). 2. Starshiy inzh. Byuro izobretateley i ratsionalizatorov zavoda (for Stasyukov). 3. Zamestitel' predsedatelya zavodskogo komiteta (for Chubarov). 4. Zamestitel' sekretarya partiynogo komiteta zavoda (for Rutsinskiy). 5. Zamestitel' sekretarya komiteta Leninskogo kommunisticheskogo soyuza molodezhi Ukrainy (for Volovik). 6. Sotrudnik gazety "Tribuna metallurga" (for Knyshev). 7. Spetsial'nyy korrespondent zhurnala "Izobretatel' i ratsionalizator" (for Shteyngart).
(Dnepropetrovsk--Efficiency, Industrial)

ACC NR: AP6022010 SOURCE CODE: UR/0120/66/000/003/0135/0136

AUTHOR: Chubarov, R. P.

ORG: none

TITLE: A frequency divider with a variable division ratio

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1966, 135-136

TOPIC TAGS: frequency divider, frequency division, electronic circuit

ABSTRACT: A frequency divider circuit with a variable division ratio is presented which consists of a switching decatron, four n-p-n transistors and a vacuum tube. The use of the switching decatron has made it possible to obtain a circuit with a division ratio varying from 1 to 10. The electrical mode of the circuit is: $E_{cathode}$ = +12 v, $E_{anode\ tube}$ = +300 v, $E_{anode\ decatron}$ = +400 v, $I_{anode\ tube}$ = 6.5 - 10.2 ma, $I_{anode\ decatron}$ = 0.8 - 0.85 ma. Values of the anode current of both the tube and the decatron depend on the division ratio. On the basis of this circuit dividers can be made for various frequencies depending on the type of decatron used. Orig. art. has: 1 table and 2 figures.

SUB CODE: 09/ SUBM DATE: 10Mar65/ ORIG REF: 002

Card 1/1 UDC: 621.374.4

44440

S/120/62/000/006/009/029
E192/E382

9.7500

AUTHOR: Chubarov, R.P.

TITLE: A dekatron counter with a transistor drive circuit

PERIODICAL: Pribory i tekhnika eksperimenta, no. 6, 1962, 62 - 63

TEXT: The counter consists of a number of decade units, each comprising a transistor amplifier, a cut-off blocking oscillator and a counting dekatron, type ОГ-5 (OG-5) (see figure). The input pulse is amplified by the first transistor of the circuit and is then applied to the blocking oscillator. A pulse of 80 V amplitude and 50 - 60 μs duration is produced in the input winding W_3 of the oscillator transformer. This is split by the diodes $Д_1$ and $Д_2$ into two successive pulses which are applied to the sub-cathodes of the dekatron. The positive portion of the pulse is applied to the first sub-cathodes as a negative pulse, while the negative portion of the pulse appears at the second sub-cathodes. In this way, the conduction is transferred from one indicator cathode to the next. The zero cathode of the

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A dekatron counter ....

dekatron is provided with a coupling transformer which produces a signal for driving the next decade. Re-setting of the decade to zero is achieved by applying a positive potential of 150-200 V. to the sub-cathodes and by removing the negative source from the cathodes (figure). The counter can operate at the maximum rate of 5 kc/s and its counting error is ± 1 pulse in 10 000. There is 1 figure.

SUBMITTED: February 28, 1962

Card 2/3

CHUBAROV, R.P.

Counter on decatrons with combined control circuit. Prib. i tekh. eksp. 9 no.3:64-66 My-Je '64 (MIRA 18:1)

CHUBAROV, R.P., inzh.

Using transistor circuits in controlling gas counting tubes. Priborostroenie no.9:13-14 S '65. (MIRA 18:10)

L 6386-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AP5026747 SOURCE CODE: UR/0286/65/000/017/0023/0023

INVENTOR: Bolibok, G. N.; Kordobovskiy, A. I.; Chubarov, R. P.; Tverdov, B. I.

TITLE: A multicontact electronic memory register. Class 21, No. 174213 [announced by Organization of the State Committee on Radio Electronics SSSR (Organizatsiya Gosudarstvennogo komiteta po radioelektronike SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 23

TOPIC TAGS: computer memory, shift register

ABSTRACT: This Author's Certificate introduces a multicontact electronic memory register which contains ferrite-transistor cells. The number of elements is reduced to simplify the circuit by equally spaced connection of the readout windings of the cells in the master register into the control (pusher) windings of the cells in the auxiliary register from which the output pulses with the required cadence interval are read out.

UDC: 621.374.32

SUB CODE: EC,DP/ SUBM DATE: 19Aug64/ ORIG REF: 000/ OTH REF: 000

Card 1/1

0902 0149

CHUBAROV, S., general-mayor artillerii

Each political worker should be a skilled specialist. Komm.Vooruzh.-Sil 2 no.3:48-51 F '62. (MIRA 15:1)
(Air warfare)

CHUBAROV, S., general-mayor artillerii

Develop social principles in party and political work in every way possible. Komm. Vooruzh. Sil 4 no.15:9-14 Ag '64.
(MIRA 17:10)

1. Chlen Voyennogo soveta; nachal'nik politicheskogo upravleniya Bakinskogo okruga protivovozdushnoy oborony.

MATALIN, L.A.; SHIMANSKIY, A.M.; CHUBAROV, S.I.

Amplitude pulse analyzers. Prib. i tekh. eksp. no.1:64-71 Ja-F '57.
(Pulse techniques (Electronic)) (MLRA 10:6)
(Nuclear physics--Measurement)

MATALIN, L.A.; SHIMANSKIY, A.M.; CHUBAROV, S.I.; SHTRANIKH, I.V.

1024-Channel time analyzer. Prib. i tekh. eksp. no.3:54-63 My-Je '60. (MIRA 14:10)

(Neutrons) (Nuclear counters)

CHUBAROV, Sp. I., MATALIN, L. A., and TIMECHKINA, A. S.

"Data Handling from Multichannel Analyzers"

report submitted for the IAEA conf. on Nuclear Electronics, Belgrade, Yugoslavia 15-20 May 1961

29600

S/120/61/000/004/009/034
E192/E382

26.2244

AUTHORS: Ivanov, A.A., Lytkina, V.M., Matalin, L.A. and Chubarov, S.I.

TITLE: Time-to-amplitude converter for the millimicrosecond range

PERIODICAL: Pribory i tekhnika eksperimenta, no. 4, 1961, pp. 66 - 69

TEXT: The converter was designed as a part of a 128-channel amplitude-analyser employed in the measurement of transit times of the neutron-energy distribution in the mega-electron-volt region. Such a multichannel analyser was described by a number of authors (Ref. 1 - G.C. Neilson, D.B. James - Rev. Scient. Instrum., 1955, 26, no. 11, 1018; Ref. 2 - R.E. Green, R.E. Bell, Nucl. Instrum., 1958, 3, no. 3, 127; Ref. 3 - W. Weber, G.W. Johnstone, J. Cranberg - Rev. Scient. Instrum., 1956, 27, no. 3, 166; Ref. 4 - Ye.A. Zherebin, Ye.A. Tamanov - PTE, 1960, No. 4, 40). A detailed description of the converter is given. The system is provided with a control-pulse source where the pulses repeated at 4 Mc/s

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E192/E382

Time-to-amplitude converter ....

are shaped from a sinusoidal waveform, which is used for the modulation of a beam of charged particles. These control pulses are applied to one of the inputs of the converter. The second input receives the signals from the neutron detector via a cathode-follower, a wideband amplifier (type YP-4 (UR-4)), a fast discriminator and a shaping circuit. A positive-going signal from the wide-band amplifier is applied to the fast discriminator through the cathode-follower, the discrimination level of the discriminator being set by another cathode-follower. The pulses at the output of the discriminator are shaped by a tube which is normally open and whose load is in the form of a short-circuited cable (type PK3-400 (RKZ-400)), having a length of 6 cm. The cathode-follower, the discriminator and the shaping circuit are coupled directly and produce positive pulses having an amplitude of about 10 V and duration of 120 mμsec at the base. These are applied to the time-to-amplitude converter proper. The second input of the converter receives positive control pulses having an amplitude of about 20 V. These pulses are formed by a two-stage amplifier whose

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Time-to-amplitude converter ....

anode loads are in the form of differentiating transformers. The output amplitude of the pulses is about 35 V and their duration is 20 mμsec at the base. The phase of the sinusoidal voltage corresponding to the instant of the formation of the control pulse can be adjusted by changing the bias at the grid of one of the shaping valves. The time-to-amplitude converter is based on four tubes and operates in the following manner: the pulse formed at the output of the fast discriminator and its shaping stage is applied to the first tube of the converter which is normally closed; a fast step is therefore produced at the anode of this tube since its parasitic capacitance is rapidly charged. When the pulse is terminated the parasitic capacitance slowly discharges through its anode resistance of 100 kΩ. The negative pulse across the anode load is therefore still present until the appearance of the successive control pulse which is applied to the control grid of the second tube of the converter which operates as a cathode-follower. The anode load of the first tube forms the cathode load of this cathode-follower. The control pulse applied to the cathode-follower rapidly discharges the parasitic capacitance to its initial level. In this way, a negative pulse appears at the

Time-to-amplitude converter ....

control grid of the third tube, the pulse being characterised by very fast rise and decay times. This pulse closes the third tube which acts as a switching tube for a sawtooth waveform generator which is based on the standard positive feedback circuit (employing the fourth converter tube). The signal obtained at the output of the sawtooth generator has an amplitude sufficient for applying to the analyser without additional amplification. The discriminator circuit is reliable and simple and gives good conversion linearity over the whole measurement range (about 250 mμsec). The linearity of the converter was checked by feeding to it the signals from a detector irradiated by a Co^{60} source. The control pulses were derived from a generator working at 4 Mc/s. There are 3 figures and 4 references: 1 Soviet-bloc and 3 non-Soviet-bloc. The English-language references mentioned are: Ref. 1, G.C.Neilson, D.B.James, Rev. Scient. Instrum. 1955, 26, no. 11, 1018. Ref. 2 - R.E.Green, R.E. Bell - Nucl. Instrum., 1958, 3, no. 3, 127. Ref. 3 - W.Weber, G.W. Johnstone, J.Cranberg, Rev.Scient.Inst., 1956, 27, no. 3, 166.

SUBMITTED: November 22, 1960

Card 4/4

L 10106-63 BDS

ACCESSION NR: AP3002722 S/0120/63/000/003/0072/0078

AUTHOR: Yekatov, A. B.; Matalin, L. A.; Semenkov, V. F.; Smirnov, V. I.; Chubarov, S. I.; Shimanskiy, A. M. 53

TITLE: Multirange analyzer 10

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1963, 72-78

TOPIC TAGS: pulse analyzer, description of input units, system of recording

ABSTRACT: A multirange pulse analyzer with a magnetic-core memory system has been designed for the investigation of distribution which depend on two or three variables. The device has 16,383 channels, each with a 16-digit binary number. The analyzer not only sorts pulses into the proper channels, but can also perform preliminary processing of recorded information. The recording system is equipped with an address system which allows various input circuits to be used without changing the memory system. Two amplitude-to-digital converters are used as the basic input circuits. The converters have coders (16 inputs) operating in the two-dimensional amplitude-measurement mode;

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L 10106-63

ACCESSION NR: AP3002722

they convert the pulse amplitude into a seven-digit binary-code. The following can be used as additional input units: 1) time-to-time amplitude converter for operation in the nanosecond range; 2) circuit for measuring the ratio and sum of amplitudes of two pulses; 3) time-of-flight measuring unit with channel widths from 10 sup -4 to 10 sup -6 sec; and 4) coincidence unit. The recording system consists of the memory circuit, programming circuit, address selecting circuit, arithmetic circuit (addition and subtraction), and display system (CRT and a ten-key typewriter). The memory circuit has a ferrite matrix consisting of 128 x 128 x 16 K-260 cores (2 x 13 x 1 mm in size) and operates on the principle of half-current coincidence. The signal-to-noise ratio of the analyzer is better than 5. A special feature is the possibility of obtaining a readout not only of each separate line of stored information but even of certain parts of a line. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 05Jul62 DATE ACQ: 12Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 004 OTHER: 008

Card 2/2

ACCESSION NR: AR4032147 S/0058/64/000/002/A014/A015

SOURCE: Ref. zh. Fiz., Abs. 2A163

AUTHORS: Ivanov, A. A.; Ly*tkina, V. M.; Chubarov, S. I.

TITLE: Vernier time-amplitude converter

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radioelektronike. T. 2. Ch. 1. M., Gosatomizdat, 1963, 35-41

TOPIC TAGS: time amplitude converter, vernier time amplitude converter, neutron spectrometry, time of flight spectrometry, time interval stretching

TRANSLATION: The described time-amplitude converter is an attachment for a standard 128-channel pulse-height analyzer. The instrument is intended for time of flight neutron spectrometry. The width of the analyzer channel amounts in this case to 2nsec. The measured time

Card 1/2

ACCESSION NR: AR4032147

interval lies between the neutron-detector pulse and a definite phase of the reference oscillations used to modulate the ion current in the accelerator tube. The reference-oscillation frequency is 4 Mc. The investigated time interval is first "stretched" by a factor of 20 and only then is it fed to the time-amplitude converter. The "stretching" (i.e., the conversion of the measured interval into a proportional longer time interval) is realized by using the vernier method. A block diagram of the instrument and the schematic diagram of one of the main elements of the converter, namely the intermittent-oscillation generator, are presented. Yu. Semenov.

DATE ACQ: 31Mar64 SUB CODE: GE, SD ENCL: 00

Card 2/2

ACCESSION NR: AR4032159 S/0058/64/000/002/A018/A019

SOURCE: Ref. zh. Fiz., Abs. 2A188

AUTHORS: Matalin, L. A.; Tishechkin, A. S.; Chubarov, S. I.

TITLE: Device for the reduction of pulse-height spectra

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 4. M., Gosatomizdat, 1963, 45-49

TOPIC TAGS: pulse height spectrum, pulse height spectrum reduction, spectrum reduction apparatus, spectrum insertion, spectrum multiplication, spectrum transformation, spectrum subtraction, spectrum differentiation

TRANSLATION: Apparatus is described capable of performing several simple operations involved in the reduction of spectra obtained with the aid of the multichannel pulse-height analyzers. The apparatus

Card 1/2

ACCESSION NR: AR4032159

is designed to operate with a 256-channel analyzer having a magnetic-core memory which can be separated into several parts. The following operations can be performed: 1. Insertion of numbers into the analyzer memory by means of a keyboard contained in the apparatus. 2. Multiplication of the spectrum by a constant number. The constant number is set with the aid of tumbler switches. The result is entered into the analyzer memory. 3. Multiplication of the spectrum by a function. The function is set by means of a punched tape. 4. Transformation of the pulse-height distributions into energy distributions with the aid of a direct or inverse matrix. The matrix is set in a punched tape. The result is entered into the analyzer memory following erasure of the information previously contained there. 5. Numerical differentiation of the spectrum is by subtracting the data of the next channel from the preceding one. 6. Channel by channel subtraction of one spectrum from another. The choice of the particular mode is by means of transfer switches located on the control panel of the apparatus. L. I.

DATE ACQ: 31Mar64 SUB CODE: GE, SD ENCL: 00

Card 2/2

ACCESSION NR: AR4032157 S/0058/64/000/002/A017/A017

SOURCE: Ref. zh. Fiz., Abs. 2A181

AUTHORS: Utyuzhnikov, A. N.; Chubarov, S. I.

TITLE: Device for the determination of the ratio of amplitudes of two pulses

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radioelektronike. T. 2. Ch. 1. M., Gosatomizdat, 1963, 171-175

TOPIC TAGS: pulse amplitude ratio computer, analog divider, pulse height analyzer, analog ratio computer

TRANSLATION: A device capable of dividing in analog form the amplitude of one pulse by the amplitude of another is described. The division is carried out in the following manner: a signal is shaped in the form $u_1(t) = v_1(1 - e^{-t/\tau})$, where v_1 is the amplitude of the

Card 1/2

ACCESSION NR: AR4032157

larger of the two investigated pulses. A signal $u_0(t) = v_0(1 - e^{-t/\tau})$ is also shaped, with v_0 a fixed reference voltage. The value of $u_0(t)$ is measured at the instant of time T when $u_1(t) = v_2$ (v_2 is the amplitude of the smaller pulse). Then $u_0(T) = v_0 v_2 / v_1$, where v_2/v_1 is the sought quotient. The quantity $u_0(T)$ is registered by a pulse-height analyzer. In principle this method makes it possible to carry out in analog form arithmetic operations of the type x(y/z), where x, y, and z are arbitrary quantities. The apparatus is constructed in the form of an attachment to a 128-channel analyzer. The maximum range of registered ratios is 0.1--1. If the analyzer memory is subdivided in two parts, the range of the registered ratios becomes equal to 0.1--10. The division operation is completed within 150 μsec. The apparatus contains 35 tubes and draws 400 W from the line. Yu. Semenov.

DATE ACQ: 31Mar64 SUB CODE: CP, GE ENCL: 00

Card 2/2

MATALIN, L.A.; CHUBAROV, S.I.; IVANOV, A.A.; MELESHKO, V.K., red.; VLASOVA, I.A., tekhn. red.

[Multichannel pulse analyzers in nuclear physics] Mnogokanal'nye analizatory iadernoi fiziki. Moskva, Atomizdat, 1964. 226 p. (MIRA 17:3)

L 4379-66 EWT(m)/EWA(h)
ACCESSION NR: AP5020258 UR/0367/65/002/001/0092/0096 31 25 B

AUTHOR: D'yachenko, P. P.; Kuz'minov, B. D.; Smirnov, V. I.; Chernukhin, V. L.; Chubarov, S. I.

TITLE: Kinetic energies of fragments with various masses in the fission of U-235 by thermal and fast neutrons 19

SOURCE: Yadernaya fizika, v. 2, no. 1, 1965, 92-96

TOPIC TAGS: uranium, nuclear fission, fission product, fast neutron, thermal neutron

ABSTRACT: The kinetic energy distributions of fragments with various masses have been investigated in the fission of U^{235} by thermal neutrons and by neutrons of mean energy 720 kev, for the purpose of comparing the dependence of the total fragment kinetic energies on the fragment mass ratios at the two fissioning-neutron energies. The fission was produced in a layer of uranium enriched 90% in U^{235}, deposited on a thin organic film, and the fragment energy was measured with two surface-barrier silicon detectors. The detector signals were analyzed after amplification by a two-dimensional 128 x 128 channel pulse-height analyzer, which sorted the pulse heights and stored all the information obtained during the measurements.

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L 4379-66
ACCESSION NR: AP5020258

The results show that the mean total kinetic energies of the fission fragments have the same value for thermal and fast neutron fission, amounting to 156 ± 2 Mev for fission into two fragments with approximately equal masses. This means that in bombardment of U^{235} by thermal neutrons and neutrons with an average energy of 720 keV, the kinetic energy of the symmetric-fission fragments is approximately 10 Mev lower than for fission by neutrons with energies above 7 Mev. "The authors thank A. I. Sergachev, A. B. Yekatov, V. F. Semenkov, A. N. Utyuzhnikov, A. N. Agfonov, and V. V. Kalyuzhnyy for help." Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 19Jan65 ENCL: 00 SUB CODE: NP

NR REF SOV: 003 OTHER: 004

Card 2/2

L 2773-66 EWT(m)/T IJP(c)

ACCESSION NR: AP5021339 UR/0120/65/000/004/0100/0106
539.283.078

AUTHOR: Matalin, L. A.; Smirnov, V. I.; Timokhin, L. A.; Chubarov, S. I.

TITLE: The reduction of counting losses in multichannel recorders by preliminary grouping of events

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 100-106

TOPIC TAGS: multichannel analyzer, nuclear radiation spectrometer, pulse counter, pulse counting, group theory

ABSTRACT: The majority of registering devices used in nuclear spectrometry exhibit fixed dead time τ. Pulse equalization devices are able to improve somewhat the situation and the quantity $N_{inp}\tau$ (equal to the ratio of the average rate of input pulse arrivals (N_{inp}) to the maximum possible registration rate $N_{pmax} = 1/\tau$) may attain a magnitude ≤ 0.5-0.7. New experiments now require rates corresponding to $N_{inp}\tau \gtrsim 1$. The present authors studied an approach to counting loss reduction during the registration of statistically distributed pulses by introducing preliminary grouping of events. A theoretical analysis described in detail in the present paper shows that a simultaneous use of grouping and equilization devices substantially reduces the influence of the magnitude

Card 1/2

L 2773-66

ACCESSION NR: AP5021339

of the dead time on the size of counting losses. Calculations of the effective dead time are carried out for the case of three types of recorders (with arbitrary choice of addresses, consecutive choice of addresses, and address recording) joined with preliminary grouping devices. The theoretical results of the article are incorporated in two multichannel analyzers described elsewhere. "The authors thank V. G. Zolotukhin and I. Ye. Bochareva for their help in the design of the grouping system and A. A. Ivanov for numerous critical remarks during the investigation." Orig. art. has: 33 formulas, 4 figures, and 6 tables.

ASSOCIATION: Fiziko-energeticheskiy institut GKAE, Obninsk (Physics-Power Institute, GKAE)

SUBMITTED: 05Jun64 ENCL: 00 SUB CODE: NP, MA

NO REF SOV: 007 OTHER: 001

Card 2/2

CHUBAROV, V.

Dynamic show windows. Sov.torg. 35 no.2:56-57 F '62. (MIRA 15:1)

(Show windows)

ISEROV, B.I., inzh.; CHUBAROV, V.I., inzh.

New equipment for mine haulage. Bezop. truda v prom. 6 no.11:11-13 N '62. (MIRA 16:2)

1. Upravleniye Donetskogo okruga Gosudarstvennogo komiteta pri Sovete Ministrov UkrSSR po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru (for Iserov). 2. Donetskiy sovet narodnogo khozyaystva (for Chubarov).
(Mine haulage—Equipment and supplies)

BUTENKO, I.T.; CHUBAROV, V.I.

Results of the competition. Ugol'.prom. no.3:76 My-Je '62.

Electric locomotive with dual control cabins and a mechanical shifting of the storage battery. Ibid.:77

(MIRA 18:3)

L 24461-66 EWT(m)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/ETC(m)-6 IJP(c) JD/HW/
ACC NR: AT6008664 JG/EM/GS (N) SOURCE CODE: UR/0000/65/000/000/0215/0220

AUTHORS: Chubarov, V. G. (Moscow, Nikolayev); Khazanov, M. S. (Moscow, Nikolayev); Fedorova, T. M. (Moscow, Nikolayev)

76
62
B+1

ORG: none

TITLE: Investigation of thermal fatigue of cast nozzle vanes

18 18

SOURCE: Vsesoyuznoye soveshchaniye po voprosam staticheskoy i dinamicheskoy prochnosti materialov i konstruktsionnykh elementov pri vysokikh i nizkikh temperaturakh, 3d. Termoprochnost' materialov i konstruktsionnykh elementov (Thermal strength of materials and construction elements); materialy soveshchaniya. Kiev, Naukova dumka, 1965, 215-220

TOPIC TAGS: thermal fatigue, turbine blade, durability, chromium base alloy, nickel base alloy, cobalt base alloy, metal grain structure

ABSTRACT: To investigate thermal fatigue of cast nozzle vanes, blades made of different alloys were subjected to heat cycling (30 seconds to reach a gas temperature of 1475K, 30 seconds at 1475K, shut-down and cooling for one minute) in a combustion chamber. The blade temperature varied between 1315K and 775K during the cycle. The number of cycles to surface crack formation and to final failure and their long duration strength (100 hours at 1175C) were recorded for blades made of 9 different

2

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L 24461-66

ACC NR: AT6008664

cobalt- and chromium-nickel-based alloys (4K66-Ya, VZh36-L4, VZh36-Li, VZhL-8, NS-242, K14N56L-Ya, ZhS6K, ZhS6KL, and ZhSZDK). The macrostructure of some of the alloys was studied, and curves of the coefficient of linear expansion as a function of temperature (873-1273K) are presented for all the alloys. It was found that: cobalt-based alloys had higher thermal strength than chromium-nickel alloys; resistance of nickel-based alloys was independent of alloying them with cobalt; the grain size in the macrostructure has a strong effect on thermal strength; calorized blades of ZhS6K were much more heat resistant than blades of cobalt-based alloys (2000 versus 200 cycles). Orig. art. has: 5 figures.

SUB CODE: 13, 20/ SUBM DATE: 19Aug65

Card 2/2dda

L 43829-66 EWP(e)/EWT(m)/EWP(w)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AP6030023 (A) SOURCE CODE: UR/0020/66/169/005/1104/1106

AUTHOR: Portnoy, K. I.; Chubarov, V. M.; Romashov, V. M.; Levinskaya, M. Kh.; Salibekov, S. Ye.

ORG: none

TITLE: Phase diagram of the nickel-boron system

SOURCE: AN SSSR. Doklady, v. 169, no. 5, 1966, 1104-1106

TOPIC TAGS: nickel boron system, nickel boron alloy, alloy phase diagram, alloy phase composition, alloy structure, intermetallic compound

ABSTRACT: A phase diagram of the Ni-B system (Fig. 1) has been plotted on the basis of data obtained by physicochemical analyses of a series Ni-B alloys, containing 0 to 100% B, compacted and sintered from the powders of 99.7% carbonyl nickel and 99.4% boron. In alloys with up to 50 at% B, the existence of Ni_3B (orthorhombic), Ni_2B (tetragonal), Ni_4B_3 (monoclinic) and NiB (orthorhombic) compounds was confirmed. In alloys with 50—70 at% B, a new phase containing approximately 92 at% B with

L 43829-66

ACC NR: AP6030023

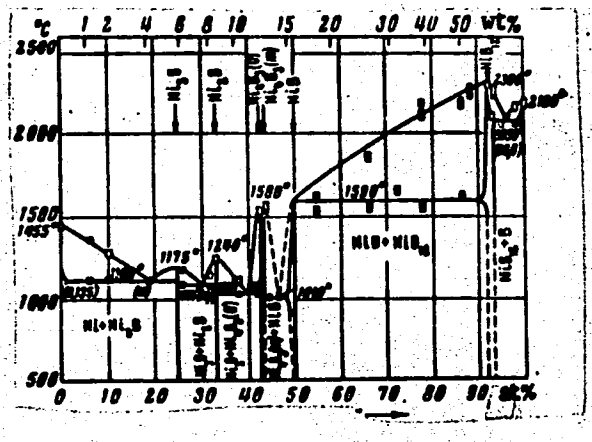


Fig. 1. Phase diagram of the Ni-B system.

a cubic crystal lattice (a = 7.377 ± 0.005 kx) and NiB_{12} stoichiometric composition was found. The microhardness of this phase was found to be 2900 kg/mm^2; it has a melting point of 2320C. Orig. art. has: 2 figures and 1 table. [WW]

SUB CODE: 11/ SUBM DATE: 08Dec65/ ORIG REF: 002/ OTH REF: 008

ATD PRESS: 5072

Card 2/2 fv

CHUBAROV, V.N.

Moisture exchange in the aeration zone as a factor in the formation of fresh underground waters in the desert as revealed by the studies in the western part of the Lower Kara Kum. Biul.MOIP.Otd.geol.38 no. 2: 117-125 Mr-Ap '63. (MIRA 16:5)

(Kara Kum--Water, Underground)

CHUBAROV, V.V. (g.Leningrad)

Automatization and mechanization of operations in the division.
Zhel. dor. transp. 43 no. 7:51-56 Jl '61. (MIRA 14:7)

1. Nachal'nik Leningrad-Moskovskogo otdeleniya Oktyabr'skoy dorogi.
(Railroads—Management) (Railroads—Maintenance and repair)
(Automatic control)

L 27240-66

ACC NR: AP6009894 SOURCE CODE: UR/0413/66/000/004/0086/0086

AUTHORS: Katys, G. P.; Chubarov, Ye. P.

21
B

ORG: none

TITLE: Color scanning pyrometer. 10 Class 42, No. 179034

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 86

TOPIC TAGS: optic pyrometer, photoresistance

ABSTRACT: This Author Certificate presents a color-scanning pyrometer containing an optical part, a radiation receiver, and a radio electronic circuit. To obtain the temperature field of heated surfaces, the pyrometer has a Pekhan prism (or Dove prism) and two sets of point-contact photoresistances. The photoresistances are connected electrically to a cathode ray tube whose screen serves to reproduce the temperature field (see Fig. 1).

2

Card 1/2 UDC: 536.521.3:621.396.965

L 27240-66
ACC NR: AP6009894

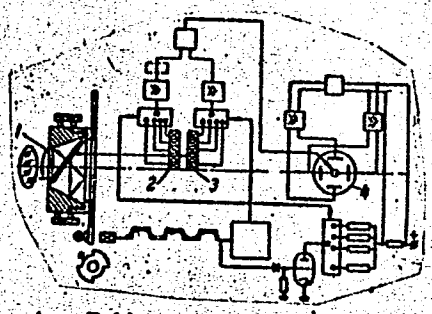


Fig. 1. 1 - Pekhan prism; 2 and 3 - sets of point-contact photoresistances; 4 - cathode ray tube.

Orig. art. has: 1 diagram.

SUB CODE: 20/ SUBM DATE: 17Nov64

Card 2/2 cc

L 22421-65 EEO-2/EWT(d)/FBD/FSS-2/EWT(1)/EEC(m)/EEC(k)-2/EWA(d)/T-2/EEC(c)-2/EEC-2/EWA(h) Pn-4/Po-4/Pq-4/Pac-4/Pg-4/Pae-2/Peb/Pk-4/Pl-4 MLK/WR

ACCESSION NR: AT4047764 S/0000/64/000/000/0298/0312

AUTHOR: Chubarov, Ye. P.

TITLE: Scanning tracking devices with a Dove prism

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Teoriya i primeneniye avtomaticheskikh sistem (Theory and application of automatic systems). Moscow, Izd-vo Nauka, 1964, 298-312

TOPIC TAGS: scanning device, tracking device

ABSTRACT: The development of a new scanning device for 0.4--0.9-micron wavelength radiation from the target is described. The device is based on a rotating Dove prism which forms the error signal and on a photovaristor which functions as a sensor. Objective 1 (see Enclosure 1) focuses the beam on a differential photovaristor 3 (type FS-K7); the beam passes through prism 2 rotated at a constant speed. If the beam shifts away from the optical axis by a distance R, the spot on sensor 3 will rotate with a radius r at double speed. The photosensitive surface of 3 is subdivided by parallel electrodes into 3—5 parts.

Card 1/3

L 22421-65

ACCESSION NR: AT4047764

2

When the spot falls between electrodes 4 and 5, the photovaristor develops a negative signal; between 5 and 6, the signal is positive. A comparison between the phases of the sensor-signal and a reference signal reveals the direction of rotation. A shift of the radiation source exceeding a certain threshold results in another signal proportional to the shift. Both signals can be used for controlling a tracking mechanism. Two modifications of the above scanning device are also described. Design formulas are evolved. The testing of a laboratory model is mentioned. The project was carried out under the direction of Doctor of Technical Sciences G. P. Katy*s.

ASSOCIATION: Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics, AN SSSR)

SUBMITTED: 06Jun64

ENCL: 01

SUB CODE: EC, NG

NO REF SOV: 003

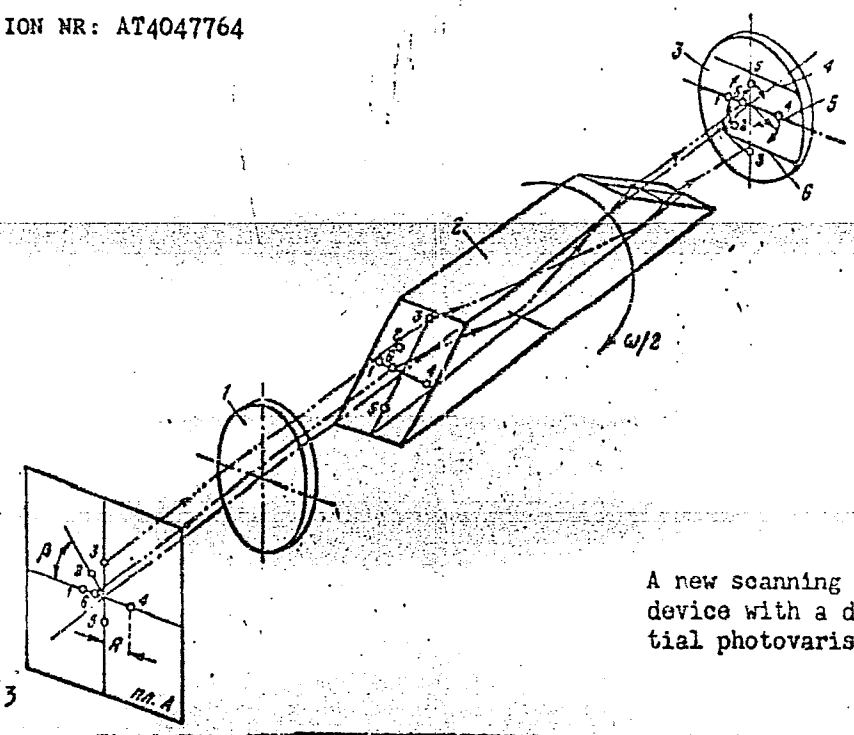
OTHER: 000

Card 2/3

L 22421-65

ACCESSION NR: AT4047764

ENCLOSURE: 01



A new scanning tracking device with a differential photovaristor

Card 3/3

L 11303-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6029794 SOURCE CODE: UR/0089/66/021/002/0083/0084

AUTHOR: Zvara, I.; Chuburkov, Yu. T.; Tsaletka, R.; Zvarova, T. S.; Shalayevskiy, M. R.; Shilov, B. V.

46
45
B

ORG: none

TITLE: Chemical properties of the element 104

SOURCE: Atomnaya energiya, v. 21, no. 2, 1966, 83-84

TOPIC TAGS: [redacted], transuranium element, chemical property, nuclear reaction, fission product, isotope separation

ABSTRACT: Chemical identification of the new element 104 has been attempted in a comparative study of the curium, californium, hafnium and new element chlorides. Previously, the 104^{260} isotope was identified by physical means only [G. N. Flerov et al. Atomnaya energiya, 17, 310, 1964]. The authors applied their own method, earlier developed, of a rapid, continuous separation of the elements of the III B and IV B groups of the Periodic Table to a mixture of gaseous chlorides of the elements produced by nuclear reactions. A PuO_2 target was bombarded with Ne^{22} ions in a Y-300 accelerator of the Joint Institute for Nuclear Research. Radioactive isotopes produced were chlorinated by a mixture of $NbCl_5$ and $ZrCl_4$ vapors in the 220—350C range in the chamber of the cyclotron. The curium, californium, and scandium isotope chlorides were adsorbed on the walls of the chamber and in the special filters, while

Card 1/2 UDC: 541.9:541.27

ACC NR: AP6029794

Zr, Hf and 104^{260} isotopes were transported in a stream of nitrogen to a fission event detector. The presence of the 104^{260} isotope was recorded by the detector in the gaseous stream transporting the IV B group element chlorides. A total of 12 atoms of the 104^{260} isotope was recorded during a series of experiments. Recurrence intervals of all 12 spontaneous fission events confirmed the earlier established half-life of the new element (0.3 ± 0.1 sec). Thus, confirmation was obtained of the earlier advanced hypothesis of a sharp difference in the chemical property between the 104 element and transuranium elements which were discovered in the past few years. The atomic number of the new element was determined and the element 104 was shown to be close to hafnium, hence to belong to the IV b group of the Periodic Table of the Elements. Thanks are expressed to G. N. Flerov, Corresponding Member of the Academy of Sciences SSSR.

[JK]

SUB CODE: 07/ SUBM DATE: 18May66/ ORIG REF: 004/ OTH REF: 001 ATD Press 5065

Card 2/2

CHUBAROVA, A. S.

Local application of podophyllin in eczema and eczema like processes. Vest. vener., Moskva no.4:41-42 July-Aug 1951. (CLML 21:1)

1. Of the Department for Skin and Venereal Diseases (Head -- P. V. Kozhevnikov, Corresponding Member of the Academy of Medical Sciences USSR), Leningrad State Institute for the Advanced Training of Physicians.

CHUBAROVA, A.S., dotsent.

Therapy of chronic pyococcic ulcers under lapis-tannin crusts. Vest.ven.i derm. no.6:31-34 N-D '53. (MLRA 6:12)

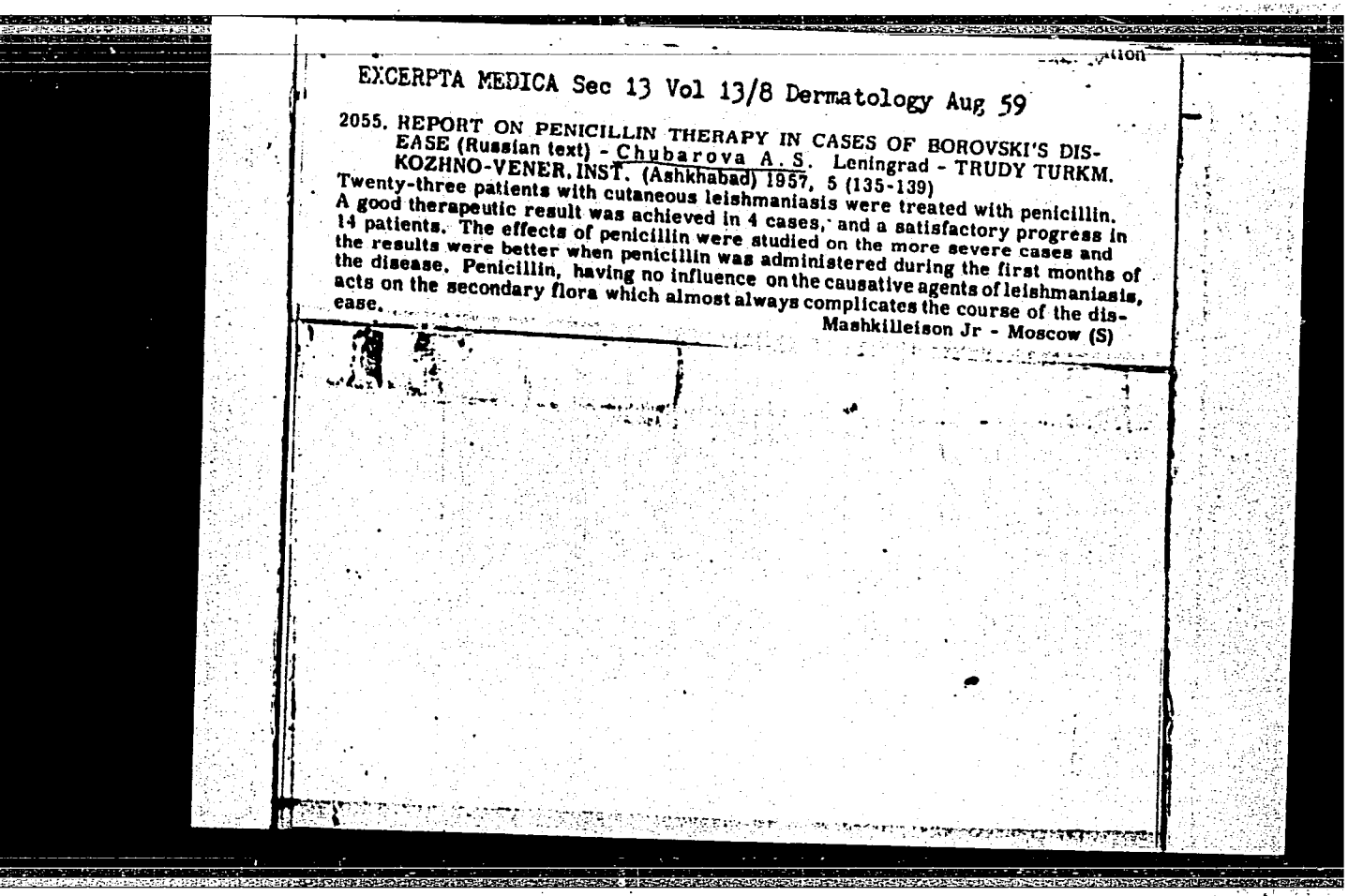
1. Iz kafedry kozhnykh i venericheskikh bolezney Leningradskogo GIDUV.

(Ulcers)

CHUBAROVA, A.S.

CHUBAROVA, A.S.; VINOKUROVA, M.I.

Remarks on the textbook for public hygiene statistical work "The nomenclature of diseases" fourth revised edition. Reviewed by A.S. Chubarova, M.I.Vinokurova. Vest. ven. i derm. no.4:61-62 Jl-Ag '54.
(MEDICINE--NOMENCLATURE)
(MLRA 7:8)

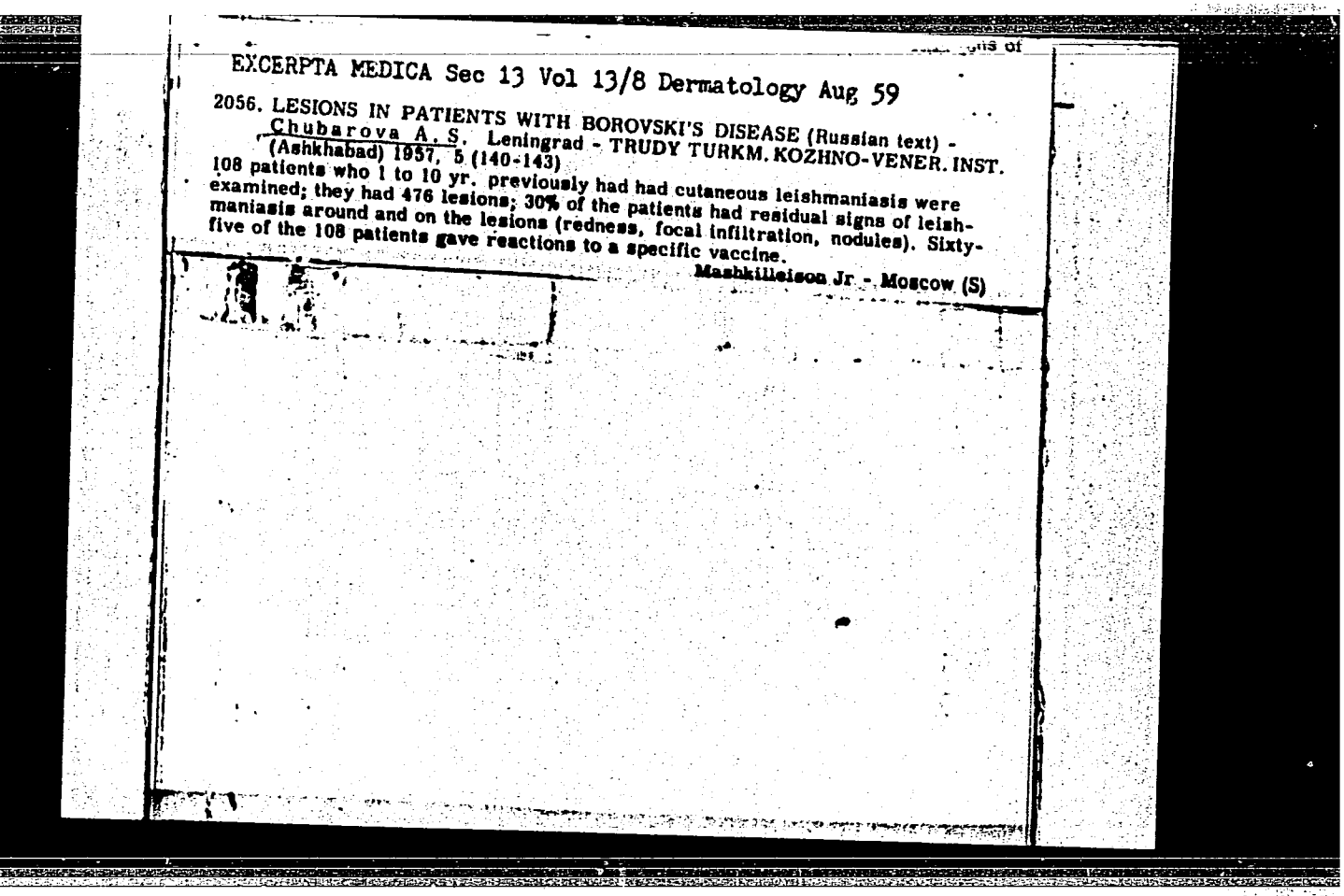


EXCERPTA MEDICA Sec 13 Vol 13/8 Dermatology Aug 59

2055. REPORT ON PENICILLIN THERAPY IN CASES OF BOROVSKI'S DISEASE (Russian text) - Chubarova A. S. Leningrad - TRUDY TURKM. KOZHNO-VENER. INST. (Ashkhabad) 1957, 5 (135-139)

Twenty-three patients with cutaneous leishmaniasis were treated with penicillin. A good therapeutic result was achieved in 4 cases, and a satisfactory progress in 14 patients. The effects of penicillin were studied on the more severe cases and the results were better when penicillin was administered during the first months of the disease. Penicillin, having no influence on the causative agents of leishmaniasis, acts on the secondary flora which almost always complicates the course of the disease.

Mashkilleison Jr - Moscow (S)

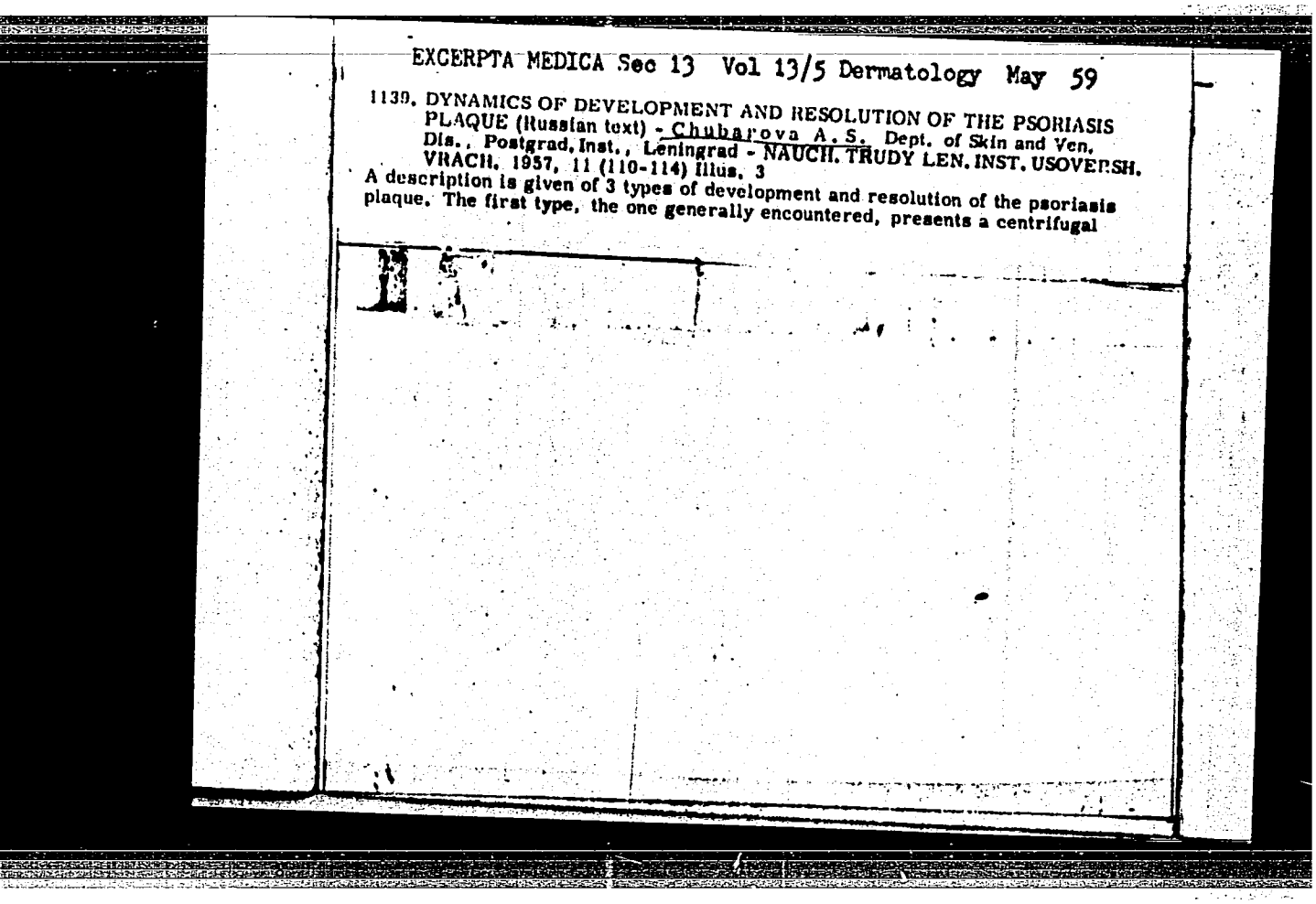


EXCERPTA MEDICA Sec 13 Vol 13/8 Dermatology Aug 59

2056. LESIONS IN PATIENTS WITH BOROVSKI'S DISEASE (Russian text) - Chubarova A. S. Leningrad - TRUDY TURKM. KOZHNO-VENER. INST. (Ashkhabad) 1957, 5 (140-143)

108 patients who 1 to 10 yr. previously had had cutaneous leishmaniasis were examined; they had 476 lesions; 30% of the patients had residual signs of leishmaniasis around and on the lesions (redness, focal infiltration, nodules). Sixty-five of the 108 patients gave reactions to a specific vaccine.

Mashkilleison Jr - Moscow (S)



EXCERPTA MEDICA Sec 13 Vol 13/5 Dermatology May 59

1139. DYNAMICS OF DEVELOPMENT AND RESOLUTION OF THE PSORIASIS PLAQUE (Russian text) - Chubarova A. S. Dept. of Skin and Ven. Dis., Postgrad. Inst., Leningrad - NAUCH. TRUDY LEN. INST. USOVERSH. VRACH. 1957, 11 (110-114) Illus. 3

A description is given of 3 types of development and resolution of the psoriasis plaque. The first type, the one generally encountered, presents a centrifugal

growth of the plaque together with resolution of the central part, thus resulting in formation of annular patches. The second type consists of a simultaneous group of raised, closely aggregated papules, which are at first separate and subsequently, merge into a large plaque which later breaks up again into separate papules as a regressive process. The third type begins as a large, almost flat plaque which spreads out like butter on paper and during the process of resolution gradually diminishes in size, beginning from the edges.

Dobrotvorskaya - Leningrad (S)

CHUBAROVA, A.S., dots.

Program for advanced training and recruitment of dermatology and venereology students at the Institute for Postgraduate Medical Education. Vest.derm. i ven. 31 no.2:41-45 Mr-Ap '57. (MIRA 12:12)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof. P.V. Koshevnikov) Leningradskogo ordena Lenina instituta usovershenstvovaniya vrachey im. S.M. Kirova.

(DERMATOLOGY, educ.
postgraduate in Russia)
(VENEREAL DISEASES
postgraduate educ. of venereologists in Russia)

CHUBAROVA, A.S., dotsent

Skin reaction to histamine at the focus of infection in some dermatoses. Vest.derm.i ven. no.12:18-22 '61. (MIRA 15:1)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - chlen-korrespondent AMN SSSR prof. P.V. Kozhevnikov) Leningradskogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S.M. Kirova.

(SKIN--DISEASES) (HISTAMINE)

CHUBAROVA, A.S., dotsent

Importance of perifocal reactions in the prognosis and treatment of some skin diseases. Vest.derm.i ven. 35 no.5:14-21 '62.
(MIRA 15:5)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - chlen-korrespondent AMN SSSR prof. P.V. Kozhevnikov) Leningradskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey.
(SKIN--DISEASES)

CHUBAR'VA, A.S.

Perifocal changes in some skin diseases in the light of the theory of parabiosis and perielectrotonus. Nerv. sist. no.4: 161-163 '63 (MIRA 18:1)

1. Leningradskiy institut usovershenstvovaniya vrachey.

YELISEYEVA, V.I.; LEBEDEV, A.V.; RAKHLIN, P.I.; CHUBAROVA, A.V.

New types of material for leather finishing. Kozh.-obuv.prom. 5 no.3: 18-21 Mr '63. (MIRA 16:3)
(Leather) (Finishes and finishing)

ROMANOVA, Ye.M., inzh.; CHUBAROVA, A.V., inzh.

Diagrams for connecting cast iron feed-water economizers. Energomashinostroenie 9 no.2:13-16 F '63. (MIRA 16:3)
(Feed water) (Boilers)

EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL S/WW

ACCESSION NR: AP5003838 S/0190/65/007/001/0156/0162

AUTHORS: Yeliseyeva, V. I.; Zharkova, N. G.; Chubarova, A. V.; Zubov, P. I. 39

TITLE: Emulsion polymerization of lower alkyl acrylates 36

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 1, 1965, 156-162 B

TOPIC TAGS: polymerization, emulsion polymerization, latex, methylacrylate, butylacrylate, acrylate/ STEK emulsifier, E 30 emulsifier, OP 10 wetting agent

ABSTRACT: The polymerization kinetics and stability of water soluble lower alkyl acrylates were studied as a function of monomer content in the reacting system. The conditions for obtaining stable latexes of copolymers of methylacrylate (MA), butylacrylate (BA), and acrylic acid (AK) were studied by noting the formation of a coagulum. The polymerization was performed at 77-80C by either adding the monomer (drop ratio to the water phase) at one time or by adding it gradually. Periodic samples were tested for latex content, free monomer content, emulsifier, latex surface tension, and polymer relative viscosity. It was found that with [illegible]-30 emulsifier the polymerization rate is several times higher and the molecular weight several times larger (M = 250 000-1250 000) with batch addition than with gradual addition. Similar results were obtained with a mixture (0.67% total) of ionic

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ACCESSION NR: AP5003838

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emulsifier[15] STEK[16] and nonionic wetter OP-10 as shown in Fig. 1 on the Enclosure. The initiation rate for polymerization with batch loading was found to be lower than with gradual loading. It was concluded from the data that the amount of water soluble monomer (which determines its diffusion rate to the reaction zone) significantly affects the emulsion polymerization rate, the molecular weight, and the stability of the system. The molecular weight and the amount of polar groups in the polymer also affect the latex stability (it is not stated how this occurs). Orig. art. has: 3 tables and 2 figures.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry, AN SSSR)

SUBMITTED: 28Mar64 ENCL: 01 SUB CODE: OC

NO REF SOV: 013 OTHER: 015

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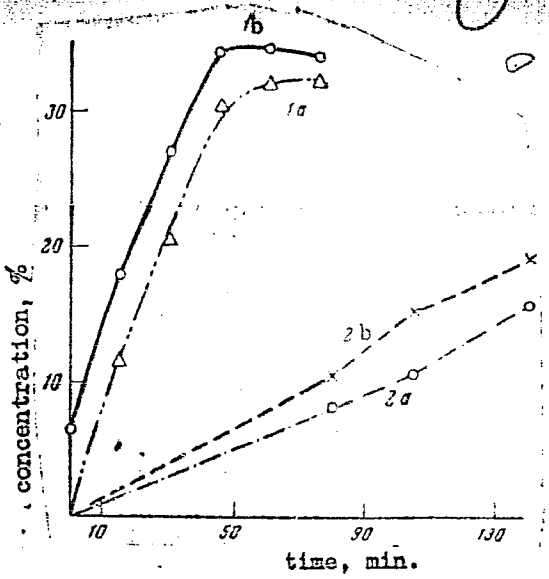
ACCESSION NR: AP5003838

ENCLOSURE: 01

Fig. 1. Polymerization kinetics (emulsifier mixture: STEK-0.5% and OP-10-0.5%): 1a and b-batch loading, polymer and monomer dissolved in water phase respectively; 2a and b-gradual loading, polymer and monomer respectively



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CHUBAROVA, G.D.; BELOUSOVA, Z.P., inzh.

Causes of weft breakage on ATK-100 and AT-100 looms and ways to prevent it. Tekst.prom. 22 no.1:45-46 Ja '62. (MIRA 15:2)

1. Nachal'nik tkatskogo sektora issledovatel'sko-tekhnologicheskogo otdela spetsial'nogo konstruktorskogo byuro tekstil'noy promyshlennosti Leningradskogo sovnarkhoza (for Chubarova). 2. Tkatskiy sektor issledovatel'sko-tekhnologicheskogo otdela spetsial'nogo konstruktorskogo byuro tekstil'noy promyshlennosti Leningradskogo sovnarkhoza (for Belousova).

(Looms)

L 45277-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6023234 (A) SOURCE CODE: UR/0342/66/000/004/0015/0017

29
28
B

AUTHOR: Kantonistov, A. M., (Deputy Director for Scientific Research, Candidate of Technical Sciences); Chubarova, G. D., (Chief of the Weaving Department); Novolodskaya, I. G., (Chief of Assortment Laboratory); Belousova, Z. P., (Chief of Laboratory of Weaving Technology)

ORG: Leningrad Scientific Research Institute of the Textile Industry (Len NIITP), (Leningradskiy nauchno-issledovatel' skiy institut tekstil' noy promyshlennosti)

TITLE: Bulked yarn fabrics

SOURCE: Tekstil' naya promyshlennost' , no. 4, 1966, 15-17

TOPIC TAGS: synthetic fiber, orlon, acrilon, exlan, courtell, nitron, lavsan, polyacrylonitrile, bulked yarn

ABSTRACT: The Leningrad Scientific Research Institute for the Textile Industry has created new imitation-wool bulk fabrics made from nonstabilized yarns containing corded fibers of polyacrylonitrile and polyester synthetics (orlon, acrilon, exlan, courtell, nitron, lavsan) and yarns made of spun fibers ("B" nitron and

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nitron, a pure polymer of irregular shrinkage. The fabric was bulked by irregular shrinkage of the fibers during heat treatment. The author describes the properties of the fabrics made from nonstabilized bulked yarn, processed from twisted orlon and gives a detailed description of the properties of the yarn used. The data given show that the yarn is of high and relatively uniform strength and, therefore, breaks infrequently during weaving. The use of twisted yarn made sizing unnecessary. Table 1 in the original article shows the weaving characteristics of the sample fabrics, finished at the V. Slutskaya and "Lensukno" mills. Table 2 shows the properties of some unfinished and finished samples. Fabrics made of nonstabilized yarn, produced from corded polyacrylonitrilic and polyester fibers were developed by the authors with the assistance of associates of the Zhelyabov Mill. Table 3 shows the properties of acrilon, exlans, courtell, nitron and lavsan of samples. The shrinkage of nitron samples during heat treatment was lower than for orlon fabrics. Fabrics made from nonstabilized yarn, produced from a blend of spun fibers of irregular shrinkage used nonstabilized No 54/2 (18.5 Text. x 2) fibers, containing "B" nitron and pure-polymer nitron. Samples of the three types of fabrics were produced at the Zhelyabov Weaving Mill, and the sample made from yarn containing 50% nitron (both types) was found to be the best. The tests carried

L 45277-66

ACC NR: AP6023234

out showed that the outlooks for the use of various highly shrinkable fibers to produce bulked fabrics are promising and that research to develop such fabrics should continue. Orig. art. has: 3 tables. [GC]

SUB CODE: 11/ SUBM DATE: none/

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S/032/62/028/004/020/026
B124/B101

AUTHORS: Reztsova, Ye. V., Slonimskiy, G. L., and Chubarova, G. V.

TITLE: Laboratory setup for repeated stressing of elastic materials in various media

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 4, 1962, 496 - 497

TEXT: A simple device was used to stretch a rubber sample kept in an inert atmosphere 120 times per minute to twice its original length. Stretching is effected by means of a core to which the rubber sample has been attached; this core is drawn into a coil when the circuit is closed. Interruption of current is performed by a Warren motor at a frequency of 120 times per minute. The rubber samples were repeatedly stretched to 50% of their original length in argon. Fatigue strength is given as the number of cycles leading to destruction of the sample. After destruction, residual strain and the character of the rupture were determined. The mean number of cycles causing destruction was $5{:}6 \cdot 10^4$ in argon and $2.6 \cdot 10^4$ in air which indicates the effect of chemically active substances, chiefly atmospheric oxygen, on the examined properties of the material. There

S/032/62/028/004/020/026
B124/B101

Laboratory setup for ...

are 1 figure and 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

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ACCESSION NR: AP4043787 S/0190/64/006/008/1483/1486

AUTHOR: Reztsova, Ye. V., Chubarova, G. V., Slonimskiy, G. L.

TITLE: Mechanical induced chemical processes in rubber fatigue

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 8, 1964, 1483-1486

TOPIC TAGS: rubber, rubber fatigue, rubber mechanical treatment, rubber rolling, fatigue prevention, vulcanate

ABSTRACT: The fatigue resistance of unsaturated vulcanates of natural rubber containing 0.5 wt.% stearic acid, 5 wt.% zinc oxide, 0.7 wt.% Kaptax, and 3 wt.% sulfur was investigated in nonmachined or rolled samples, using phenyl-β-naphthylamine, N-phenyl-N'-cyclohexyl-p-phenylenediamine, 2,2,4-trimethyl-6-ethoxydihydroquinoline, and 2,2'-methylene-bis-(4-methyl-6-butylphenol) as anti-fatigue agents. The agents were introduced into nonmachined samples by absorption from benzene solution, and into machined samples before they were rolled together for 5 1/2 hrs. The fatigue resistance was measured on a specially designed laboratory device, described in an earlier paper, which permitted repeated stretching of samples in various media and in a vacuum. The results of the tests (see Fig. 1 in the Enclosure) show that anti-fatigue agents introduced without machining

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