

L 17612-65 EPA(s)-2/ENT(m)/EPF(c)/ENG(v)/EPR/EPA(w)-2/T/ENP(j) Pp-4/Pp-5/Pp-4/
Pab-10/Pp-4/Pt-10 BSD/ASD(m)-3 #1/MLK/RM

ACCESSION NR. AM1046718

BOOK EXPLOITATION

S/

Tkhorzhevskiy, V. P.; Perevzentsev, I. G.

Construction of instruments for countries with tropical climates (Konstruirovaniye priborov dlya stran s tropicheskim klimatom), 2d ed., rev. and enl., Moscow, Izd-vo "Mashinostroyeniye", 1964, 199 p. illus., biblio., tables. 3,100 copies printed.

TOPIC TAGS: tropical deterioration, metal corrosion, organic coating, packing material, metallic coating, nonmetallic coating, electric insulation

PURPOSE AND COVERAGE: The book reports on the design of new and the redesign of old instruments for countries with tropical climates. The basic design rules of instruments, the selection of materials, storage and packing are considered. The norms and methods of tropical climate testing are examined. The book is intended for technical workers of plants and design bureaus as a manual.

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ACCESSION NR AM1046718

SUB CODE: MM, MT, IC, OC

SUBMITTED: 25Feb64

NR REF SOV: 091

OTHER: 020

Card 3/3

28577 3/187/61/000/010/002/007
D053/D113

6.6000 (map 1159)

AUTHOR: Perevezentsev, L.T.

TITLE: Trial operation of the experimental LEIS color television station

PERIODICAL: Tekhnika kino i televideniya. no. 10, 1961, 35-37

TEXT: The author describes performance characteristics of the equipment installed at the LEIS experimental color television station which underwent trial operation from April 1960 till July 1961 in Leningrad. The station was established and operated by the Leningradskiy elektrotekhnicheskiy institut svyazi imeni M.A. Bonch-Bruyevicha (Leningrad Electrotechnical Institute of Communications im. M.A. Bonch-Bruyevich) with the help of some enterprises in Leningrad. The station used a compatible TV system with a quadrature modulation of the subcarrier frequency. The chrominance information was transmitted by two color-difference signals, E_{R-Y} and E_{B-Y} , which were quadrature-modulated by the subcarrier frequency located in the frequency spectrum of the luminance signal (E_Y). The luminance and color-difference signals were determined by the formulas:

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Trial operation...

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D053/D113

$$E_Y = 0.299E_R + 0.587E_G + 0.114E_B;$$

$$E_{R-Y} = 0.701E_R - 0.587E_G - 0.114E_B;$$

$$E_{B-Y} = -0.299E_R - 0.587E_G + 0.886E_B;$$

where E_R , E_G and E_B are the corresponding red, green and blue video signals.

The shape of the composite color signal corresponded to the ГОСТ 7845-55 (GOST 7845-55) black-and-white TV standard, except that the color synchronization and chrominance signals were added to the luminance-signal spectrum. The color-synchronization signal contained 10 cycles of the subcarrier frequency. The parameters of the composite signal were: (1) frequency of the color subcarrier - $f_s = 4429687 \pm 30$ cps; (2) bandwidth of the luminance signal - $\Delta f_Y = 6.2$ Mc at 6-db level; (3) bandwidth of the color-difference signals - Δf_{R-Y} and $\Delta f_{B-Y} = 1.5$ Mc at 6-db level; and

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Trial operation...

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S/187/61/COO/010/002/007
D053/D113

(4) frequency separation between sound and image carriers - 6.5 Mc. The transmitter output power was 75 w. Programs were transmitted once weekly for 1 to 1.5 hours in the 8th TV channel (Soviet standard). Besides the TV broadcasts, the station regularly transmitted test patterns, using for that purpose color-bar, wedge, checkerboard and grid generators, and a monoscopic unit with the O249 test pattern. The TV programs were received using "Raduga" and "Temp-22" color receivers, and with black-and-white receivers operating in the 8th TV channel. The transmission range was found to be 8-10 km for color reception with antennas tuned to the 8th TV channel. The black-and-white reception range was up to 30-40 km with special antennas. In May 1961, a trial color TV broadcast was put on the air by a high-power transmitter of the Leningradskiy teletsentr (Leningrad Telecast Station) operating in the 1st TV channel. The pictures were received using several color TV receivers in the Institut svyazi (Institute of Communications) and in the zavod imeni Kozitskogo (Plant im. Kozitskiy). The results showed that color TV programs can be broadcast by standard black-and-white transmitters. An analysis of the results gathered during the trial operation of the station showed that a simultaneous compatible color TV system with the

Card 3/4

AKSENTOV, Yu.V.; GOL'DIN, A.A.; DZHAKONIYA, V.Ye.; DUSHKEVICH, N.I.;
YERGANZHIYEV, N.A.; YEFIMKIN, V.I.; LIPAY, I.N.; MINENKO, Yu.G.;
ODNOL'KO, V.V.; PEREVEZENTSEV, L.T.; TARANETS, D.A.; SHMAKOV,
P.V., prof.; KUKOLEVA, T.V., red.; BELYAYEVA, V.V., tekhn. red.

[Theory and practice of color television]Teoriia i praktika
tsvetnogo televideniia. Moskva, Sovetskoe radio, 1962. 661 p.
(MIRA 16:1)

(Color television)

PEREVEZENTSEV, L. S., Cond Tech Sci -- "Analysis of the method of resolution ^{of images}
a scanning beam." Len, 1960 (Min of Higher and Secondary Specialized Education
RSFSR. Len Inst of Aircraft Instrument Building). (KL, 1-61, 196)

-226-

S/194/61/000/008/044/092
D201/D304

9,4130

AUTHOR:

~~Perevezentscv, L.T.~~

TITLE:

Distribution of current fluctuation probabilities
in secondary-electron multipliers

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika,
no. 8, 1961, 25, abstract 8 G198 (Tr. Nauchno-tekhn.
konferentsii Leningr. elektrotekhn. in-ta svyazi,
no. 3, L., 1960, 45-56)

TEXT:

The theoretical analysis has been carried out of
noise characteristics photo-electron multipliers. The probability
density has been calculated of the appearance of random values of
the photo-current due to the increase of it by secondary electron
emission. By means of numerical integration, values have been ob-
tained for the most characteristic variants of the relationships be-
tween photo-currents, the secondary emission coefficients and their
dispersion. A formula has been obtained for evaluating the S/N

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S/194/61/000/008/044/092
D201/D304

Distribution of current...

ratio of single-stage photo-electron multipliers. The formula obtained may be, with some modification, applied to multi-stage photo-electron multipliers, but it differs from that obtained earlier by other authors. [Abstracter's note: Complete translation]

✓C

Card 2/2

S/058/61/000/006/048/063
A001/A101

9,4130

AUTHOR: Brevezentsev, L T.

TITLE: Distribution of probabilities of current fluctuations in secondary-electron multipliers

PERIODICAL: Referativnyy zhurnal Fizika, no. 6, 1961, 351, abstract 6Zh197 ("Tr. Nauchno-tekhn. konferentsii Leningr. elektrotekhn. in-ta svyazi", no. 3, Leningrad, 1960, 45 - 56)

TEXT: The distribution of probabilities of multiplier anode current fluctuations was theoretically and experimentally investigated. It is shown that the differential distribution law for probabilities of fluctuations of multiplier anode current differs from the normal one. The author derives formulae for determining the root-mean-square noise value and signal-to-noise ratio at the output of photoelectronic multipliers. VB

[Abstracter's note: Complete translation]

Card 1/1

6.6000

S/112/59/000/012/089/097
A052/A001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, p. 258,
25731

AUTHOR: Perevezentsev, L.T.

TITLE: On the Problem of Selection of Raster Dimensions for Scanning Beam
Transmitter 8

PERIODICAL: Sb. tr. Leningr. elektrotekh. in-ta svyazi 1957, No 2 (32), pp.
49-55

TEXT: A derivation of the signal-to-noise ratio is given depending on dimensions of the scanner tube raster in a scanning beam transmitter at a constant aperture and brightness of scanning. A formula for the light flux per element of image is derived. The dependence of the function, which characterizes the signal-to-noise ratio and corresponds to this light flux, on raster dimensions is presented graphically. The dependence of the depth of sharpness of the transmitted scene on the dimension of the tube raster is determined, and this dependence is

✓
B

Card 1/2

S/112/59/000/012/089/097
A052/A001

On the Problem of Selection of Raster Dimensions for Scanning Beam Transmitter
plotted against the sizes of transmitted objects When studio scenes are trans-
mitted, an increase of raster dimensions leads to a considerable improvement of
the signal-to-noise ratio

G.I.R. B

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

Card 2/2

PEREKZENTSEV, I.T.

Transient amplitude-frequency and phase-frequency characteristics of television cameras with a traveling beam.
Elektrosviaz' 14 no.3:17-25 Mr '60. (MIRA 13:6)
(Television camera)

PERMVEENTSEV, M.I.

Acorns

Autumn seedings. Les i step' 1, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, DE AIN... 1952 ~~1953~~, Uncl.

OSTROVSKIY, I.I., inzh., red.; PEREVEZENTSEV, N.T., inzh., red.;
SHMELEVA, V.F., inzh., red.; KAMYSH'YAN, A.G., inzh., red.

[Collection No.4 of standard district uniform estimates for construction work; strip mining] Sbornik No.4 edinykh raionnykh edinichnykh rastsenok na stroitel'nye raboty; gornovskryshnye raboty. Moskva, Stroiizdat, 1965. 174 p.

(MIRA 18:8)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Gosstroy SSSR (for Ostrovskiy).
3. Nauchno-issledovatel'skiy institut ekonomiki stroitel'stva Gosstroya SSSR (for Perevezentsev, Shmeleva).
4. Gosudarstvennyy institut po proyektirovaniyu shakht, kar'yerov i obogatitel'nykh fabrik (for Kamysh'yan).

BUDANOV, G.V., inzh., red.; GUSEV, V.I., inzh., red.; NI, V.N.,
inzh., red.; MALYAKOVSKIY, V.T., inzh., red.; GRIGOROV,
I.I., inzh., red.; PEREVEZENTSEV, N.T., inzh., red.
TURIANSKIY, M.A., spets. red.

[Construction specifications and regulations] Stroitel'-
nye normy i pravila. Moskva, Stroiizdat. Pt.4. Vol.2.
No.1. Ch.10. 1965. 95 p. (MIRA 18:7)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po
delam stroitel'stva. 2. Gosstroy SSSR (for Budanov,
Gusev, Malyakovskiy). 3. Nauchno-issledovatel'skiy insti-
tut ekonomiki stroitel'stva Gosstroya SSSR (for Ni,
Perevezentsev, Grigorov).

DRUYAN, M.A.; PEREVEZENTSEV, T.G.; SOSNITSKIY, A.Ye.; PERS, L.Ye.;
PANFILOV, I.P.

Making 30G1, 5L steel with addition of ferromanganese in the
ladle. Lit.proizv. no.7:8 J1 '62. (MIRA 16:2)
(Steel—Metallurgy) (Ferromanganese)

BALASHOV, M.I.; BEKERMANN, F.A.; PEREVEZENTSEV, T.G.; Prinimali uchastiye:
SMIRNOVA, L.G., rabotnik; ZHIGALENKOVA, R.S., rabotnik;
DUBOVA, L.S., rabotnik

Prevention of waterleaks in iron castings. Lit. proizv. no.1:
40 Ja '65. (MIRA 1P:3)

1. Tsentral'naya zavodskaya laboratoriya (for Smirnova, Dubova,
Zhigalenkova).

L 53943-65 EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/EPR/EWA(h) Pr-4/Ps-1/Pu-4 WH

ACCESSION-NR: AT5013238

UR/3119/64/000/002/0051/0064

42
40

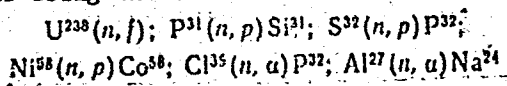
AUTHOR: Pravdyuk, N. F.; Ivanov, V. P.; Kuznetsov, V. N.; Vikhrov, V. I.; Peravezentsev, V. N. BFI

TITLE: Measurement of fast neutron flows using threshold reactions during experiments on irradiation of materials in the RFT reactor 19

SOURCE: AN LatSSR. Institut fiziki. Radiatsionnaya fizika, no. 2, 1964. Dozimetriya neytronov i gamma-luchey (Dosimetry of neutrons and gamma rays), 51-64

TOPIC TAGS: fast neutron flux, threshold reaction, neutron registration, neutron flux measurement, reactor neutron flux, radiation dosimetry

ABSTRACT: The authors studied the problem of absolute measurements of integral fluxes of fast neutrons using the threshold reactions



in the channels of the RFT reactor. The absolute isotope activity was measured by means of a 4π flow-through type counter, a 4π slit scintillation counter, the β-γ coincidence method, γ-spectrometers, and by calibrated proportional and crystal

Card 1/3

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ACCESSION NR: AT5013238

counters with layers of fissionable material. The distribution of fast and thermal neutrons within the active zone was determined according to the relative method by means of fission counters and sulfur and copper activation. The article outlines the theory of the experiments, describes the experimental method, and reports the results of the measurements. The methods used for the flux determination during the present investigation are quite complex and cumbersome and the success of any such measurement hinges to a great extent on the knowledge of the shape of the spectrum at various points within the reactor. Consequently, the authors suggest that the theoretically calculated spectra be used whenever possible. If the neutron spectrum for a point in the reactor is calculated reasonably accurately, a single threshold indicator is sufficient for its empirical normalization. If the accuracy of the calculation is in doubt, it can be checked and corrected by means of a series of threshold indicators (see, R. Nibson, Neutron dose monitoring for irradiation of materials in reactors. Contributions to the Harwell Symposium in December 1962, No SM.36/42; J. Motoff, Nucleonics, 20, 1962, 12, 56). "In conclusion, the authors thank Yu. G. Nikolayev and his co-workers for calculating the neutron spectra and for practical help in carrying out the experiments." Orig. art. has: 9 formulas, 5 figures, and 3 tables.

Card 2/3

L 53943-65

ACCESSION NR: AT5013238

ASSOCIATION: Ordena Lenina Institut atomnoy energii im. I. V. Kurchatova (Order
of Lenin Institute of Atomic Energy)

SUBMITTED: 00

ENGL: 00

SUB CODE: NP

NO REF SOV: 005

OTHER: 004

AR
Card 3/3

L 07081-67 EWT(d)/EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD/EM/GD
ACC NR: AT6026919 SOURCE CODE: UR/0000/66/000/000/0179/0187

AUTHOR: Pokrovskiy, Yu. I.; Vikhrov, V. I.; Perevezentsev, V. N. 68
Put 1

ORG: None

TITLE: Unit for remote measurement of internal friction and modulus of elasticity
of radioactive materials 16 9m 16

SOURCE: AN SSSR. Institut metallurgii. Vnutrenneye treniye v metallakh i splavakh
(Internal friction in metals and alloys). Moscow, Izd-vo Nauka, 1966, 179-187

TOPIC TAGS: internal friction, elastic modulus, shear modulus, electronic measurement,
laboratory instrument, mechanical motion instrument, fatigue test, relaxation process,
material deformation, radioactivity

ABSTRACT: A unit for remote measurement of internal friction and modulus of elasti-
city is described. This unit received author certificate application no. 823088/
26-25, 5 Mar 63. The unit can measure the internal friction of materials from
 5×10^{-2} down to 5×10^{-5} in the range of 60-600 cycles for bending and torsion
vibrations under conditions of low (-196°C) room and elevated temperatures (up to
700°C). Modulus of elasticity and shear modulus can be measured on this unit and
fatigue testing can be carried out. Both vibration damping and resonance methods
can be used. A simplified projection of voltages at various points in the circuit,
and a principal schematic diagram of the unit are included, together with a brief

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ACC NR: AT6026919

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description of the functions of some of the electronic components. Standard measurements of internal friction, determined by a thermal elastic effect, were used to check unit operation as well as to evaluate the background of internal friction. Thermal elastic internal friction was caused by transverse fluxes in the sample. Relaxation phenomenon was associated with an established thermal equilibrium at a specific time. Orig. art. has: 3 formulas and 4 figures.

SUB CODE: ~~18,13,09~~ ^{18,13,09} SUBM DATE: 02 Apr 66/ORIG REF: 007/OTH REF: 002

Card 2/2 LC

ACC NR: AT6026912 (A) SOURCE CODE: UR/0000/66/000/000/0076/0082

AUTHOR: Pokrovskiy, Yu. I.; Vikhrov, V. I.; Porevzontsov, V. N.

ORG: None

TITLE: Study of some radiation defects in metals by measuring internal friction and modulus of elasticity

SOURCE: AN SSSR. Institut metallurgii. Vnutrenneye treniye v metallakh i splavakh (Internal friction in metals and alloys). Moscow, Izd-vo Nauka, 1966, 76-82

TOPIC TAGS: metal analysis, internal friction, elastic modulus, radiation damage, irradiation, nuclear reactor core / RFT reactor core, IRT-1000 reactor core

ABSTRACT: Samples of pure (99.98%) copper, molybdenum and tungsten were irradiated in the operating channel of an RFT reactor core at a flux of 10^20 neutron/cm^2 and in the channel outside an IRT-1000 reactor core at a flux of 10^14 neutron/cm^2. Internal friction (Q^-1) was measured between stresses of 1-1,000 G/mm^2 with maximum stress amplitude (sigma) calculated according to the amplitude of vibrations; change of modulus of elasticity (E), associated with change of Q^-1 to sigma, was studied with respect to change of natural frequency vibrations squared (f^2) of sample in relation to sigma. For copper, sigma_crit rose 100 times after irradiation at 10^20 neutron/cm^2 and Q^-1 decreased by about 40% with respect to its pre-irradiation values. Changes in

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ACC NR: AT6026912

Q^{-1} and σ_{crit} are explained by reaction of dislocations with spot defects at low neutron dosages, and reaction of dislocations with more complex defects (such as vacancy complexes) at high neutron dosages. This behavior differs from that of Mo and W in that Q_{min}^{-1} for Cu at a flux of 10^{20} neutron/cm² decreases while Q^{-1} for both Mo and W increases because these two metals have "free" (unattached to dislocations) spot defects which are absent in Cu. The increase of σ_{crit} for Mo and W may signify that dislocations, such as in Cu, are locked in place by radiation defects. A small increase in σ_{crit} for these metals is associated with the fact that many of the defects formed remain in the lattice because of low mobility of radiation defects in these metals in comparison with the same mobility in copper. Examination of change of modulus of elasticity for the metals under scrutiny showed that neutron irradiation may cause an increase or decrease in elastic modulus (E) for copper in relation to the magnitude of the integrated flux. This E for copper increases with small doses and decreases for large doses. Explanations for changes in modulus of elasticity are quite similar to those for changes in internal friction. Low temperatures, and other forms of radiation (gamma-rays, electrons), can be used to study spot defects by the internal friction method. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 11, 18/SUBM DATE: 02 Apr 66/ORIG REF: 003/OTH REF: 002
nuclear metallurgy

L 10330-67 ENT(m)/Gara(1)/STL

ACC NR: AP6029795

AUTHOR: Pravdyuk, N. F.; Vikhrov, V. I.; Pavlov, G. Yu.; Pervezontsov, V. N.

ORG: none

TITLE: Determination of the burnup of the fuel element of the icebreaker "Lenin" from the Cs-137 activity without chemical separationSOURCE: Atomnaya energiya, v. 21, no. 2, 1966, 92-96TOPIC TAGS: fuel element, cesium, uranium compound, enriched uranium, reactor neutron flux

ABSTRACT: The authors determined the distribution of the burn-up along the length of the fuel element by measuring the intensity of the 0.66-Mev gamma lines of the Cs¹³⁷ in the reaction products with a scintillation γ spectrometer with resolution 10--12%. The fuel element tested was made of uranium dioxide with 5.5% enrichment, operated for 428 effective days, and stored for 575 days after removal from the reactor. It was cut in the hot chamber in 11 places and two samples of the uranium dioxide were chosen from each cut. The activity was measured with a scintillation counter in a specially designed pickup (Fig. 1) and the data were processed with a pulse-height analyzer (AI-100) provided with a special information extraction system (VD) developed at the Institute of Atomic Energy im. I. V. Kurchatov by M. P. Sokolov. The calibration of

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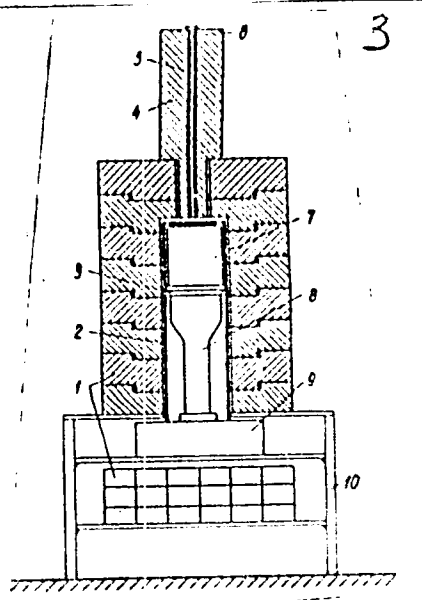
UDC: 621.039.548

L 10330-67

ACC NR: AF6029795

Fig. 1. Diagram of gamma-spectrometer pickup. 1 -- Lead shield, 2 - jacket, 3 - light pipe, 4 - collimator, 5 - copper tube, 6 - target, 7 - NaI(Tl) crystal, 8 - photomultiplier, 9 - cathode follower, 10 - support

the apparatus and the processing of the results are described, and the integral flux of the thermal neutrons and the burnup rate are calculated. It is concluded that the method can be used to determine the relative distribution of the burnup, after suitable cooling of the fuel element with accuracy $\pm 6\%$ and the absolute burn-up value with accuracy $\pm 16\%$. The authors thank N. M. Mordvinov for a discussion of the results, and A. A. Markov and M. P. Sokolov for practical aid in preparing the system for information extraction. Orig. art. has: 4 figures, 11 formulas, and 2 tables



SUB CODE: 18/ SUBM DATE: 01Feb66/ ORIG REF: 006/ OTH REF: 001

Card 2/2 BP

PEREVEZETSEV, V. V., Maj. Vet. Corps; F. S. KIRILLOV, Sr. Lt., Vet. Corps

"Effect of Intravenous Infusions of White Streptocide (III), on the Blood of a Horse"

Above is a Section (in Table of Contents (p. 253)) in Chap. V - Tests and Practice, of "Bolezni Loshadey - Sbornik Rabot" ("Equine Diseases - Collection of Works"), Ogiz-Sel'khozgiz, 1947, compiled by A. Yu. Branzburg and A. Ya. Shapiro, and edited by A. K. Laktionova, State Press for Agricultural Literature. Works in a majority of cases had been published previously in the journal Veterinariya or in one of the manuals issued by the Veterinary Administration of the Armed Forces.

L 40247-66 T(2)/P(v)/ P(r)/ P(h)/ P(1)

ACC NR: AR6014866

(N)

SOURCE CODE: UR/0372/65/000/011/G003/G003

AUTHOR: Porevezontsev, Ye. I.

TITLE: A self-adjusting system of automatic marine navigation with search for a given dynamic characteristic

9

SOURCE: Ref. zh. Kibernetika, Abs. 11G16

REF SOURCE: Tr. Tsent. n.-1. in-ta morsk. flota, vyp. 59, 1964, 71-79

TOPIC TAGS: navigation system, ship navigation, automatic navigator, self adaptive control, game theory

ABSTRACT: The design principle of a self-adjusting system¹⁴ of automatic marine navigation is described with a model. The method of putting the system of automatic marine navigation into a stable equilibrium position is examined initially. The problem is formulated and solved by methods of game theory. 4 illustrations. Bibliography of 4 citations. B. A. Translation of abstract

SUB CODE: 17

Card 1/1

UDC: 62-506.1:681.142.36

L 43651-66 EWT(d)/ENP(v)/ENP(k)/ENP(h)/ENP(l) BC

ACC NR: AT6014881

(N)

SOURCE CODE: UR/2752/65/000/077/0074/0081

AUTHOR: Denisov, K. N. (Candidate of technical sciences); Perevezentsev, Ye. N. (Candidate of technical sciences)

ORG: none

B+1

TITLE: A variation in the structural synthesis of a perceptron-type recognition device for an automated system to control fleet operations

SOURCE: Leningrad. ¹⁴Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 77, 1965. Avtomatizatsiya i vychislitel'naya tekhnika na morskoy flote (Automation and computer engineering in the Merchant Marine), 74-81

TOPIC TAGS: perceptron, adaptive pattern recognition, naval ~~force~~ ^{fleet} organization ^{operation, automaton}

ABSTRACT: The functional properties of a perceptron-type learning automaton which has two and three valued thresholds and associative elements with distributed parameters for use in the recognition of flat black-and-white images in printed texts are discussed. The authors consider a perceptron-like net of sensitive, associative, and re-active elements forming a variable transitional matrix of coefficients of amplification, which depends upon a set of past active states of the net (particularly upon a set of objects presented to the perception during the learning period). They show that

UDC: 656.61-52

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L 43651-66

ACC NR: AT6014881

a two or three-threshold perceptron is capable of generalization (i. e., interpolation and extrapolation) and self-organization (in the sense of learning), and is therefore a detailed enough model for studying the process of automatic pattern recognition with forced learning, given a sufficient number of elements in the logical net. The authors also discuss the problem of the efficient operational control of fleet movements from the viewpoint of automatic pattern recognition with self-organization and learning. The problem of directing ships approaching an operational area to particular ports would be solved by the automatic selection of a particular "picture", or configuration, that reflects total minimum cost on the basis of memory and program constantly modified and updated through past experiences. Orig. art. has: 4 figures.

SUB CODE: 095/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 001

15

Card 2/2

L 43652-66 ENT(d)/EMP(v)/EMP(k)/EMP(h)/EWE(1) BC

ACC NR: AT6014882

(N)

SOURCE CODE: UR/2752/65/000/077/0082/0088

AUTHOR: Denisov, K. N. (Candidate of technical sciences); Perevezentsev, Ye. N. (Candidate of technical sciences)

ORG: none

51
671

TITLE: The problem of synthesizing a discrete perceptron

SOURCE: Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 77, 1965. Avtomatizatsiya i vychislitel'naya tekhnika na morskoy flote (Automation and computer engineering in the Merchant Marine), 82-88

TOPIC TAGS: computer control system, perceptron, pattern recognition, digital computer, linear programming, decision theory, coding, computer circuit

ABSTRACT: The article presents a solution to the problem of synthesizing the logical net of a digital perceptron based on optimum coding and linear programming methods. The structural circuit utilizes simultaneously both recurrent and nonrecurrent forced learning procedures. The recurrent procedure for learning to recognize objects (presented by binary numbers) is based on the simplex method of linear programming. The nonrecurrent procedure is based on the Browning-Bledsoe method of binary digital recognition. Information signs of recognized forms are extracted by computer procedures in

Card 1/2

UDC: 62-52

L h3652-66

ACC NR: AT6014882

general coding (in the sense of the Browning-Bledsoe method), leading to an investigation of the fine structure of the binary numbers by methods in the theory of optimum coding. The algorithms of optimum coding of binary numbers are based on a comparison of divergence and entropy of a series of possible states of the recognition device. Optimum selections of the weighted coefficients in the logical net are determined on the basis of algorithms of the simplex method using digital computers. The authors conclude that the further development of the theory of discrete (digital) perceptron depends on perfecting the recurrent and nonrecurrent learning procedures in pattern recognition devices which involves the use of more general computational methods of mathematical programming. Orig. art. has: 3 figures, 3 tables.

SUB CODE: 09.12/

SUBM DATE: none/

ORIG REF: 001/

OTH REF: 004

LS

Card 2/2

PEREVEZENTSEV, Ye.N.

Using multiple route, multichannel, and complex navigational systems
in automatic ship steering. Trudy TSNIIMP' 8 no.47:32-38 '63.
(MIRA 16:12)

PERVEZENTSEV, Ye.N.

Optimal system of automatic navigation with full initial information equivalent to an adaptive control system. Trudy TSNIIMF no. 55:28-32 '64.

Conditions for the stability of a nonlinear system of automatic navigation. Ibid.:33-51

(MIRA 18:2)

L 02259-67 EWT(d)

ACC NR: AT6014773

(N)

SOURCE CODE: UR/2752/63/000/051/0022/0032

AUTHOR: Perevezentsev, Ye. N.

ORG: none*

61
B+1

TITLE: The problem of the representation of the basic problem of automatic navigation from the informational aspect

SOURCE: * Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 51, 1963. Vychislitel'naya tekhnika i avtomatizatsiya na morskoy flote (Computer technology and automation in the merchant marine), 22-32

TOPIC TAGS: ship navigation, automatic navigator, information theory, random process, navigation system

ABSTRACT: The paper deals essentially with a study of the information-related properties of a complex dynamic system for automatic ship control according to a prescribed program. These properties and concepts are approached through an analysis of the fundamental statistical and information characteristics of multidimensional random processes, which are an extension of the unidimensional random processes encountered in automatic control problems. On this basis, the author seeks to: 1) establish a relation between the correlation theory of random processes and the classical theory of discrete measurements with respect to the problems of Card 1/2

Card 2/2 pb

ACC NR: AT6034956

(N)

SOURCE CODE: UR/2752/66/000/073/0065/0076

AUTHOR: Perevezentsev, Ye. N.

ORG: None

TITLE: The Doppler method of navigation using satellites

SOURCE: Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 73, 1966. Sudovozhdeniye i svyaz' (Navigation and communication), 65-76

TOPIC TAGS: Doppler effect, Doppler navigation equipment, Doppler tracking, navigation satellite, ~~artificial earth satellite, satellite orientation, artificial satellite orbit, navigation equipment, navigation system,~~ ship navigation, *ORBIT PARAMETER, SPACE COORDINATE SYSTEM*

ABSTRACT: The orbital parameters and possible spatial positions of satellites in rectangular and spherical coordinates are defined. Fundamental questions of using satellites to determine a ship's position at sea by the Doppler method are reviewed. Recommendations concerning the composition and structural arrangement of the ship's navigational complex for the reception and processing of orbital information are made. Orig. art. has: 7 figures, 21 formulas, and 1 table.

SUB CODE: 17,22/SUBM DATE: None/ORIG REF: 005/OTH REF: 002

Card 1/1

UDC: 527:629.195.1

ABRAMOV, V.G., kand.med.nauk; PEREVEZENTSEVA, M.A., vrach

Surgical treatment of Marcus Gunn's syndrome. Oft. zhur. 16 no.4:
248-249 '61. (MIRA 14:7)

1. Iz kafedry glaznykh bolezney (zav. - prof. A.A.Bugayev) Omskogo
meditsinskogo instituta.
(EYELIDS—DISEASES)

PEREVEZHEITSEVA, M.M.; PLUNGIAN, L.V.; SEREBRYAKOVA, V.L.

Intensification of the processes of plasticization and mixing on
rollers. Kauch. i rez. 17 no.6:34-35 Je '58. (MIRA 11:7)

1. Moskovskiy zavod rezinovykh izdeliy sanitarii i gigiyeny.
(Rubber)

MIKHAYLOV, V.V.; PESCHANSKAYA, R.Ya.; FORER, Ye.R.; YEFREMOVA, V.K.;
PEREVEZENTSEVA, N.M.; ALEKSEYEVA, N.A.

New production variety of organic pigments for the rubber industry.
Khim.prom. no.1:26-28 '63. (MIRA 16:3)
(Pigments) (Dyes and dyeing--Rubber goods)

30V/138-58-6-10/25

AUTHORS: Perevezentseva, N.M., Plungian, L.V., Berebryakova, V.L.

TITLE: Intensifying Processes of Plasticisation and Mixing on Roll Mills (Intensifikatsiya protsessov plastikatsii i smesheniya na val'tsakh)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 6, pp 34 - 35 (USSR)

ABSTRACT: The aim of the investigation was to intensify the plasticisation of natural rubber and colouring of mixtures whilst working on rollers (temperature of the roller = 50° - 60°C) by using non-toxic plasticiser. The first stage of the investigation consisted in testing under laboratory conditions, substances recommended by NIIR, NIISHP and the Lomonosov NITKhT. (1) Antioxidants: dimethylphenylparaecresol (DMFPA), para-tert-benzimidazol (MB), tert-butylphenol (P-2), 1-tert-butylhydroquinone (P-20). (2) Vulcanisation accelerators: tetramethylthiuramdisulphide (thiuram), peroxide (1-propylbenzene hydroperoxide), chlorinated paraffin, ferric stearate, bis-(para-tert.-butylphenol) disulphide and renatsit.H. The effect of these various substances was tested; however, negative results were obtained.

Card 1/3

SOV/ 138-58-6-10/25

Intensifying Processes of Plasticisation and Mixing on Roll Mills

Accelerated plasticisation (20 - 30%) was obtained with bis (para-tert.-butylphenol) disulphide. Results (at a temperature of 50° - 60°C) are given in a Table. The effect of the temperature of processing on the plasticisation of natural rubber in the temperature limits of 50° - 120°C was investigated. The plasticity (according to Karrer) was decreased on increasing the temperature, but in all cases the plasticity of natural rubber containing the above named substances was higher than that of untreated natural rubber. A maximum degree of plasticisation of natural rubber was obtained when the rubber was first heated before being fed to the rollers (100°C) and when processing was carried out at 50°-55°C. This was verified on a rubber mixer in the Sverdlovsk plant RII (10 - 15%). When DMFPK was used, the plasticisation was accelerated by 20 - 30%. The time

Card 2/3

SOV/138 -58-6-10/25

Intensifying Processes of Plasticisation and Mixing on Roll Mills

of plasticisation was shortened by 20% when using the substance with heated plasticised rubber, and by 11 - 14% when using it with heated unplasticised natural rubber.

There is 1 Table.

ASSOCIATION: Moskovskiy zavod rezinovykh izdeliy sanitarnoy gigiyeny (Moscow Plant for Making Rubber Products for Sanitation and Hygiene)

1. Rubber--Processing 2. Plasticity--Application 3. Rubber--mixing
--Application 4. Rubber--Test results

Card 3/3

PEREVEZKINTSOV, L.D., PAVLOVA, V.I.

Brief report on the work of the province conference of dermatovenereolo-
gists of Leningrad Province, November 28-30, 1957. Vest.derm. i
ven. 32 no.3:95 My-Je '58 (MIRA 11:7)
(DERMATOLOGY)

PERSEPOLIS, I.

F. DANCOV, Emur Fir Khim, 1933, 4, (3), 374-342

PEREVERZEV, Nikolay Sergeyevich.

For putting one third of the earth's surface under cultivation (On the threshold of a new agricultural Five-Year Plan). Leningrad. Sel'kolkhozgiz 1931. 62 p. (54-45309)

HC335.P345

PEREVIAZKINA, L.M.

№52/2600 (The role of tanning matter in the phenomena of disease resistance in cotton plants). Rol' dubil'nykh veshchestv v isvleniakh ustoiichivosti khlopchatnika k viltu. Doklady Akademii Nauk SSSR, 79(2): 303-306, 1951.

FEREVIAZKINA, L. V.

and RUBIN, B. A. "Role of Tannins in the Phenomena of Cotton Resistance to Wilt," Doklady Akademii Nauk SSSR, vol. 79, July 11, 1961, pp. 303-306. 511 P444A

So: Sira S1-90-53, 15 Dec. 1953

PEREVIAZKO, S.I.

Coal Mines and Mining

The longwall system of working does not have to be the only one in the Donets Basin.,
trud.rab., 6, No. 1., 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1952 ~~1952~~, Uncl.

Pervezova, R.G.

Heterogeneity of large steel ingot. S. Ya. Skoblo, B. G. Pervezova, and N. F. Kapelkin. *Sovetskaya Nauka. Trudovye izobrazheniya*, 1958, No. 8, 47-58; *Referat. Zhur.*, No. 1958, Abstr. No. 8192. — A longitudinal slab of the axial section of a 24-ton ingot of acid Cr-Ni-MO steel was examined. There were found periodic changes of microstructure, mech. properties, and contents of nonmetallic inclusions and C. The best mech. properties occurred in the trans-crystg. zone. The content of nonmetallic inclusions was greatest in the center of the ingot; they consisted of SiO₂ up to 73% and Al₂O₃ up to 30-40%. FeO (3.7%) and MnO (5-15%) were included in the compn. of the silicates. The periodicity of distribution of the heterogeneity of the ingot is attributed to discontinuous crystn. and contraction of molten metal. A. N. Pestoff

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(11)

PERVEDCHENY, T. N.

Pervedchikov, I. N. and Ten-Eshayev, R. M. - "A comparative evaluation of treatment of syphilis by arsenoxides and novarsenol preparations", Trudy Astran. univ. med. in-ta, Vol. IX, 1948, p. 515.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh' Statov, No. 1), 1 13).

PEREVODCHIKOV, I. N.

Perevodchikov, I. N. - "Skin diseases of workers in the fish industry", Izv. Astrakh. gos. med. in-ta, Vol. IX, 1940, p. 223-25.

SO: 11-3047, 11 March 53, (Letopis 'Zhurnal Inykh Shtetov, No. 3, 1947).

PEREVOZCHENKO, I. N.

Perevozchikov, I. N. - "Skin diseases among workers in sheepskins enterprises",
Trudy Astrakh. gos. med. in-ta, Vol. IX, 1970, p. 176-80.

SO: K-3040, 11 March 53, (Letavis 'Zhurnal Inzh. Stroy, No. 3, 1949).

PEREVEDCHIKOV, I. N.

Perevedchikov, I. N. - "On the Diagnosis and Therapy of anthrax with special reference to the skin",
Trudy Astrakh. gos. med. in-ta, Vol. IX, 1948, p. 131-35.

SI: U-3042, 11 March 53, (Letopis 'Zhurnal Vnesh. Stroy, No. 3, 1948).

PEREVOZCHIKOV, E. N.

Perevozchikov, E. N. - "On the problem of nodes at the joints", Izv. Akad. Nauk SSSR, Ser. med. i biol. nauki, Vol. IX, 1973, p. 336-37.

SO: U-3072, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 2, 1949).

PEREVEDCHIKOV, I. N.

Perevedchikov, I. N. - "On the reactivity of the skin during exhalative processes",
Trudy Astrakh. gos. med. in-ta, Vol. IX, 1941, p. 32-45.

SO: U-2042, 11 March 53, (Letovis 'Zhurnal Inzh. Statov, No. 1, 1945).

PEREVODCHIKOV, I. N.

26001 PEREVODCHIKOV, I. N. O Dermatozakh, Svyazannykh S Voennoy Travmoy V SB:
Problemy Vosstanovit. Lecheniya Invalidov Otechestv. Voiny. Astrakhan',
1948, S. 276-81.

SO: Letopis' Zhurnal Statey, No. 30, 1948, Moscow

PEREVODCHIKOV, I.N.; TER-ZAKHAROVA, R.I.; ANDREYEVA, F.I.; TARSHINA, Ye.I.

Syphilis treated by reinforced therapy. Vest.vener. no.2:15-17 Mr-
Ap '50. (GLML 19:3)

1. Of the Skin-Venereological Clinic, Astrakhan' Medical Institute
(Head -- Prof. N.N.Perevodchikov).

PEREVODCHIKOV, I.N.

Development of undifferentiated forms of leprosy. Vest. vener., Moskva
no. 5:29-31 Sept-Oct 1952. (GLML 23:3)

1. Professor. 2. Of the All-Union Scientific-Research Institute for
Leprosy and of the Skin Clinic of Astrakhan' Medical Institute.

KOSOLAPKINA, L.I., kandidat meditsinskikh nauk, zaveduyushchiy laboratoriyey;
ALANDAROV, I.N.; PEREVODCHIKOV, I.N., professor, direktor.

Condition of nerve fibers in experimental leprosis. Vest.ven. i dern.
no.3:14-17 My-Je '53. (MLRA 6:7)

1. Patomorfologicheskaya laboratoriya Vsesoyuznogo instituta po izuche-
niyu lepry. (Leprosy) (Nerves)

PERECHIN, I. N. Prof.

"The Application of the Basic Principles of I. I. Pavlov's Doctrine in Dermatology."

vestnik venerologii i dermatologii [Bulletin of Venereology, Dermatology],
No 1, Moscow, January-February, 1954 (former),

ИВАН ОУЧЕНКО, И. . . проф.

"Modern Methods in the Treatment of Syphilis."

vesnik venerologii i dermatologii (Bulletin of Venereology, Dermatology),
no 1, January-February 1971. (Moscow), Moscow.

USSR / General Problems of Pathology. Experimental Treatment. U-5

Abs Jour : Ref Zhur - Bill., No 10, 1958, No 46916

Author : Perevodchikov, L. N.

Inst : Astrakhan' Institute of Medicine.

Title : Some Problems of skin Cancer and of Precancerous Skin Conditions.

Orig Pub : V sb. Tr. Astrakhanskogo med. in-ta, 1956, 12, No 2, 365-371

Abstract : Data on 456 patients with cancer of the skin are given who have come to the Astrakhan' dermatology clinic during a 16 year period. A considerable number of epitheliomas developed following the appearance of atrophic skin areas and the occurrence of hyperkeratosis phenomena. In some of the cases, long lasting inflammatory processes (such as lupus cheilitis) preceded the appearance of skin cancer and of lower lip cancer. The author is of the opinion

Card 1/2

PEREVODCHIKOV, I. N.

PEREVODCHIKOV, I.N., red.; SHUBIN, V.F., kand.med.nauk

[Leprosy; diagnosis and prophylaxis; a manual for physicians]
Raspoznavanie i profilaktika lepry; rukovodstvo dlia vrachei.
Moskva, Medgiz, 1957. 230 p. (MIRA 11:1)
(LEPROSY)

PEREVODCHIKOVA, L.M., kand.med.nauk

Use of gangleron in the compound treatment of peptic ulcer.
Kaz.med.zhur.no.3:69-71 My-Je '63. (MIRA 16:9)

1. Kafedra fakul'tetskoy terapii (zav. - dotsent S.V.
Bazanova) Bashkirskogo meditsinskogo instituta.
(GANGLERON—THERAPEUTIC USE)
(PEPTIC ULCER)

BLOKHIN, N.N.; KUDIMOVA, E.G.; PEREVODCHIKOVA, N.I.; SHABAD, L.M.; VASILIEV, Y.M.

A short outline of the oncological work in the U.S.S.R. Neoplasma 9
no.3:355-368 '62.

1. Institute of Experimental and Clinical Oncology of the Academy of
Medical Sciences of U.S.S.R., Moscow.
(NEOPLASMS)

PEREVOSHCHIKOV, Konstantin Alekseyevich; CHERNENKO, K.A., otv. red.;
TISHINA, Z.V., tekhn. red.

[Under the sun of India, a land which is fantastic and ordinary]
Pod solntsem Indii, strany skazochnoi i obyknovЕННОi. Moskva,
Gos.izd-vo detskoi lit-ry M-va prosv. RSFSR, 1961. 158 p.
(MIRA 15:2)

(India—Social conditions)

KOBRIN, V.U.; PEREVOZCHIKOV, S.N.; SHAPIRO, A.S., starshiy master

Noncontact back current relay for multiple-unit rail cars.
Elek. i tepl. tiaga no.6:21 Je '62. (MIRA 15:7)

1. Rukovoditeli grupp nauchno-issledovatel'skogo otdela
Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta
(for Kobrin, Perevozchikov). 2. TSeKh tekushchego remonta depo
Leningrad-Finlyandskiy (for Shapiro).

(Railroad motorcars)
(Railroads--Electric equipment)
(Electric relays)

NEKRASOV, V.I., inzh.; CHERKASOV, Ye.B., inzh.; PRRVOZCHIKOV, S.N., inzh.

ET-16 narrow-gauge diesel-electric locomotive using single-phase current of industrial frequency. Sbor.LIIZHT no.159:92-105 '58. (MIRA 12:2)

(Diesel locomotives)

SHCHUKAREV, S.A.; SEMENOV, G.A.; RAT'KOVSKIY, I.A.; PEREVOSHCHIKOV, V.A.

Determination of the saturated vapor pressure of indium oxide.
Zhur.ob.khim. 31 no.7:2090-2092 '61. (MIRA 14:7)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.
(Indium oxide) (Vapor pressure)

24420
S/079/61/031/007/002/008
D229/D305

52200

AUTHORS:

Shchukarev, S.A., Semenov, G.A., Rat'kovskiy, I.A.,
and Perevoshchikov, V.A.

TITLE:

Determination of saturated vapor pressures of indium
oxide

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 7, 1961,
2090 - 2092

TEXT: This is a report on determining very low saturated vapor
pressure of indium oxide by the flow method using a radioactive
tracer - In^{114} in the range of temperature from 1290° to 1490°. It
is known (Ref. 1: S.V. Bleshinskiy, and V.F. Abramova, Khimiya in-
diya. Izd. AN Kirgizsk SSSR, 1958) that the ignition of In_2O_3 at
the temperature up to 1200° did not lead to a change in weight of
indium oxide. The attempt to measure the vapor pressure of In_2O_3
at 1060° using the flow method was unsuccessful. In view of the
above it was decided to determine vapor pressure of In_2O_3 by a

Card 1/4

Determination of saturated ...

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flow method at much higher temperatures (1290°-1490°) with air as a carrier gas suppressing the dissociation of indium oxide. Air was found to be satisfactory, as it is proved (Ref. 1: Op.cit.) that indium nitride if formed, burned up in the air, forming oxide. It was assumed that indium oxide vapor is monomeric. After describing the indium oxide preparation method, the authors note that its radio-chemical purity was checked by a γ -spectrometer (illustrated in this article). The rate of flow of carrier gas at its saturation with In_2O_3 vapor was determined for three temperatures: 1290°, 1445° and 1490°C. The values of molar concentration at the flow rates less than 4 ml/min were not taken into account when extrapolating for zero rate, as they showed discrepancies. The flow rate of 5-7 ml/min was chosen. The values of indium oxide molar concentration obtained by extrapolation for the zero rate and measured at the low rate of 5-7 ml/min varied roughly by 8%. Saturated vapor pressure of indium oxide was measured in the temperature range of 1290° - 1490°C and the dependence of the saturated vapor pressure of indium oxide on temperature is shown in Fig. 2. Results were taken from

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D229/D305

Determination of saturated ...

three independent experiments with preparations of different total activity. The total determination error of indium oxide vapor pressure consists of: Determination error of total activity of preparation ($\pm 1.2\%$), error in measuring activity ($\pm 6\%$), determination error of preparation temperature ($\pm 0.5\%$), error in measuring volume of passed carrier gas ($\pm 2\%$). The determination error of indium oxide vapor pressure calculated on the basis of these values amounts to 6%. Enthalpy of sublimation of indium oxide was found to be 118 ± 2 Kcal/mol. Entropy of the process of sublimation of In_2O_3 was calculated taking the heat capacity values of indium oxide in the temperature range of $0^\circ-100^\circ C$ (Ref. 1: Op.cit.), as no value of C_p of In_2O_3 at high temperature could be found in technical literature. Calculated S°_{298} amounts to 42 ± 1 Kcal/mol. degree. There are 2 figures, 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova (Leningrad State University imeni A.A. Zhdanov)

SUBMITTED: June 21, 1960

Card 3/4

ACC NR: AT7003993

SOURCE CODE: UR/0000/66/000/000/0048/0055

AUTHOR: Perevodchikov, V. I.; Pokras, A. N.; Skibityanskiy, D. A.

ORG: none

TITLE: Electron gun with a current of 40-50 amp intended for pulsed linear accelerator

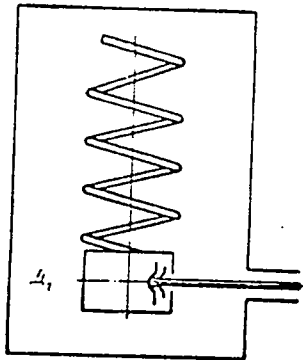
SOURCE: Mezhevuzovskaya konferentsiya po elektronnyim uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 48-55

TOPIC TAGS: linear accelerator, electron gun

ABSTRACT: The design, construction, and testing of a special electron gun intended for operation in the linear accelerator of the Institute of Nuclear Physics, SO AN SSSR, are briefly reported. An accelerating voltage of 1.5 Mv is developed in a cavity resonator containing the gun chamber suspended from a helix (see figure). No structural insulating member between the first and second anodes is provided. Current density at a spherical cathode is 20 amp/cm². A focusing

Card 1/2

ACC NR: AT7003993



electrode is placed close to the cathode; the first anode is conical, and the second is a flat diaphragm. A sketch shows general construction of the axisymmetrical gun. The cathode is heated by the electron beam (180-360 w, 600 v). Turn-on pulse voltage is applied to the first anode whose breakdown voltage is about 45 kv. During the tests, the accelerating positive pulses were controlled within 0-22 kv. With a heater voltage within 5.5-7 v and a heater current, 25.5-27.5 amp, the cathode temperature was within 1550-1700C. With an electron-bombardment power of 360 w, the gun current was 42 amp. During the first two hours of gun operation, the emission current fell off by 25% and then remained constant for several dozen hrs. Orig. art. has: 7 figures and 1 table.

SUB CODE: 09 / SUBM DATE: 06Mar66 / ORIG REF: 001

Card 2/2

S/109/60/005/009/014/026
E140/E455

AUTHORS: Perevodchikov, V.I. and Kuznetsov, Ye.P.
TITLE: The Possibility of Using Germanium Sulphide
Photoresistances as Television Camera Tube Targets
PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.9,
pp.1478-1483

TEXT: The use of GeS photoresistances in a vidicon-type television camera tube was proposed by Cashman in 1956. The present article presents the results of an experimental study of such photoresistances. An alloy of spectrally-pure germanium with sulphur was evaporated on to a glass base. Approximately stoichiometric proportions were used, where the GeS was separated from the germanium disulphide GeS_2 by sublimation, as well as from oxides and non-reacting residues. Layers were evaporated in vacuum on to glass plates with parallel electrodes 30 mm long with 0.5 mm gap. Resistivity and sensitivity of the photolayer were studied; as functions of the base temperature, the rate of evaporation, the residual gas pressure and the thermal treatment. It was found that the sensitivity and resistivity were not critical, subsequent heat treatment permitting compensation for variation in base

Card 1/3

S/109/60/005/009/014/026
E140/E455

**The Possibility of Using Germanium Sulphide Photoresistances as
Television Camera Tube Targets**

temperature during evaporation. Residual gas pressures up to 10^{-3} mm Hg had practically no effect on the resistivity or the sensitivity. The layers obtained were fairly sensitive, with maximum sensitivity at 590 m μ , in individual layers shifting down as far as 560 m μ . Typical characteristics are shown in Fig.3. Since appreciable absorption occurs at wavelengths below 600 m μ , the sensitivity of the photolayer depends appreciably on its thickness. The temperature characteristics (Fig.4) indicate the presence of intrinsic and impurity conductivities. The width of forbidden zone obtained from the curve is 1.7 to 1.75 eV, the dissociation work of the impurity levels 0.9 to 0.95 eV. Although the layers were stable up to high temperatures, the sensitivity decreased by a factor of 3 between 20 and 60°C, and by a factor of 8 up to 100°C. Vidicon samples were produced approximating to the Soviet type LI-18. A resolution of 500 to 550 lines was obtained. The target had appreciable inertia. With a motion of the test chart across the target at 2 to 2.5 mm/sec

Card 2/3

PEREVOZCHIKOV, V.I.

YUMATOV, K.A.; PEREVOZCHIKOV, V.I.

New photoconductive layers for television pickup tubes with a photoconductive target. Radiotekh. i elektron. 3 no.3:415-420 Mr '58.
(Television--Transmitters and transmission) (MIRA 11:4)
(Photoconductivity)

PEREVODCHIKOV, V.I.; KUZNETSOV, Ye.P.

Possibilities of using GeS photoresistances as targets in television camera tubes. Radiotekh. i elektron. 5 no.9:1478-1483 S '60.

(MIRA 13:9)

(Television camera)

PERLVOZHCHIKOV, Yu.

You have to undertake it the right way. Izobr.i rats. no.6:25-27
Je '60. (MIFA 14:2)

1. Predsedatel' Udmurtskogo oblastnogo soveta Vsesoyuznogo obshchestva
izobretateley i ratsionalizatorov, g. Izhevsk.
(Udmurt A.S.S.R.—Technological innovations)

PEREVOSHCHIKOVA, A.I., prof.

Results of the work of consolidated children's institutions in Udmurtia. Trudy Izhev.gos.med.inst. 13:419-424 '51. (MIRA 13:2)

1. Klinika detskikh bolezney Izhevskogo meditsinskogo instituta.
(UDMURT A.S.S.R.--CHILDREN--HOSPITALS)

PEREVOSHCHIKOVA, A.I., prof.

Angina in childhood. Trudy Izhev.gos.med.inst. 13:425-430 '51.

(MIRA 13:2)

1. Zaveduyushchiy kafedroy detskikh bolezney Izhevskogo meditsinskogo instituta.

(TONSILS--DISEASES)

PEREVOSHCHIKOVA, A. I.

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SO: U-4110, 17 July 53, (Letovis 'Zhurnal 'nykh Statey, No. 19, 1949).

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"Children of the Udmurt Autonomous Socialist Republic." Thesis for Degree of Dr. Medical Sci. Sub 24 Apr 50, Moscow Medical Inst, Ministry of Health RSFSR

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PERVOSHCHIKOVA, A.I., professor; **KOROTKOVA, K.V.**, kandidat meditsinskikh nauk; **MYAKISHEVA, L.S.**

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1. Iz kliniki detskikh bolezney Izhevskogo meditsinskogo instituta
(dir. - dotsent I.V.Olyunin)

(RICKETS, compl.

pneumonia, mutual exacerbation of both cond. in child.)

(PNEUMONIA, etiol. and pathogen.

rickets, mutual exacerbation of both cond. in child.)

PEREVOSHCHIKOVA, G.F.

Blood cholesterol in epilepsy. *Vop.psikh.i nerv.* 8:2,2-254
'62. (MIRA 17:4)

1. Iz y-go nervno-organicheskogo otdeleniya (zav. otdeleniyem
S.P.Vorob'yev) Psikhonevrologicheskogo instituta imeni
V.M.Bekhtereva (direktor - B.A.Lebedev).

PEREVODCHIKOVA, N.I.; PLATONOVA, G.N.; PUKHAL'SKAYA, Ye.Ch.

Chemotherapy of malignant tumors. Vest. AMN SSSR 18
no.3:49-66 '63.

(MIRA 17:10)

PEREVOLOCHINA, T. N.

Perevolochina, T. N. - "A narrow punctate in malaria", Trudy Astrakh. gos. un-
-in-ta, Vol. IX, 1948, p. 20-21.

SC: W-3747, 11 March 53, (Iateris 'Zhurnal 'nykh Statey, No. 3, 1949).

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Dissertation: "Children of the Udmurt Autonomous Socialist Republic."
24/4/50

Moscow Medical Inst. Ministry of Health

RSFSR

SO Vecheryaya Moskva
Sum 71

AGEYEVA, A.N.; GOL'DIN, L.S.; ZAKHAROVA, V.V.; PEREVOSHCHIKOVA, G.F.

Some modern methods in morphological investigation and their use
in a clinic for nervous and mental diseases, Trudy Gos. nauch.-
issl. psikhonevr. inst. no.20:29-34 '59. (MIRA 14:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy psikhonevrologicheskiy
institut imeni V.M. Bekhtereva, Leningrad.
(NERVOUS SYSTEM--DISEASES)

PEREVOSHCHIKOVA, K. A.

USSR^A medicine - Nucleins
Medicine - Uterus, Cervix

Mar/Apr 1948

"The Morphology of Phosphorous Exchange Under Normal and Pathological Conditions: II, Ribonucleic Acid in Inflammation, Necrosis and Cancer of Human Cervix Uteri," Prof A. G. Andres, Inst of Normal and Path Morph; K. A. Perevoshchikova, Cent Oncol Inst imeni ~~X~~ A. Gertsen, 8 pp

"Arkhir Patologii" Vol X, No 2

Treats problem of detection of the content and distribution of ribonucleic acid histochemically in the various cellular elements of one organ, the human cervix uteri, under several pathological conditions: inflammation, necrosis, epithelial hyperlasia, and cancer.

PA 66T83

11-6

CA

Some properties of proteins of cellular nuclei I. B. Zbarski and K. A. Perevoshchikova, *Doklady Akad. Nauk S.S.S.R.* 60, 77-80(1948) Nuclei from human liver cells were most satisfactorily isolated by using a citrate buffer at pH 6.1-6.2, at which concn. of citric acid the nuclei are undamaged and are free of extraneous materials. Extn. of the nuclei by *M* NaCl led to extn. of a nucleoprotein, which was sepl. into desoxyribonucleic acid and protein. The extn. residue contains 2% tryptophan and is free of desoxyribonucleic acid and appears to be a protein. Extn. of the nuclei with 0.24 N HCl resulted in extn. of a protein having histone properties; the ext. was soltd. by NaCl and gave a ppt. of the histone-HCl, which did not dissolve on 24-hr. dialysis against water, was sol. in 0.05 N HCl forming a viscous soln., was pptd. by NH₄OH, and was free of tryptophan; it contained 17% N and under 2% P. The heparin-histone-HCl soln. on injection into water gave gelatinous threads which with 0.001 *M* adenosinetriphosphate showed sharp contraction. Very low concns. of NaCl, KCl, MgSO₄, and CaCl₂ gave only small contractions, while 0.01-0.1 *M* concns. gave sharp contractions (bivalent salts are more potent). Thymonucleic acid causes initial swelling, then a shrinkage of the fibers. Contractions in phosphate buffers showed that it takes place at pH values over 5.5 and rises with rising pH. The histone is sol. in *M* solns. of NaCl, KCl, CaCl₂, and MgSO₄. G. M. Kosolapoff

ASB-51-A METEOROLOGICAL LITERATURE CLASSIFICATION

SEARCHED INDEXED SERIALIZED FILED

APR 1950

CA

11A

Contractile properties of cell nuclei proteins 1. H. Zbarskii and N. A. Peregudchikova (Central Oncological Inst., Moscow). *Biokhimiya* 10, 112-24(1931); cf. C.A. 42, 6399a.—Nuclei from human tissue were sepd. from the cytoplasm by $M/230$ citrate buffer of pH 6.1-6.2. In the case of rat sarcoma, $0.005 M$ citrate buffer of pH 6.1-6.2 was employed. Complete details for the nuclei seps are given; the method is regarded as superior to that worked out by Deance and Heyer (C.A. 42, 6225a). The histone was catd. from the nuclei with $0.24 N HCl$, by Kossel's method (*Z. physiol. Chem.* 8, 511(1884)). The high viscosity shown by histone sols. was a property of the protein itself, and was not caused by impurities of nucleic acid. By blowing the viscous histone soln. with a capillary pipet into distd. water, or into very dil. salt solns., jellylike threads were obtained. In contrast to the actomyosin threads, the histone threads were not elastic. The latter sharply contracted sidewise and lengthwise when placed in a soln. of $0.001 M$ Na adenosine triphosphate (ATP). Salt solns., $0.1 M$, also caused about the same degree of contraction of the histone threads, but $0.001 M$ salt solns. caused only a slight contraction. The action of ATP (contraction of histone threads to 50% of their original length in $0.001 M$ ATP soln.) is therefore regarded as specific. Histone threads from liver nuclei that had contracted by the action of $0.1 M$ KCl returned to their original condition when placed in distd. water. Threads contracted by $0.001 M$ ATP did not swell up again in distd. water. Histone threads from malignant tumors contracted more slowly and to a lesser extent than the threads from normal tissues. Unlike actomyosin, the contractile nuclei protein did not possess ATP-ase activity. The amino acid compn. of histones and total nuclei proteins are listed in 2 tables. It is suggested that the contractile properties of nuclei proteins play an important part in the mechanism of mitosis. H. Priestler

1851

2A

118

The nature of the contractile substance in the cell nucleus. I. B. Zbarskii and K. A. Perevoschikova (Oncol. Inst., Moscow). *Biokhimiya* 16, 347-55(1931); cf. *C.A.* 45, 7013d.—A complex of a histone and an acid protein is the contractile substance of the cell nucleus. The histone is free of tryptophan, is sol. in H_2O , difficultly sol. in 0.05-0.5 *M* NaCl, and again sol. in 0.5-1.4 *M* NaCl. The proteins separately are without effect. The contractile protein can be prepd. by mixing the histone and acid protein from the cell nuclei of the same or different organs of man and animals, or even by mixing the nuclei of different organs from different animals. If one or both components of the complex is derived from the nuclei of malignant tissues, the threads possess less contractile ability. The acid protein of the cell nuclei can be replaced by a nonnuclear, cytoplasmic acid protein. A contractile protein is obtained by combining a liver histone with egg albumin. H. P.

PEREKOSHCHIKOVA, K.A.

USSR:

The amount of histones in the cell nuclei of tumors, of the normal organs, and of the embryonic tissues. K. A. Perekoshchikova. *Voprosy Mas. Khim.* 6, 123-124 (1954). *Voprosy Mas. Khim.* 1954, No. 23733.—The amt. of histones (I) in the cell nuclei of tumors and of normal and embryonic tissues was detd. by different methods. From the nuclei isolated in a neutral medium, nucleoproteins were extd. by 1M NaCl, pptd. by dilg. the ext. to 0.14M NaCl and purified by 3-fold repptn. I was extd. from the nucleoproteins by 0.24N HCl, and the relative amt. of N to that of the total N of the nuclei was then detd. The amt. of I in cell nuclei of the liver tumor and the normal liver tissues was 0.2 and 3.2%, resp. However, by the method used only a small part of the total amt. of I is detd. Therefore, the total amt. of I in the nuclei isolated in a neutral medium was detd. indirectly in the fraction of non-repptd. nucleoproteins and the amt. of deoxyribonucleic acid was calcd. from the P content. The residual protein was taken as I. The amts. of I in the cell nuclei of liver tumor (5.3-5.8%) and that of gastric cancer (6.0-5.8%) were significantly below that in the normal liver tissues (14-19%). In an acidic medium, using 5% soln. of citric acid with and without pepsin added, a significant amt. of the nuclear I was lost, I is extd. by 4% AcOH soln. to a very small extent. When this soln. was used for extn. the amt. of I found in the cell nuclei of the gastric cancer tissues was lower (7.6%) than the amts. in the cell nuclei of the liver (17%), spleen (11.6%), liver of an embryo (27.33%) spleen of an embryo (23.27%) and of the chorion (21.7%), resp. When 0.1N H₂SO₄ was used, I was extd. immediately. Qualitatively there is no difference between I obtained from the tumor tissues and from the normal organs. Thus, by using these different methods, it was shown that the amt. of I in the cell nuclei of tumor tissues is lower and that of embryonic tissues is higher than that in the cell nuclei of normal tissues.

B. Wierbicki

~~PEREVOSHCHIKOVA, K. A.~~

PEREVOSHCHIKOVA, K. A.

USSR

The effect of histone upon the growth of experimental sarcoma of mice. I. I. Zharskii and K. A. Perevoshchikova. *Sov. J. Biol. Chem.* 38, No. 10, 1121 (1964).

The cellular nuclei of malignant tumors contained much less histone than the normals. The lethal dose of histones for mice was 357-400 mg./kg. irrespective of the source—acromial or carcinomatous origin. Histone was divided into ammoniacal and ammoniacal-insol. fractions. The lethal dose of the ammoniacal fraction was 290 mg./kg., that of the other fraction 723 mg./kg. Both fractions delayed the growth of tumors, the ammoniacal being more active and also more toxic.

A. S. Mirkin

PEREVOSCHIKOVA K.A.

md Inclusion of labeled amino acids into proteins of whole tissue, cell nuclei and nuclear fractions of experimental tumors and normal organs. I. B. Zharzil and K. A. Perevoschikova. *Doklady Akad. Nauk S.S.S.R.* 107, 285-B (1956).—The rate of inclusion of labeled amino acids (methionine, tyrosine, and glycine) into proteins of cell nuclei of normal organs is but slightly below that occurring in proteins of whole tissues (liver and spleen of rats). In tumor tissues (sarcoma and hepatoma) the nuclei possess a much lower ability to incorporate such acids into protein matter; the rate of renewal of acidic and residual proteins is especially low. In sarcoma M, the distribution of radioactive tracers shows max. concn. in the nucleoprotein fraction of the nucleus and this activity is mainly due to non-histone protein. G. M. Kosolapoff

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ZBARSKIY, I.B.; PEREVOSHCHIKOVA, K.A.

Participation of the nuclei of normal and tumor cells in protein synthesis studies by the in vivo incorporation of labeled amino acids [with summary in English]. Biokhimiia 22 no.1/2:295-304 Ja-F '57.
(MLRA 10:7)

1. Biokhimiicheskaya laboratoriya Gosudarstvennogo onkologicheskogo instituta im. P.A.Gertsena, Moskva.

(AMINO ACIDS, metabolism,

inclusion into normal & tumoral cell nucleus (Rus))

(NEOPLASMS, metabolism,

amino acid inclusion into cell nucleus in tumor tissue (Rus))

(CELL NUCLEUS, metabolism,

amino acids, inclusion in normal & tumoral nuclei (Rus))

Р. С. ВОСНУХИНА, К. А.

Stimulation of incorporation of some amino acids into proteins of normal and tumor cells by the products of decomposition of ribonucleic acids. *Trav. Inst. Chim. Acad. Sci. USSR* 1964, 10, 100-104.

As demonstrated with the use of amino acids, the stimulation occurs in the cells of liver and in cells broken by supersonic vibrations, as well as in normal liver slices and other normal tissues. G. M. K.