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plant parameters [illegible] should be taken into account. A second-order ACS 18

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AVEN, O.A.; DVORETSKIY, V.M.; DOMANITSKIY, S.M.; ZALMANZON, L.A.; KRASSOV, I.M.; KRUG, Ye.K.; TAL', A.A.; KHOKHLOV, V.A.; BULGAKOV, A.A.; DEMIDENKO, Ye.D.; BERNSHTEYN, S.I.; YEMELIYANOV, S.V.; LERNER, A.Ya.; MEYEROV, M.V.; PEREL'MAN, I.I.; FITSNER, L.N.; CHELYUSTKIN, A.B.; ZHOZHIKASHVILI, V.A.; IL'IN, V.A.; AGEYKIN, D.I.; GUSHCHIN, Yu.V.; KATYS, G.P.; MEL'TTSER, L.V.; PARKHOMENKO, P.P.; MIKHAYLOV, N.N.; FITSNER, L.N.; PARKHOMENKO, P.P.; ROZENBLAT, M.A.; SOTSKOV, B.S.; VASIL'YEVA, N.P.; PRANGISHVILI, I.V.; POLONNIKOV, D.Ye.; VOROB'YEVA, T.M.; DEKABRUN, I.Ye.

Work on the development of systems and principles of automatic control at the Institute of Automatic and Remote Control during 1939-1964. Avtom. i telem. 25 no. 6:807-851 Je '64. (MIRA 17:7)

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

ACCESSION NR: AP4041463 S/0103/64/025/006/0881/0886

AUTHOR: Yemel'yanov, S. V.; Taran, V. A. (Moscow)

TITLE: Stabilizing the variable-structure automatic-control system by inertial units with a variable time constant

SOURCE: Avtomatika i telemekhanika, v. 25, no. 6, 1964, 881-886

TOPIC TAGS: automatic control, automatic control theory, variable structure automatic control

ABSTRACT: In the authors' previous works (referenced in the article), it was shown that instead of using an error-signal derivative, the error signal may be transformed by an inertial (relaxation) unit, the time constant T of the unit being limited by stability and transient-response conditions. Shortening the time constant makes the system more sensitive to the variation of parameters of the correcting units. The limitations imposed on T can be alleviated by step-changing

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ACCESSION NR: AP4041463

the transfer factor of the inertial unit simultaneously with changing the system structure. In the present article, another correction method is suggested for desensitizing an automatic-control system. This method involves a step-changing of the time constant T of the inertial unit. The dynamics of a second-order free-migrating system is investigated. The domain of existence and the equation of motion of the sliding mode are considered, as well as conditions of stability and aperiodic motion. The step-time-constant method is recommended for the case when $1 - \lambda T > 0$ (with high values of λ) is the fundamental limitation. For the general case, a switching of both the gain and the inertial-unit time constant is recommended. Orig. art. has: 3 figures and 34 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: DP, IE NO REF SOV: 003 OTHER: 000

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APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

ACCESSION NR: AP4019965 S/0020/64/154/006/1294/1296

AUTHORS: Petrov, B.N. (Academician); Yemel'yanov, S.V.; Utkin, V.I.

TITLE: Principle for designing invariant automatic control systems with variable structure

SOURCE: AN SSSR. Doklady*, v. 154, no. 6, 1964, 1294-1296

TOPIC TAGS: automatic control, automatic control system, variable structure, invariant control system, low order astatism, invariance theory, mathematical determination

ABSTRACT: An attempt was made to make use of some properties of an automatic control system with a variable structure for assuring a full reproducibility of the controlled coordinate of the manipulated variable. It was assumed that the disturbance and manipulated variables belong to a sufficiently wide class of functions - a class of polynomials of any, but finite, degree of time. The control principle should be formulated without a change in the disturbance or some internal coordinates of the objects. Suppose that the motion of an automatic control system in the domain G of an n-dimensional

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ACCESSION NR: AP4019965

space $(x_1, \ldots, x_n)$ is described by the system of differential equations

$$\frac{dx}{dt} = f(x, \vec{\psi}, t), \tag{1}$$

where

$$\psi_i(x) = \begin{cases} \omega_i & \text{for } \sigma x_i > 0, \\ \lambda_i & \text{for } \sigma x_i < 0, \end{cases} \quad (i = 1, 2, \ldots, n-1)^*; \tag{2}$$

ω_i, λ_i, c_i are constants, $c_n = 1$. It is supposed that the object's control is realized by an astatic controller with proportional feedback. In that case, a_i are values which are linearly dependent upon k- the coefficient of the controller's proportional feedback,

$$\Phi(t) = kG(t) + pG(t), \qquad G(t) = \sum_{i=0}^{m} Q_i(p) g_i(t). \tag{3}$$

The domain U is defined by the relations

$$c\frac{dx}{dt} > 0 \text{ for } \sigma < 0, \qquad c\frac{dx}{dt} < 0 \text{ for } \sigma > 0, \tag{4}$$

where $c = (c_1, \ldots, c_n)$. According to (1), the condition (4) can be written in the form

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ACCESSION NR: AP4019965

$$\sum_{i=1}^{n-1} c_i x_{i+1} + \left[-\sum_{i=1}^{n} a_i x_i - \sum_{i=1}^{n-1} \psi_i(x) x_i + \Phi(t)\right] > 0 \quad \text{for } \sigma < 0$$

$$\sum_{i=1}^{n-1} c_i x_{i+1} + \left[-\sum_{i=1}^{n} a_i x_i - \sum_{i=1}^{n-1} \psi_i(x) x_i + \Phi(t)\right] < 0 \quad \text{for } \sigma > 0 \qquad (5)$$

As can be seen from (5) the boundaries of the domain U change in time with a change in the value of $\Phi(t)$. The commutated proportional feedback $k(\mu, x)$ should have the form

$$k(\mu, x) = \begin{cases} k_1 & \text{for } \sigma\left(\mu + \sum_{i=1}^{n} b_i x_i\right) < 0, \\ -k_2 & \text{for } \sigma\left(\mu + \sum_{i=1}^{n} b_i x_i\right) > 0^*, \end{cases} \qquad (6)$$

Orig. art. has: 1 figure and 8 formulas.

ASSOCIATION: Institut avomatiki i telemekhaniki (Institute of Automation and Telemechanics)

SUBMITTED: 29Nov63 ATD PRESS: 3046 ENCL: 00

SUB CODE: IE NO REF SOV: 004 OTHER: 000

Card 3/3

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

ACCESSION NR: AP4022951 S/0020/64/155/001/0061/0064

AUTHOR: Petrov, B. N. (Academician); Yemel'yanov, S. V.; Kosty*leva, N. Ye.

TITLE: Control of linear objects with varying parameters

SOURCE: AN SSSR. Doklady*, v. 155, no. 1, 1964, 61-64

TOPIC TAGS: cybernetics, control theory, automatic control, linear object control, varying parameter, automatic control system

ABSTRACT: This is an investigation of a linear-object automatic control system with varying parameters whose differential equation of motion has the form

$$Q(p)\, x_1 = P(p)\, z_{m-1}, \qquad (1)$$

where x_1 is the controlled coordinate; z_{m-1} is the action control;

$$Q(p) = \sum_{l=0}^{n} a_{l+1}(t) p^l, \quad a_{n+1} = 1;$$

$$P(p) = \sum_{l=0}^{m-1} b_{l+1}(t) p^l, \quad b_m = 1;$$

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

ACCESSION NR: AP4022951

$$p = \frac{d}{dt}; \quad n > m;$$

$$a_i(t), b_i(t)$$

are some analytic time functions where

$$a_{imin} < a_i < a_{imax}$$

$$b_{imin} < b_i < b_{imax}.$$

The problem is to synthesize the control principle in such a way that the dynamic properties of the system would change only slightly with a change in $a_i(t)$ and $b_i(t)$ over the specified range. This was accomplished in this study by formulating a control principle in which a domain existed in the coordinate space $x_1, x_1, \ldots\ldots\ldots x_1^{(n-1)}$ wherein the motion does not depend upon the coefficients $a_i(t)$ and $b_i(t)$. This is attained by cutting-in a passive filter(2)with local commutated feedback in sequence with the correcting device(1)(see Fig. 1 , of the Enclosure). Orig. art. has: 1 figure and 11 formulas.

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

ACCESSION NR: AP4022951

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

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SUB CODE: IE, MA NO REF SOV: 004 OTHER: 000

Card 3/4

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

BUROVOY, I.A.; YEMEL'YANOV, S.V.; LODYSEVA, M.S.; LUNKIN, B.V.

Static regulator with variable structure. Sbor. nauch. trud. Gintsvetmeta no.21:400-408 '64. (MIRA 18:8)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

BUROVOY, I.A.; YEMEL'YANOV, S.V.

Synthesis of automatic control systems with a variable structure for the regulation of heterogenous thermochemical processes limited by the rate of surface chemistry reactions. Sbor. nauch. trud. Gintsvetmeta no.21:373-387 '64.

Synthesis of automatic control systems with a variable structure for the regulation of heterogenous thermochemical processes in the vicinity of the extreme value of the rate of reaction constant. Ibid.:388-399 (MIRA 18:8)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

BUROVOY, I.A.; YEMEL'YANOV, S.V.; LODYSEVA, M.S.

Synthesis of automatic control systems with a variable structure for regulating heterogenous thermochemical processes when the constant of the speed of reaction depends on temperature. Sbor. nauch. trud. Gintsvetmeta no.21:359-372 '64. (MIRA 18:8)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, S.V.

Principles of the theory of automatic control systems of variable structure. Sbor. nauch. trud. Gintsvetmeta no.21: 307-343 '64. (MIRA 18:8)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

BUROVOY, I.A.; YEMEL'YANOV, S.V.; ZELENTSOV, O.P.; LUNKIN, B.V.; PAVLIN, I.M.

Integral regulator with variable structure and minimal changes of controlling effects. Sbor. nauch. trud. Gintsvetmeta no.21:409-417 '64. (MIRA 18:8)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

BUROVOY, I.A.; YEMEL'YANOV, S.V.; LODYSEVA, M.S.; RASSMOTROV, A.A.

Integral discrete regulator with variable structure. Sbor. nauch. trud. Gintsvetmeta no.21:418-428 '64.

Regulator of the quality of transient processes. Ibid.:429-440 (MIRA 18:8)

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structure second-order servo system is considered. A

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L 2401-66 EWT(d)/EPF(n)-2/EWP(v)/EWP(k)/EWP(h)/EWP(1) IJP(c) WW/BC

ACCESSION NR: AP5022973 UR/0103/65/026/008/1336/1347
62-501:519.25

51
B

AUTHOR: Bermant, M. A. (Moscow); Yemel'yanov, S. V.; Taran, V. A. (Moscow)
44 44 44

TITLE: The motion of variable structure systems under sliding conditions

SOURCE: Avtomatika i telemekhanika, v. 26, no. 8, 1965, 1336-1347

TOPIC TAGS: phase shifter, filter, automatic control system, automatic control design
9,44 14

ABSTRACT: Numerous papers have dealt in recent years with variable-structure automatic control systems in which the structure and regulator parameters vary in accordance with a chosen law as a function of the state of the system. Such systems (as well as those with discontinuously varying parameters) are capable of operating under sliding conditions. The present paper develops a general approach to the study of the dynamics of systems with variable structural analysis of systems with infinite amplifications and of relay systems developed by M. V. Meyerov (Sintez struktur sistem avtomaticheskogo regulirovaniya vysokoy tochnosti, Fizmatgiz, 1959) and Ya. Z. Tsypkin (Teoriya releynykh sistem avtomaticheskogo regulirovaniya, Gostekhizdat, 1955). The authors discuss the choice of the

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ACCESSION NR: AP5022973

switching function, the structural transformation of systems with variable structure, the equations of motions of such systems under sliding conditions, the existence conditions for sliding operations, the independence of the sliding motion of the systems on the parameters of the object, the use of switching phase-shifting filters, the transformation of the structure of the switching filters, the conditions for the existence of the sliding operation of systems with variable parameters containing switching filters, and the types of transient processes during sliding operation. Results show that the use of structural transformation methods, based on the analogy between the systems with variable structure and relay systems under sliding conditions, leads to a significantly simplified treatment of the variable systems under sliding conditions. Orig. art. has: 71 formulas and 4 figures.

ASSOCIATION: None

SUBMITTED: 18Mar64 ENCL: 00 SUB CODE: IE

NO REF SOV: 012 OTHER: 000

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APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, S.V. (Moskva); FEDOTOVA, A.I. (Moskva)

Reproduction of the control action $g(t) = \alpha_n t^n$ by astatic servosystems with variable structure. Avtom. i telem. 26 no.1:67-72 Ja '65. (MIRA 18:4)

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L 23949-66 EWT(d)/EWT(m)/EWP(v)/EWP(k)/EWP(h)/EWP(1) JD

ACC NR: AP6005313 (A) SOURCE CODE: UR/0413/66/000/001/0049/0049

INVENTOR: Burovoy, I. A.; Yemel'yanov, S. V.; Kopystyanskiy, B. V. 61

ORG: none

TITLE: Nonlinear contactless control device. Class 21, No. 177504 [announced by the State Scientific Research Institute of Nonferrous Metallurgy (Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 49

TOPIC TAGS: control circuit, logic circuit, automatic control system

ABSTRACT: The proposed contactless controller (see Fig.) is intended for objects with interacting parameters in a system with a time lag. It contains a comparison unit, a shaper of the first difference of the error signal (a servomechanism whose motor is controlled by an OR-NOT circuit), and a device for shaping a signal proportional to the duration of the functioning of the actuating mechanism. The shaping device has a transformer output. In order to improve the response of the system and the accuracy of the output transformer, an additional winding is included in the output transformer. The winding is connected to the control logical element of the first-difference shaper and to two memory elements. The memory elements are interconnected

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ACC NR: AP6005313

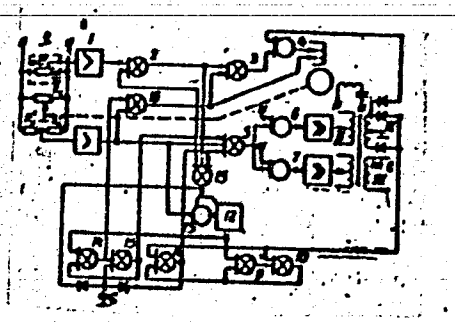

Fig. 1. Nonlinear contactless control device

1 - Amplifier; 2, 3, 6, 7 - logical elements; 4 - power amplifier; 5, 9, 10, 11, 15, 14, 16 - logical elements; 8 - actuating mechanism; 12 - counter; 13 - pulse generator.

through OR-NOT circuits and a pulse counter. The output of the first memory element is connected through an OR-NOT circuit to the logical element of the signal shaper. Orig. art. has: 1 figure. [DW]

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, S.V. (Moskva); FEDOTOVA, A.I. (Moskva)

Astatic reproduction of transcendental functions using servo systems with variable structure. Avtom. i telem. 26 no.3:454-462 Mr '65. (MIRA 18:6)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

L 25880-66 EWT(d)/EWP(v)/EWP(h)/EWP(k)/EWP(l)

ACC NR: AR6003994 SOURCE CODE: UR/0372/65/000/009/G005/G006

56
B

AUTHOR: Petrov, B. N.; Ulanov, G. M.; Yemel'yanov, S. V.

TITLE: Invariance and optimization systems in automatic control with rigid and variable structure

14

SOURCE: Ref. zh. Kibernetika, Abs. 9G34R

REF SOURCE: Tr. II Mezhdunar. kongressa Mezhdunar. federatsii po avtomat. upr., 1963. (T. 1). Teoriya nepreryvn. avtomat. sistem. M., 1965, 214-228. Diskus., 229

TOPIC TAGS: automatic control theory, optimal automatic control, correlation function, error correction, servomechanism

ABSTRACT: The authors consider the invariance of automatic regulation systems in the presence of perturbations which are specified specifically. The invariance conditions obtained on the bases of K(D) transforms are generalized to include the case of statistically specified perturbations. For stationary automatic control systems and stationary perturbations, the conditions of the K(D) transforms with respect to the perturbation turn out to be equivalent to the condition of K(D) transforms with respect to its correlation function. A new principle is proposed for constructing systems that are invariant with respect to continuous functions of the control signal, and ensure the absence of a statistical error. It is shown that when using an open cycle with variable structure it is possible to duplicate without statistical errors a broad class of functions of control action. The considered combined servomechanisms

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

L 25660-66

ACC NR: AR6003994

with variable structure of open cycle are not very sensitive to changes within a certain range of system parameters. Examples of the use of the proposed construction principle of invariant systems are presented. Eight illustrations. Bibliography of 14 titles. V. M. [Translation of abstract]

SUB CODE: 14, 09

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

L 39633-66 GD-2

ACC NR: AP6002879 (A) SOURCE CODE: UR/0286/65/000/024/0038/0039

AUTHOR: Burovoy, I. A.; Yemel'yanov, S.V.; Kopystyanskiy, B.V.

ORG: none

TITLE: Nonlinear controller. Class 21, no. 176969 [announced by the State Scientific-Research Institute of Nonferrous Metals (Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no.24, 1965, 38-39

TOPIC TAGS: automatic regulation, automatic control, nonlinear automatic control, logic circuit, servomechanism, pulse counter

ABSTRACT: 1. The nonlinear controller for controlling inertial objects with interdependent parameters, consisting of a comparator, integrating actuator, logic circuit, and relay servomechanism, showing by coincidence in symbol the error and its derivative, and triggering the final control element across the logic circuit, is characterized by the fact that it has a pulse counter connected to the pulse-couple and logic circuit for the purpose of improving the quality of control be determining the error undercompensation. 2. The controller described in section 1, is characterized by the fact that

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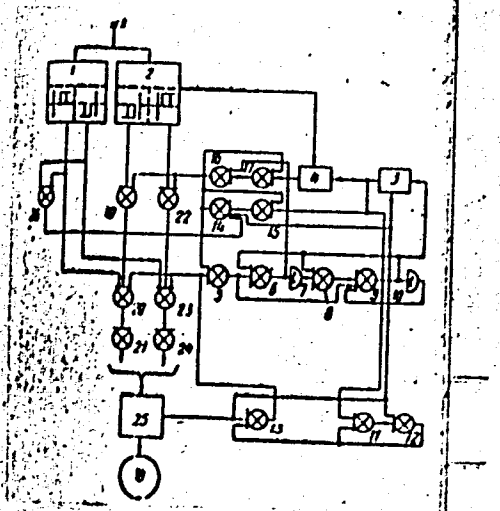
ACC NR: AP6002879

its erasing coils are connected to the relay servomechanism for the purpose of disintegrating the data in the counter. 3. The controller described in sections 1 and 2 is characterized by the fact that the pulse-couple is connected to the logic circuit that triggers the actuator only for the pulse-couple impulse duration for the purpose of obtaining a more complete error undercompensation.

1. relay unit; relay servomechanism;
3, and 4. pulse counters;
5,6,8,9,11-17,19-24 and 26. logical elements with "OR - NO" function;
18. final control element;
25. power amplifier



SUB CODE: 09,13/ SUBM DATE: 02Sep64

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.

USSR/Electronics - Receivers

Card : 1/1

Authors : Nefedov, A., and Emel'yanov, V.

Title : A "1-V-1" Battery-Type Set

Periodical : Radio, No. 4, 48 - 51, April 1954

Abstract : The article gives a description of a battery-type receiving set assembled on the principle of a "1-V-1" circuit, i.e. a radio set with a single-stage radio-frequency amplifier, a vacuum-tube type detector, and a single-stage audio-frequency amplifier. The general design of the set and its wiring diagram are given; the mounting of the set, its component parts, the sources of power supply, and the method of tuning are described in detail. One circuit diagram, and 7 other diagrams, illustrating certain details and the general view of some of the component parts, are also shown.

Institution : ....

Submitted : ....

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.

USSR/ Electronics - Combination radios

Card 1/1 Pub. 89- 22/27

Authors : Nefedov, A., and Emel'yanov, V.

Title : A single-tube radiola

Periodical : Radio 2, 52-55, Feb 1954

Abstract : A single-tube "radiola", a radio receiver-record player combination, is described. It easily picks-up all three local stations operating on the 1734, 544.4 and 344 meters wave length (173Kc, 560Kc, 872Kc). It also features a push-bottom dialing device. Diagrams; drawings; circuit diagram.

Institution: .....

Submitted: .....

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YUSHKOV, V.; YEMEL'YANOV, V.

Complete modernization of fire-tube boilers. Mias.ind.SSSR 32 no.6:25-27 '61. (MIRA 15:2)

1. Gosplan RSFSR.

(Boilers)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.

First steps of telomers. Znan.sila 35 no.4:38-41 Ap '60. (MIRA13:8)

(Polymerization) (Plastics)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.

Tending an open-hearth furnace independently. Prof.-tekh. obr. 13 no.11:17-18 N '56. (MLRA 9:12)

1. Zamestitel' direktora remeslennogo uchilishcha no.47, Sverdlovskaya oblast'.
(Open-hearth furnaces)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.

Science and life (to be continued). Nauka i zhizn' 30 no.9: 19-21 S '63. (MIRA 16:10)

1. Chlen-korrespondent AN SSSR.

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

TSIREL'SON, N.; LISITSIN, Yu.; KEROV, M.; YEMEL'YANOV, V.; ZOLOTINA, V.; SHISHOVA, I.

More on the reducing of losses in the live weight of cattle. Mias. ind. SSSR 33 no.4:30-31 '62. (MIRA 17:2)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy promyshlennosti.

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

KOVALENKO, P.P., prof.; YEMEL'YANOV, V.A., assistent

Homotransplantation of frozen and cooled cartilage; Stomatologiia 40 no.4:27-28 Jl-Ag '61. (MIRA 14:11)

1. Iz kafedry obshchey khirurgii (zav. - prof. P.P.Kovalenko) Rostovskogo-na-Donu meditsinskogo instituta.
(CARTILAGE--TRANSPLANTATION)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

MOLOTKOV, V.G., prof.; YEMEL'YANOV, V.A., dotsent

Pathomorphological changes in the lungs resected due to chronic tuberculosis. Trudy SMI 16:37-51 '63. (MIRA 18:1)

1. Iz kafedry patologicheskoy anatomii (zav. - kafedroy prof. V.G. Molotkov) i gospital'noy khirurgii (zav. - kafedroy prof. A.N.Kartavenko) Smolenskogo gosudarstvennogo meditsinskogo instituta.

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

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APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

DMITRIYEV, I.V.; YEMEL'YANOV, V.A.; ZENKEVICH, V.B.

Technical conference in the Moscow Power Engineering Institute.
Prom.energ. 16 no.9:56-57 S '61. (MIRA 14:8)
(Moscow--Power engineering)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A., inzh.

The S.M.Kirov "Elektrosila" Plant works toward the electrification of our country. Vest. elektroprom. 32 no.6:1-5 Je '61. (MIRA 16:7)

(Electric equipment industry)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

35416

S/170/62/005/004/007/016
B102/B104

10.1200

AUTHORS: Yemel'yanov, V. A., Zhavrid, G. P.

TITLE: A method of numerical solution of problems arising in optical investigations of axisymmetric inhomogeneities

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 4, 1962, 64 - 70

TEXT: A method is proposed for calculating the density distribution in axisymmetric gas flows from the interference spectra of the axisymmetric bodies in the flows. If the density distribution is known, problems of heat- and mass exchange, heat conduction and aerodynamic forces can be solved. The calculation technique suggested allows quick and accurate calculation of density distributions from the shift $S(y,z)$ of interference bands and the angles of deviation $E(y,z)$ of light rays obtained from interferograms and schlieren photographs. The formulas used read

$$\rho(\bar{r}_l) - \rho_0 = \frac{\lambda}{k} \sum_{\mu=l-1}^{2N-1} \gamma_{l\mu} S(r_\mu). \qquad (4) \text{ and}$$

Card 1/3

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

$$\rho(\bar{r}_i) - \rho_0 = \frac{1}{k} \sum_{\nu=1}^{2N-1} \beta_{i\nu} E(\bar{r}_\nu). \qquad (7)$$

where $\bar{r}_i = y/R = i/2N$ ($i = 1,2,\ldots 2N-1$), y is the coordinate of the entrance of the light ray into the inhomogeneity of radius R, r is the running coordinate, ρ_0 the density at the boundary of the inhomogeneity, k the Gladstone-Dale constant, and λ the light wavelength. The reduction of the calculation time is due to the possible reduction of the number N of zones. The coefficients $\gamma_{i\mu}$ and $\beta_{i\mu}$ are tabulated for N = 10. The applicability of the method was checked numerically and compared with experimental results. The agreement was satisfactory. Calculations were carried out for N = 5, 10, 25, and 50; N = 50 is only needed if $s(r)$ and E(r) display sudden changes. There are 1 figure, 3 tables, and 5 references: 1 Soviet and 4 non-Soviet. The two references to English-language publications read as follows: F. Bennet et al. J. Appl. Phys. 23, No. 4, 453, 1952; E. F. Geirnee, J. Appl. Phys. 26, No. 7, 918, 1955.

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

A method of numerical solution... S/170/62/005/004/007/016
B102/B104

ASSOCIATION: Institut matematiki i vychislitel'noy tekhniki AN BSSR, g. Minsk (Institute of Mathematics and Computer Technique AS BSSR, Minsk)

SUBMITTED: July 15, 1961

Card 3/3

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

10.1410

S/170/63/006/001/011/015
B112/B186

AUTHOR: Yemel'yanov, V. A.

TITLE: On the possibility of the interferometric investigation of gas inhomogeneities with shock-compression density distribution

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 6, no. 1, 1963, 79-86

TEXT: An investigation is made of the effect of a compression shock on the accuracy of the density determination in axially symmetric supersonic flows. The density ϱ and the displacement S of the interference band are connected by the relation

$$\rho(r_i) = \rho_0 + \frac{\lambda}{k} \sum_{l=1}^{N-1} \alpha_{l,i} S(r_l). \qquad (1).$$

A compression shock $\Delta\varrho$ has the effect

$$e(r_i, r_{ck}) = \bar{\varrho}(r_i) - \varrho(r_i) = 2\beta(r_i, r_{ck})\Delta\varrho$$

where

Card 1/2

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

On the possibility of the ... S/170/63/006/001/011/015
B112/B186

$$\beta(r_i, r_{ck}) = \frac{1}{2} - \frac{N}{\pi}\sum_{j=1}^{n}\left[(r_{ck}^2 - r_j^2)^{1/2} - (r_{ck}^2 - r_{j+1}^2)^{1/2}\right] \times \ln\frac{r_{j+1} + (r_{j+1}^2 - r_i^2)^{1/2}}{r_j + (r_j^2 - r_i^2)^{1/2}} \quad (11),$$

if $r_n < r_{ck} < r_{n+1}$ (the index ck denotes shock). The density distributions behind a shock wave, in the base region behind the model and in the boundary layer can be obtained from the experimentally determined coefficients $\beta(r_i, r_{ck})$. There are 2 figures and 2 tables.

SUBMITTED: July 7, 1962

Card 2/2

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

S/143/63/000/002/001/003
A004/A127

AUTHORS: Yemel'yanov, V.A., Kuz'min, V.N., Engineers, Klyuchnikov, A.D., Lecturer, Candidate of Technical Sciences

TITLE: Analyzing the heat-treatment conditions of pulverized material in cyclone melting furnaces

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika, 6 no. 2, 1963, 71 - 76

TEXT: The authors present a detailed analysis of the melting process in cyclone furnaces, which, hitherto, have been very little investigated. They give the results of the first stage of calculation investigations of the movements of particles of various materials in cyclone furnaces depending on a number of determining factors, as well as a qualitative analysis of the heat-treatment of the pulverized material. The calculations were carried out on a MH-7 (MN-7) computer of the Computing Center of the Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute). Formulae are presented for calculating the various factors, such as the movement of solid particles in a curvilinear gas stream, dependence of the

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

particle flight time τ on the particle size, etc. The investigation results are presented in the form of graphs. It is pointed out that this research work will be continued to show the significance of the various factors depending on the different ways of feeding the material into the cyclone furnace. There are 6 figures.

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut (Moscow "Order of Lenin" Power Engineering Institute)

SUBMITTED: November 22, 1961

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A., inzh.; KLYUCHNIKOV, A.D., kand. tekhn. nauk, dotsent

Modeling of the flame and thermal operation of cyclone furnaces. Izv. vys. ucheb. zav.; energ. 7 no.2:56-63 F '64. (MIRA 17:3)

1. Moskovskiy ordena Lenina energeticheskiy institut. Predstavlena kafedroy ognevoy teplotekhniki.

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

L 07066-67 EWT(1)

ACC NR: AP6024633 SOURCE CODE: UR/0170/66/011/001/0003/0009

AUTHOR: Skokov, I. V.; Yemel'yanov, V. A.

ORG: none

TITLE: The use of multibeam interferometer for quantitative studies of axisymmetric inhomogeneities in rarefied gases

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 1, 1966, 3-9

TOPIC TAGS: multibeam interferometer, gas flow, rarefied gas, gas density

ABSTRACT: A direct solution of the heat exchange problem during high speed (~5 km/sec) and high altitude (~120 km) flights is very difficult and thus it is of interest to develop diagnostic methods of densities in rarefied gases (Knudsen parameter ≥ 0.01). The author investigates rarefied gas density distributions around an axisymmetric model. The method of calculations of gaseous nonuniformities corresponding to slip flow are developed and an experimental device for the visualization of these events using multibeam interference is presented. The interferogram processing yields various parameters of the flow discussed. The density field in front of a sphere and the shock wave distribution for a disk are obtained in the

Card 1/2 UDC: 621.317.767

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

L 07066-67

ACC NR: AP6024633

case of a rarefied gas flow with M = 3.85 and Re = 75. The experimental data are in fair agreement with the values obtained by the method of electron beam scattering (Ivanov, A. V. DAN SSSR, 161, 315, 1965). Orig. art. has: 17 formulas, 1 table, and 3 figures.

SUB CODE: 20/ SUBM DATE: 19Jan66/ ORIG REF: 007

Card 2/2

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.; SHISHKOV, K.N.

Using the method of gamma-ray fluoroscopy in determining the humidity and density of soils. Biul. tekh.-ekon. inform. no.1: 60-61 '57. (MIRA 11:4)

(Soil physics) (Gamma rays)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

89-12-23/29

AUTHOR: Yemel'yanov, V.A.

TITLE: Storage Bins for Containers with Materials Emitting γ - Rays (Khranilishche dlya konteynerov s γ - izluchatelyami)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 12, pp 565-565 (USSR)

ABSTRACT: The All-Union Scientific Research Institute for Hydraulic Engineering and Melioration constructed a storage bin for containers of the KV type to store materials emitting γ rays, especially Co^{60} and Cs^{137} with a total activity of about 100 mg-equiv of radium. The storage bin is made of iron plate and consists of two sections. The 40-cm-high lower section, the storage space proper, is equipped with a rotary device. The 60-cm-high upper section is filled with concrete, which protects against radiation. An opening in the concrete layer, with a 10-cm diameter, makes possible the placing of containers upon the rotating iron plate. (There is one figure).

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.

99-58-2-3/9

AUTHORS: Astapov, S.V., Professor, Yemel'yanov, V.A., Candidate of Agricultural Sciences, Shishkov, K.N., Candidate of Agricultural Sciences

TITLE: An Experiment in Applying Radioactive Isotopes of Cobalt and Iodine in Meliorative Research (Opyt primeneniya radioaktivnykh izotopov kobal'ta i yoda v meliorativnykh issledovaniyakh)

PERIODICAL: Gidrotekhnika i Melioratsiya, 1958, # 2, pp 22-29 (USSR)

ABSTRACT: The Pochvenno-melioratívnaya laboratoriya Vsesoyuznogo nauchno-issledovatel'skogo instituta gidrotekhniki i melioratsii (Soil Meliorative Laboratory of the All-Union Scientific Research Institute of Hydro-engineering and Melioration) in 1956 examined the aquatic and sub-soil properties of the Meshcherak lowlands, using the radioactive isotopes Co^{60} and I^{131}. Radioactive cobalt was used as a gamma-radiator for determining, by radioscopy, the density and huminity of the soil. The radioactive iodine indicated, with the aid of "marked atoms", the sub-soil water movement and the filtration properties of the soil. The gamma-radiation of these isotopes were measured with the "STS-5" counter.

Card 1/2

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

99-58-2-3/9

An Experiment in Applying Radioactive Isotopes of Cobalt and Iodine in Meliorative Research

There are 3 tables, 4 graphs, 1 photo, 4 Soviet and 1 foreign (collective) references.

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Card 2/2

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.

Neutron-coring field radiometer for measurements of soil humidity. Biul.tekh.-ekon.inform. no.5:65-66 '59. (MIRA 12:8)

(Radiometer)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

SOV/89-6-5-16/33

21(4)

AUTHORS: Yemel'yanov, V. A., Nesterov, V. Ye.

TITLE: Detection of Slow Neutrons by γ-capture Radiation of Cadmium When Measuring the Humidity of the Soil and Earth by Means of the Neutron Method (Detektirovaniye medlennykh neytronov po zakhvatnomy γ-izlucheniyu kadmiya pri izmereniyakh vlazhnosti pochv i gruntov neytronnym metodom)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 5, pp 573 - 575 (USSR)

ABSTRACT: Cylindrical holes of different depths are drilled into each end of a lead cylinder (diameter 40 mm, height 210 mm). Into one of the two holes (depth 50 mm) a Po-Be-neutron source (1.10^6 neutrons/sec) is inserted. Into the other a halogen tube counter of the type STS-1 or STS-5, which can be screened off by means of a cadmium plate of 0.5 mm thickness, is inserted. Between the two internal ends of the holes 50 mm of lead are left. The pulses coming from the tube counter are recorded by means of a battery radiometer (a reducer with tyratrons is connected). If the measuring head described is inserted into a borehole, it is possible, from the intensity of the γ-radiation (measured both with and without cadmium

Card 1/3

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

SOV/89-6-5-16/33

Detection of Slow Neutrons by γ-capture Radiation of Cadmium When Measuring the Humidity of the Soil and Earth by Means of the Neutron Method

plate) to determine the thermal neutron density at the place of measurement. This is possible because the cadmium ratio is proportional to the thermal neutron density. The results obtained by the field test were compared with those obtained by means of a boron proportional counter SNM-5 and a special radiometer (tubes: 1K2P for cathode follower, amplifier, discriminator; tubes: MTKh-90 for scaler). The results obtained show satisfactory agreement. The fraction of the γ-radiation originating immediately from the Po-Be-source and after scattering was determined by replacing the Po-Be-source by a Cs^{137}-source of equal intensity, and thus measuring direct and scattered radiation. The measuring results hitherto obtained show that n-n- and n-γ-core sampling should be carried out whenever it is intended to check the humidity of sandy and loamy soil and ground by means of the neutron method. The results obtained were discussed with Ye. G. Petrov. O. I. Fedodeyeva and V. P. Izmaylov took part in measurements. There are 3 figures and 4 references.

Card 2/3

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.

Using the method of gamma-ray radiation in absolute measurements of the density of soils and grounds. Biul.tekh.-ekon. inform. no.11:67-69 '59. (MIRA 13:4)
(Radiometer)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.; RACHINSKIY, V.V., doktor khim.nauk, red.

[Practical work in the use of isotopes and radiations in agriculture] Praktikum po primeneniiu izotopov i izluchenii v sel'skom khoziaistve. Pod obshchei red. V.V.Rachinskogo. Moskva, Mosk.sel'khoz.akad. No.7. [Use of nuclear radiations in soil science and land improvement] Primenenie iadernykh izluchenii v pochvovedenii i melioratsii. 1960. 93 p. (MIRA 14:1)

(Gamma rays) (Soil research)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.

Using gamma rays for measuring the concentration of suspended and transported materials in water flows. Biul.tekh.-ekon. inform. no.1:66-68 '60. (MIRA 13:5)
(Gamma rays) (Alluvium--Measurement)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.

Device for measuring the humidity of bulk materials. Biul.tekh.-ekon. inform. no.5:35-36 '60. (MIRA 14:3)
(Moisture—Measurement)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

BELIKOV, M.P.; YEMEL'YANOV, V.A.; NESTEROV, V.Ye.; CHURAYEV, N.V., kand. tekhn. nauk, nauchnyy red.; SAFONOV, P.V., red.izd-va; GOL'BERG, T.M., tekhn. red.

[Using radioisotopes in hydraulic engineering] Primenenie radioaktivnykh izotopov v gidrotekhnicheskom stroitel'stve. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 162 p. (MIRA 14:9)

(Radioisotopes—Industrial applications)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.

Sonde with a boron counter for measuring moisture content by means of the neutron method. Biul.tekh.-ekon.inform. no.5:65-66 '61. (MIRA 14:6)

(Moisture—Measurement) (Nuclear counters)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, Valentin Aleksandrovich; KOKOSOV, L.V., red.; POPOVA, S.M., tekhn. red.

[Gamma rays and neutrons in field investigations for soil improvement purposes; theory and practice of the use of gamma-ray and neutron methods]Gamma-luchi i neitrony v polevykh pochvenno-meliorativnykh issledovaniiakh; teoriia i praktika primeneniia gamma-luchevykh i neitronnykh metodov. Moskva, Gosatomizdat, 1962. 221 p. (MIRA 15:11)
(Gamma rays) (Neutrons) (Soil research)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMELYANOV, V. A.; OSIPOV, V. I.

"The Effect of the Mineralogical Composition of the Soil on Neutron Moisture Meter Readings"
To be presented at the Symposium on the use of Radioisotopes in Soil-Plant Nutrition Studies, Bombay 26, February - 2 March 1962.

All-Union Hydrotechnology and Land Improvement Research Institute, USSR.

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V., kand.sel'skokhoz.nauk

Devices using radioactive isotopes in construction and reclamation research operations. Radio no.3:21-23 Mr '62. (MIRA 15:3)
(Radioactive substances—Industrial applications)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

PETROV, Ye.G., kand. sel'skokh. nauk; YEMEL'YANOV, V.A., kand. sel'skokh. nauk

Results and possibilities of using nuclear radiations and radioactive tracers in hydraulic engineering and irrigation and drainage investigations. Trudy VNIIGiM 38:5-12 '62. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii imeni A.N. Kostyakova.
(Hydraulic engineering—Research)
(Radiology, Industrial)

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A., kand. sel'kokh. nauk

Improving the gamma-spectroscopic method for measuring soil density. Trudy VNIIGiM 38:28-38 '62. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii.

(Gamma-ray spectrometry)
(Soils--Density)

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A., kand. sel'skokh. nauk

Field scaling radiometers for irrigation and drainage investigations. Trudy VNIIGiM 38:132-138 '62. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii.

(Hydraulic engineering—Research)
(Radiometer)

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A.; BESKIN, L.I.; OSIPOV, V.I.

Neutron method for measuring soil moisture and its prospects. Pochvovedenie no.7:109-115 Jl '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii.
(Soil moisture) (Neutrons)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

L 19691-63 EWT(m)/BDS AFFTC/ASD MLK(a) USSR

ACCESSION NR: AP3007576 S/0286/63/000/010/0037/0037

AUTHOR: Yemel'yanov, V. A.; Beskin, L. I.

TITLE: Neutron generator. Class 21, No. 154623

SOURCE: Byul. izobret. i tovarny*kh znakov, no. 10, 1963, 37

TOPIC TAGS: neutron generation, neutron generator, neutron, Alpha emission, beryllium target, Alpha particle, Alpha radiator, neutron radiation, Alpha emitter, neutron source

ABSTRACT: A patent has been issued for a neutron generator (see Fig. 1 of the Enclosure). The generator contains a stationary cylinder with beryllium targets and a cylinder with an α-emitter. The two cylinders are arranged coaxially. To achieve pulsed operation of the generator, the α-emitter cylinder is fixed and a movable cylindrical shield, with openings along its generatrices, is provided; the shield is located between the first two cylinders coaxially to them. Orig. art. has: 1 figure.

ASSOCIATION: none

Card 1/3

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L 19691-63
ACCESSION NR: AP3007576

SUBMITTED: 21Sep62 DATE ACQ: 14Oct63 ENCL: 01

SUB CODE: NS NO REF SOV: 000 OTHER: 000

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

L 19691-63

ACCESSION NR: AP3007576

ENCLOSURE: 01

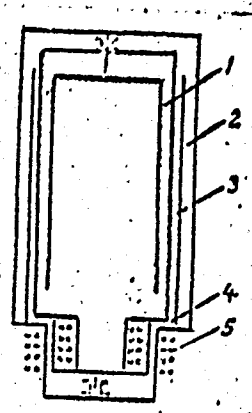

Fig. 1. Neutron generator

1 - Beryllium targets; 2 - α-radiator; 3 - shield; 4 - armature; 5 - electric-motor stator.

Card 3/3

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

USSR

ACCESSION NR: AP4011273 S/0286/64/000/002/0065/0065

AUTHOR: Yemel'yanov, V. A.

TITLE: Radioactive ground density meter. Class 42, No. 160024

SOURCE: Byul. izobret. i tovarn. znakov, no. 2, 1964, 65

TOPIC TAGS: radioactivity, radioactive meter, ground density meter, radioactive ground density meter, ground density, ground density measurement, earth density meter

TRANSLATION: The patent describes a radioactive ground-density meter containing a protective capsule with a tube closed at one end and pointed for insertion into the ground being tested. It contains a retractable radioactive preparation mechanically connected to a radiator. Measurement accuracy is increased by enclosing the capsule, together with a part of the tube, in a calibrated inspection vessel filled with liquid. (See Enclosure.)

ASSOCIATION: none

SUBMITTED: 07Aug62 DATE ACQ: 14Feb64 ENCL: 01

SUB CODE: AS, SD NO REF SOV: 000 OTHER: 000

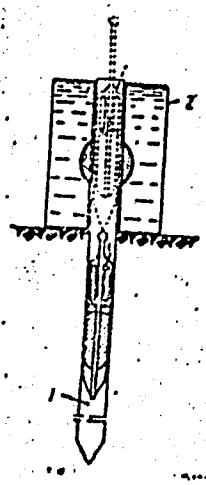
Card 1/2

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

ACCESSION NR: AP4011273

ENCLOSURE: 01



1 - tube;

2 - calibrated-inspection vessel

Card 2/2

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A., kand. sel'skokhoz. nauk

Neutron moisture indicator. Gidr. i mel. 16 no.9:34-40 S '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii imeni A.N. Kostyakova.

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SOURCE: [illegible]
69

[illegible] neutron moisture meter, neutron moisture probe, [illegible]

[illegible] An Author Certificate [illegible] of the inclosure, [illegible]
of a regulator [illegible] counter, and a neutron power source [illegible] sub-surface soils, the [illegible]
[illegible]
tube. The probe is [illegible] the diameter of the supplementary [illegible] as that of the tube. [illegible]

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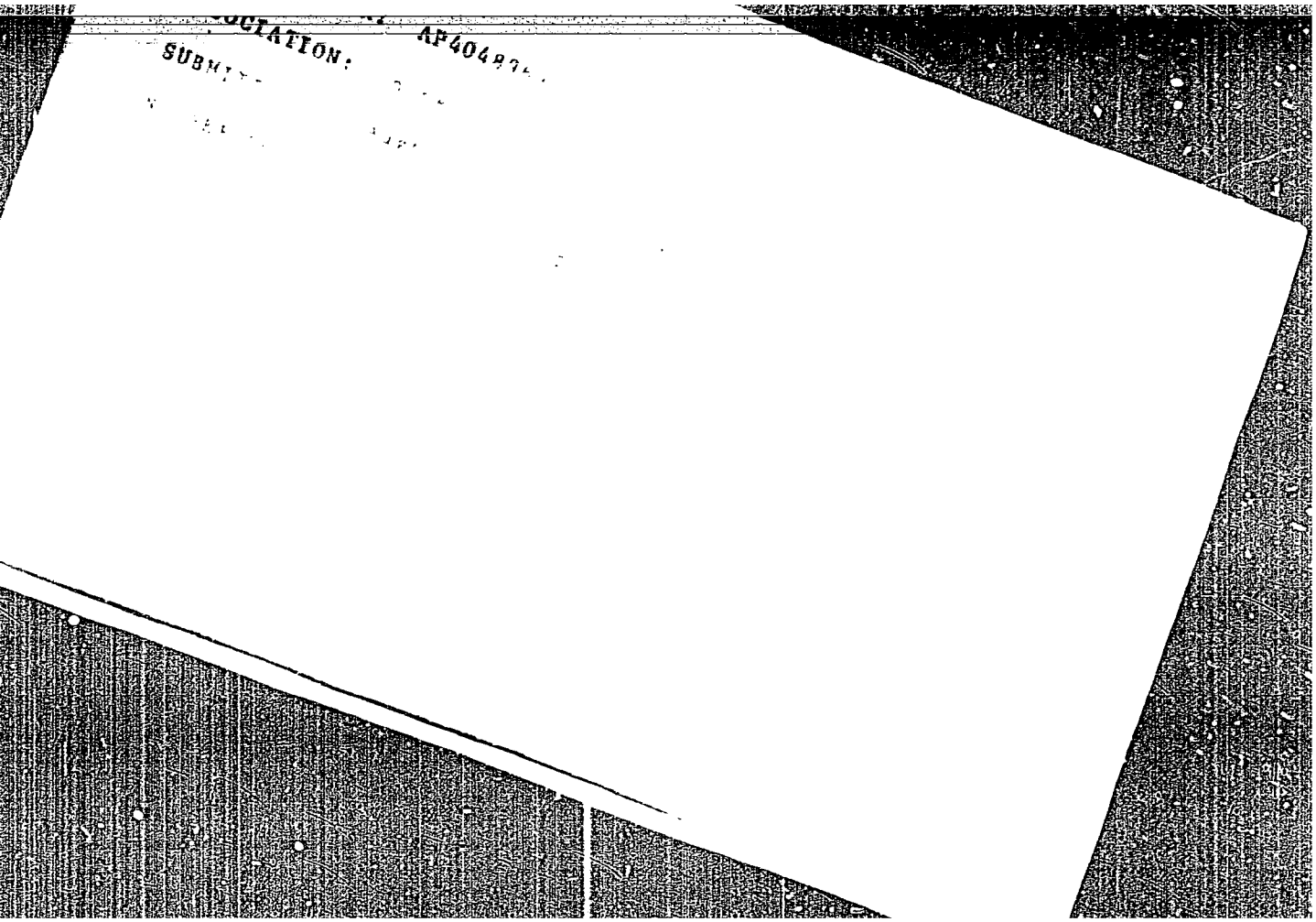
"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3



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ACCESSION NR: AP4046909

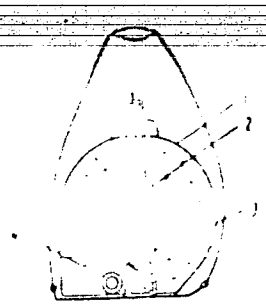

Fig. 1. Surface-and-depth neutron moisture probe

1 - Control-calibration device; 2 - casing [illegible] containing counter; 3 - power source container; 4 - horizontal channel.

Card 3/3

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"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3

YEMEL'YANOV, V.A., kand. sel'skokhoz. nauk

Gamma-gamma method for measuring the density of soils. Gidr. i mel. 17 no.1:17-23 Ja '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii imeni A.N.Kostyakova.

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LYUDKOVSKAYA, N.G.; YEMELYANOV, V.B.; LEMAZHEKHIN, B.K.

Study of the optic properties of the squid giant axon relaxed and at different phases of excitation. TSitologiia 7 no.4: 520-530 Jl-Ag '65. (MIRA 18:9)

1. Laboratoriya zhivykh struktur Instituta biologicheskoy fiziki AN SSSR, Moskva.

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YEMEL'YANOV, V.B.; TARKOVSKAYA, I.A.; RUBANIK, S.K.

Exchange sorption of complex ions of heavy metals by active carbon. Ukr. khim. zhur. 31 no.8:778-782 '65. (MIRA 18:9)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR.

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Concentration of microimpurities by means of oxidized carbon. Trudy Kom. anal. khim. 15:336-345 '65. (MIRA 18:7)

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YEMEL'YANOV, V.F.

Convergence of trigonometric gap series on sets. Dokl. AN SSSR 165 no.2:272-273 N '65. (MIRA 18:11)

1. Saratovskiy gosudarstvennyy universitet im. N.G. Chernyshevskogo. Submitted April 15, 1965.

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YEMEL'YANOV, V.I.; ZAKHAROV, N.F., dots., otv. red.; NOVIKOV, A.V., red.

[Technical and economic calculations in technological processes; methodology and exercises] Tekhniko-ekonomicheskie raschety v tekhnologicheskikh protsessakh; metodika i uprazhneniia. Rostov-na-Donu, Izd-vo Rostovskogo univ., 1961. 223 p. (MIRA 18:5)

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YEMEL'YANOV, V.L.; BALASHOV, A.I.

Satisfy demands for literature on oil field flooding. Stroi. pred. neft. prom. 3 no.5:31 My '58. (MIRA 11:7)
(Oil field flooding)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001962620020-3"

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YEMEL'YANOV, V. M.

PRIKHOT'KO, A. F.

24(7) p 3 PHASE I BOOK EXPLOITATION SOV/1365

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Materialy X Vsesoyuznogo soveshchaniya po spektroskopii. t. 1: Molekulyarnaya spektroskopiya (Papers of the 10th All-Union Conference on Spectroscopy. Vol. 1: Molecular Spectroscopy) [L'vov] Izd-vo L'vovskogo univ-ta, 1957. 499 p. 4,000 copies printed. (Series: Its: Fizychnyy zbirnyk, vyp. 3/8/)

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii. Ed.: Gazer, S.L.; Tech. Ed.: Saranyuk, T.V.; Editorial Board: Landsberg, G.S., Academician (Resp. Ed., Deceased), Neporent, B.S., Doctor of Physical and Mathematical Sciences, Fabelinskiy, I.L., Doctor of Physical and Mathematical Sciences, Fabrikant, V.A., Doctor of Physical and Mathematical Sciences, Kornitskiy, V.G., Candidate of Technical Sciences, Rayskiy, S.M., Candidate of Physical and Mathematical Sciences, Klimovskiy, L.K., Candidate of Physical and Mathematical Sciences, Miliyanchuk, V.S., Candidate of Physical and Mathematical Sciences, and Olauberman, A. Ye., Candidate of Physical and Mathematical Sciences.

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