S/276/63/000/002/029/052
A052/A126

AUTHORS: Okhrimenko, I.S., Yakovlev, A.D., and Kuznetsova, K.B.

TITLE: Paint compositions and coatings on chlorosulfurized polyethylene base

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2, 1963, 107, abstract 2B574 (Lakokrasochn. materialy i ikh primeneniye, no. 4, 1962, 25-30)

TEXT: The results of investigations of paint compositions and coatings on chlorosulfurized polyethylene base(containing 26.5-27.6% Cl and 1.7-2.5% S)are reported. It is shown that on chlorosulfurized polyethylene base paint compositions of solution and organodispersion types can be produced. It is advisable to use chlorosulfurized polyethylene in paint compositions in combination with other resins, whereby glycerin ester of colophony (it can be added to up to 50% of film-former weight) has a good modifying effect. In view of the acidity of chlorosulfurized polyethylene it is recommended to add to compositions based on it inert pigments (titanium dioxide and others); as structural additions it is advisable to use diphe-

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nylguanidine and some metal oxides in the presence of which the film-former passes into an insoluble state without heating. It is pointed out that coatings on chlorosulfurized polyethylene base have a low steam permeability, corrosion resistance in water, acids (nitric, sulfuric) and other chemical substances, as well as when used in the atmosphere and under conditions of natural and artificial ageing. On account of their properties these coatings can be recommended for protecting the equipment of chemical and other industries.

(Abstracter's note: Complete translation.)

15.8121

41467
S/153/62/005/004/005/006
E075/E436

AUTHORS: Yakovlev, A.D., Kul'chnitskayte, Ye.I.

TITLE: On curing of soft epoxy resin films with carboxyl-containing methacrylic copolymer

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, v.5, no.4, 1962, 642-646

TEXT: The curing of soft epoxy resins ЭД-6 (ED-6) and Э-40 (E-40) with the aid of n-butylmethacrylate - methacrylic acid (7%) copolymer was investigated. The optimum curing was obtained for 50 to 70% content of the copolymer in the epoxy resin films. The content of three dimensional polymer in the mixed films and their resistance to swelling increased with temperature of the curing process. The components in the mixed films are shown to form a common structural pair, in which epoxy groups react with the carboxylic groups, similarly to the reaction of epoxy groups with low molecular weight acids. The latter reaction, however, proceeds more readily and begins at 100°C, whereas the copolymer begins to react at 150°C. Thus the copolymer-containing films are of relatively low reactivity. In comparison with low

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molecular weight acids, such as phthalic anhydride, the amount of the copolymer needed for curing is 7 to 8 times less in terms of molar quantities. It was found that the mixed films have sufficiently good anti-corrosive properties. There are 5 figures and 1 table.

ASSOCIATION: Kafedra tekhnologii lakov i krasok Leningradskiy tekhnologicheskiy institut im. Lensoveta
(Department of Varnish and Paint Technology Leningrad Technological Institute imeni Lensoveta)

SUBMITTED: February 13, 1961

YAKOVLEV, A.D.; KOSHELEVA, N.V.; OKHRIMENKO, I.S.

Obtaining organic dispersions and coatings on the base of acrylonitrile-butylacrylate copolymers. Lakokras. mat. i ikh prim. no.3:3-5 '63.
(MIRA 16:9)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta.
(Protective coatings) (Acrylonitrile polymers)

YAKOVLEV, A.D.; KOSHELEVA, N.V.; OKHRIMENKO, I.S.

Protective coatings with a base of organic dispersions of polyacrylonitrile. Lakokras. mat. i ikh prim. no.4:18-22 '63. (MIRA 16:10)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

YAKOVLEV, A.D.; STOROZHENKO, G., red.

[Dyeing and decoration of plastics] Krashenie i dekorirovanie plastmass. Riga, Latviiskii respubl. in-t nauchno-tekhn. informatsii i propagandy, 1965 59 p. (MIRA 18:12)

YAKOVLEV, A.F.

Vesico-urethro-vaginal fistula of unusual etiology. Urologiia 24 no.3: 63-64 My-Je '59. (MIRA 12:12)

1. Iz kliniki khirurgii (zav. - prof. L.G. Granov) Izhevskogo meditsinskogo instituta.

(URINARY TRACT, calculi,
causing vesico-urethre-vaginal fistula (Rus))
(FISTULA, VESICOVAGINAL, etiol. & pathogen.
calculi causing vesico-urethro-vaginal fistula (Rus))
(URETHRA, fistula,
vesico-urethro-vaginal fistula caused by calculi (Rus))

YAKOVLEV, A F

N/5
789
.Y1

Ekonomicheskiye Krizisy v Rossil (Economic Crises in Russia) Moskva, Gospolitizdat, 1955.
403 p. Graphs, Tables.

ATLAS, M.S., prof., red.; POGREBINSKIY, A.P., prof., red.; REUEL', A.L., prof., red.; YAKOVLEV, A.F., prof., red.; ATLAS, M.S., prof., otv. red.

[Problems of economics; studies] Voprosy politicheskoi ekonomii; uchenye zapiski. Moskva, 1963. 420 p. (MIRA 17:3)

1. Moscow. Moskovskiy finansovyy institut.

YAKOVLEV, A.F.

49-1-7/16

AUTHOR: Yakovlev, A.F.

TITLE: Some Methods of Solution of the Direct Problem of Aerial γ-ray Exploration (Nekotoryye sposoby resheniya pryamoy zadachi aero-gamma-metoda)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 1, pp.75-85 (USSR)

ABSTRACT: By measuring the γ-radiation field at heights of the order of 20 to 150 m above the earth's surface one can obtain information on the distribution of γ-ray sources contained in the upper layers of rocks. The distribution obtained directly in the above way is in some way connected with the distribution of the radioactive elements but is also determined by other geological properties of the region. At the present time the aerial method is widely used for prospecting for uranium and thorium (Ref.1). A graphical method is described which can be used for quick calculation of the following integrals:

$$I = \frac{1}{2\pi}\int_{-\infty}^{+\infty}\int_{-\infty}^{+\infty} I_0(x, y)\, \exp\left(-\nu\sqrt{x^2 + y^2 + h^2}\right) \frac{h\, dx\, dy}{(x^2 + y^2 + h^2)^{3/2}} \quad \text{(Eq.9)}$$

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and:

$$I = \frac{1}{\pi} \int_L I_0(x) \varphi \left(\nu \sqrt{x^2 + F^2(x)}\right) \frac{\cos[\tau(x) + \Psi(x)]}{\sqrt{x^2 + F^2(x)}} \, dl \quad \text{(Eq.20)}$$

which have a major importance in the direct problem of aerial γ-exploration. The first of these integrals gives the intensity of the γ-field in the air from a plane radiating surface consisting of rocks with an arbitrary distribution of the "zero" γ-field. The second integral gives the intensity of the γ-field in the air above a 2-dimensional curvilinear rock surface, also with an arbitrary distribution of the "zero" field. The complex spectral structure of the primary γ-radiation is taken into account (uranium, thorium and potassium) as well as Compton scattering. The following assumptions are made: 1) the primary spectral composition of the γ-radiation corresponds to the γ-radiation of uranium or thorium in equilibrium with decay products;

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2) the element composition of the absorbers corresponds to effective Z numbers 11(rock) and 7(air) ; 3) the media are homogeneous in density. The ratio of the densities of the radiator-absorber (rocks) to the absorber (air) is of the order of 2×10^3 ; 4) the angular characteristic of the γ-ray detector is isotropic (a nondirectional detector) and its spectral characteristic is linear.
There are 10 figures, 1 table and 3 references, 2 of which are Slavic.

ASSOCIATION: Ac.Sc. of the USSR, Institute of Applied Geophysics (Akademiya nauk SSSR, Institut prikladnoy geofiziki)

SUBMITTED: December 24, 1956.

AVAILABLE: Library of Congress.

49-58-5-3/15

AUTHOR: Yakovlev, A. F.

TITLE: On the Anomaly found in γ-ray Surveys by Aeroplane (O forme deystvuyushchikh i registriruyemykh anomaliy pri aero-gamma-s"yemke)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 5, pp 594-604 (USSR)

ABSTRACT: Radioactive elements in the upper layers of the Earth's surface produce a γ-field in the atmosphere to a height of several hundred meters. Anomalously high values for this field may indicate a bed of radioactive material. In air surveys of the γ-field a difference is found between the value registered and that actually existing at any point. This is due to the inertial properties of radiometers. Thus one of the main tasks in this field is to determine the actual field from the instrumental record at any height. Earlier work is given in Ref.1.

1. The anomalous γ-field from the profile

The author considers one of the scalar quantities of the γ-field - its intensity. This is proportional to the number of γ-quanta registered per unit time by a receiver placed at a given point and possessing an isotropic angular characteristic and a linear spectral characteristic together with a

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On the Anomaly found in γ-ray Surveys by Aeroplane.

size small compared with the mean free path of the γ-quantum. Eq.(1) gives the intensity at any height for a given surface field $I_o(\xi, \eta)$

$$I(x,y) = \frac{1}{2\pi} \int\int I_o(\xi,\eta)\exp\left(-\mu\sqrt{(\xi-x)^2+(\eta-y)^2+h_2}\right) \frac{h\, d\xi\, d\eta}{[(\xi-x)^2+(\eta-y)^2+h^2]^{3/2}} \quad . \quad (1)$$

where x, y and h are the coordinates of the observation point and ξ, η, 0 are the coordinates of a point of the radiating surface. The use of the effective absorption coefficient, μ , determines the complicated spectral composition of the γ-radiation (from uranium, thorium, potassium), the Compton scattering at the ore-air boundary and the corresponding composition of the absorbing medium. The author next considers anomalous regions found in many typical forms

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On the Anomaly found in γ-ray Surveys by Aeroplane.

of γ-ray survey. Assuming that the anomalous region can be defined by a contour on the surface of the stratum, all points interior to this contour have the same anomalous zero intensity. The excess of this value over that of the normal background is denoted by I_o. Formula (1), given above, can now be used to give $\omega_1(x)$ the anomalous curve profiles at a height h above the surface (the centre of coordinates being taken in the centre of the region).

(a) Profile passes over the centre of the area (cross-sectional dimensions small compared with h). In this case, the function under the integral sign can be considered constant. The author thus gives an equation for $\omega_1(x) \left(= \left(I_1(x)/I_1(0)\right)\right.$, using the notation, $\bar{h} = \mu h$, $\bar{x} = \mu x$, etc.

(b) Profile passes to the side of the area at a distance y from the centre. The substitution $R^2 = h^2 + y^2$ is made in the basic and a result similar to (a) is obtained, with h replaced by R.

(c) Two-dimensional problem - radiation zone of width $\Delta\xi$, small compared with h, and infinite length. The substitut-

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ions $\xi = 0$, $y = 0$ and $r^2 = x^2 + h^2$ are made in the basic formula which is then integrated from $\eta = -\infty$ to $+\infty$. Numerical values for the function $\varphi(\bar{r})$ are given in Ref.3. (d) Radiation zone of width $2d$, length again infinite. The magnitude of the anomaly is written, in this case, as a function of $\varphi(z, \bar{h})$, values for which are given in the table.

2. Approximation to the anomalous curves by the function $\exp(-x^2/\alpha^2)$.

It can be seen from Figs.1 and 2, that the equations obtained for the anomalous curves (ω_1, ω_2, ω_3, ω_4) are, to a good approximation, represented by an equation of the form $\omega(x) = \exp - x^2/\alpha^2$. The constant α depends on h (for ω_1 and ω_3), $\bar{R} = \mu\sqrt{h^2 + y^2}$ (for ω_2) and $\bar{h}$ and $\bar{d}$ (for ω_4). This formula is sufficiently accurate for small x , although the deviation of the approximate curve from the true value for large $x(>\alpha)$ is not important in anomalous γ-field problems, since, in this region, the magnitude of the field itself is small. Hence, the experimentally obtained results

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agree very well with this approximation (so long as there is an approximately constant null γ-field in the area). Fig.3 gives an example of an anomalous curve, registered over an area containing an increased amount of radioactive elements, and an anomalous curve computed from this approximation. The author defines α by the condition that the observed and approximate curves should coincide at the point $\omega = 0.5$. If x^* is the abscessa of this point, $2x^*$ is called the anomaly width. Thus $x^* = 0.832\alpha$. For the different anomaly curves ω_1, ω_2, ω_3 and ω_4, the following conditions therefore hold:

$$x_1^* = f_1(\bar{h}) = 0.832\alpha, \quad x_2^* = f_1(\bar{R}) = 0.832\alpha, \qquad (15)$$

$$x_3^* = f_3(\bar{h}) = 0.832\alpha, \quad x_4^* = f_4(\bar{h},\bar{d}) = 0.832\alpha$$

The computed curves are given in Fig.4. In the range of heights 0-150 m ($\bar{h} = 0$-0.5 in free path units) which have the greatest significance in practice, the approximations given in Eq.(16) hold. (Fig.4 gives the relation of the anomalous parameters to the Gaussian curves). In the case

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of a radiation zone of width $2d$, the exponential type of approximation only holds for $d/h \leq 3$. However, the formula is still available for the decreasing branch of the anomalous curve.

3. The form of the registered anomalous curves

Generally speaking, some forming of integrating (RC) counter is used in air surveys of γ-ray intensity. The time relation between the registered effect (the current $i_R(t)$ across the resistance R) and the velocity of transmission of the impulses from the γ-ray receiver to the RC counter (proportional to the intensity of the γ-ray field at the given moment of time $I(t)$) is defined by the differential equation:

$$I(t) = RC \frac{\partial i_R(t)}{\partial t} + i_R(t) \quad . \tag{18}$$

The author now alters this to relative units, giving:

$$\omega(t) = \tau \frac{\partial g(t)}{\partial t} + g(t) \tag{19}$$

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On the Anomaly found in γ-ray Surveys by Aeroplane.

Where time is counted from the moment when the anomaly has its maximum value ($\omega_{max} = 1$), $\tau = RC$, $g(t) = i_R(t)/I(0)$, $\omega(t) = I(t)/I(0) = \exp\left(-\frac{t^2}{\beta^2}\right)$ and $\beta = \frac{\alpha}{V} = \frac{x^*}{0.832V}$ (V is the velocity of the aeroplane). On solving this equation, an expression is obtained for the registered anomalous curve. On substituting $y = t/\beta$ (measured in units of β) and $\gamma = \beta/\tau$, an equation containing the error function of $y - \gamma/2$ is obtained. Erf t is, in this case, an odd function of the argument t . For large t , the expansion (Eq.23) is employed, giving Eq.(24) for $G(y)$ [$= g(t)$] for large, negative values of $y - \gamma/2$. Large, negative values of $y - \gamma/2$ will occur when γ is very large (>15-20) for all ranges of y-values for which $G(y)$ is real. Thus, in this case, $G(y) = \exp(-y^2)$ and the recorded and actual values coincide. Fig.3, for example, shows the forms of recorded and actual G of anomalous curves for a series of γ . For $\gamma = 2$, the experimentally obtained curve is also given. From the expression for $g(t)$, it can be seen that if time is always expressed by the dimensionless quantity y , then the form of

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the recorded anomalous curve $G(y)$ depends only on the parameter γ (which is proportional to the ratio of the width of the recorded anomaly to the magnitude of the time constant). Thus the similarity criteria for scaling down the recording process can be easily found, e.g., in scaling down, the velocity V, the time constant τ and the geometrical dimensions of the anomaly α, can be changed, to fulfill the conditions:

$$\gamma = \gamma' \text{ or } \frac{\alpha}{V\tau} = \frac{\alpha'}{V'\tau'} \quad . \qquad (26)$$

An important characteristic of the recording process is that the areas under the recorded and actual anomaly curves are equal and independent of the magnitude of RC. (This can be established by integrating (18) from $t = -\infty$ to $+\infty$). The author next investigates the maximum of the curve $G(y)$ obtaining an expression for the amplitude and the width (Y). He also defines a coefficient of asymmetry for the curve $[F_4(y) = k]$. The results of calculations for y_{max}, G_{max}, Y and k are given in Figs.5-7 (continuous lines).

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On the Anomaly found in γ-ray Surveys by Aeroplane.

The following points are of importance in air surveys of γ-ray intensity: (a) If the time constant is reduced to 0.2 - 0.4 sec, values of the parameter γ are easily obtained ($\gamma > 5$-10) for which the recorded curve is not appreciably different from the actual anomalous curve. (b) As is shown in Fig.8 and Eqs.(32), relationships can be found which can be used for working out the actual amplitude and width of the anomaly together with the displacement of the maximum, on the basis of measurements made directly on the radiometer tape. A suitable method of determining the amplitude is given in Ref.2 (cf the dotted line in Fig.8). (c) The amplitude of the recorded anomaly decreases as the time constant τ increases, but the accuracy of measurement of the background counting rate n_1 is improved. If n_2 denotes the actual amplitude of the anomaly then the optimum time constant is given by the maximum of the ratio:

$$\frac{\text{amplitude of the recorded anomaly}}{\text{background fluctuations}} = \frac{n_2 G_{max}}{\Delta n_1}$$

This gives Eq.(33) as the condition for a maximum and numerical calculations give the values in Eq.(34). Figs.5-6 show

On the Anomaly found in γ-ray Surveys by Aeroplane.

the results calculated by Peirson and Franklin (Ref.1), which are considerably different from those of the author. Eqs.(35) reproduce their results ($\mu = 0$) . These can be seen to suffice only for a rough estimation in practice and are obtained in theory by replacing the real anomalous curve by a square pulse of width $2t''$ - giving Eqs.(36). (In the article, Fig.5 gives the displacement of the anomaly maximum, Fig.6 gives the decrease in the amplitude of the anomaly, Fig. 7 gives the width and the coefficient of asymmetry of the recorded anomalies and Fig.8 gives a nomogram for the solution of the inverse problem). There are 8 figures, 1 table and 5 references, 4 Soviet and 1 English.

ASSOCIATION: Akademiya nauk SSSR, Institut prikladnoy geofiziki (Academy of Sciences, USSR, Institute of Applied Geophysics)

SUBMITTED: December 24, 1956.

1. Gamma radiation---Measurement

YAKOVLEV, A.F., inzh.

Experience in automating the operation of compressors. Elek. sta. 33 no.6:76-77 Je '62. (MIRA 15:7)
(Compressors) (Automatic control)

YAKOVLEV, A.F.

Dermoid cyst of the penis. Urologiia 28 no.3:59-60 '63
(MIRA 17:2)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. A.I.Zverev) Izhevskogo meditsinskogo instituta.

YAKOVLEV, A.F. (Ivanovo)

Results of the use of corticosteroids in the treatment of epidemic hepatitis. Klin. med. 41 no.7:28-33 Jl '63 (MIRA 16:12)

1. Iz kafedry infektsionnykh bolezney i epidemiologii (zav. prof. Ye.P. Ushinova) Ivanovskogo meditsinskogo instituta.

YAKOVLEV, A. F., ENG.

Electric Substations

By-pass devices. Elek. sta. 23 no. 8, 1952

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

1. YAKOVLEV, A. F., Eng.

2. USSR (600)

4. Hydroelectric Power Stations

7. Perfecting the automatic regulation of the power units of hydroelectric plants, Elek. sta., 24, no. 3, 1953.

Discusses weak points (in particular, complexity) of automatic relay-contact app for control of equipments at hydroelectric power stations; describes briefly simplified circuits proposed and used in USSR. Such simplification of app, undertaken by personnel and VNITOE primary organization at a hydroelectric power station, reduced cases of faulty operation of automatic control app from 17% in 1951 to 2% in 1952. 255T61

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

PAUTIN, N.V., inzhener; YAKOVLEV, A.F., inzhener.

Automatic control of frequency and active power. Elektrichestvo no.3: 58-64 Mr '56. (MLRA 9:6)

1.Energeticheskiy institut AN SSSR (for Pautin).2.Dneprovskaya Gidroelekricheskaya stantsiya imeni V.I.Lenina.
(Automatic control) (Hydroelectric power stations)

YAKOVLEV, A.F., inzh.

Using hydraulic units in a system of synchronous compensators. (MIRA 14:7)
Gidr. stroi. 31 no.7:36-38 Jl '61.
(Dnieper Hydroelectric Power Stations)

YAKOVLEV, A.F., inzh.

Some facts about the operation of the Lenin Dnieper Hydroelectric Power Station. Gidr. stroi. 32 no.10:36-38 O '61. (MIRA 14:10)
(Dnieper Hydroelectric Power Station)

YAKOVLEV, A.F., glavnyy inzhener

Thirty years of operation of the Lenin Dnieper Hydroelectric Power Station. Gidr.stroi. 33 no.10:1-5 O '62. (MIRA 15:12)
(Dnieper Hydroelectric Power Station)

YAKOVLEV, A.F.; RYZHIKOV, I.N.; KROL', B.I.

UGB-4 unit for horizontal drilling. Stroi. trub. 9 no.7:33 Jl '64. (MIRA 17:11)

1. Leningradskiy filial spetsial'nogo konstruktorskogo byuro "Gazstroymashina".

KOGAN, R.M., kand.tekhn.nauk; NIKIFOROV, M.V.; FRIDMAN, Sh.D., kand.tekhn. nauk; CHIRKOV, V.P.; YAKOVLEV, A.F., kand.fiz.-matem.nauk

Determining the water equivalent of snow cover by means of airplane gamma surveys. Meteor. i gidrol. no.4:51-55 Ap '65. (MIRA 18:4)

1. Institut prikladnoy geofiziki AN SSSR.

YAKOVLEV, A.G., predsedatel'.

The Stalin District of the capital in the new five-year plan. Gor.khoz.Mosk. 21 no.1:13-22 Ja '47. (MLRA 6:11)

1. Ispolnitel'nyy komitet Stalinskogo rayonnogo Soveta Deputatov trudyashchikhsya. (Moscow--City planning) (City planning--Moscow)

1. YAKOVLEV, A. G.

2. USSR (600)

7. Protective Attachment for a Circular Saw, Machine Tools and Instruments No. 11, Nov 1948

9. Compilation of Information of the USSR Machine and Machine Tools Industry Contained in Soviet Publications. ATIC. Restricted.

1. YAKOVLEV. A. G.

2. USSR (600)

7. Device for Threading of Non-Circular Gear, Machine Tools and Instruments No. 12, Dec 1948

9. Compilation of Information on the USSR Machine and Machine Tools Industry Contained in Soviet Publications. ATIC. Restricted.

1. YAKOVLEV, A. G.

2. USSR (600)

7. Cutting of Non-Circular Wheels, Machine Tools and Instruments No. 9, Sep 1950

9. Compilation of Information of the USSR Machine and Machine Tools Industry Contained in Soviet Publications. ATIC. Restricted.

1. YAKOVLEV, A. G.

2. USSR (600)

7. Device for the Selection of Tolerances During Conveyer Milling, Machine Tools and Instruments, Dec 1952

9. Compilation of Information on the USSR Machine and Machine Tools Industry Contained in Soviet Publications. ATIC.

YAKOVLEV, A. G.

Machine-Shop Practice

Universal jig for drilling holes in cylindrical parts, Stan. i instr. 23 No. 3, 1952

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

YAKOVLEV, A. G.

Cutting Machines

Device for measuring ground module gear cutters.
Stan. i instr. 23 No. 6, 1952

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

1. YAKOVLEV, A. G.

2. USSR (600)

4. Machine Tools

7. Cam chuck. Stan. i instr. 23 no. 8, '52.

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

1. YAKOVLEV, A. G.

2. USSR (600)

4. Milling Machines

7. Device for removing backlash in milling operations with automatic feed. Stan.i instr. 23 no. 12, 1952.

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

YAKOVLEV, A. G.

Machine Tools

Making use of high-speed steel waste material. Stan. i instr. 24 no. 3 1953

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

BOGDANOV, V.M.; YAKOVLEV, A.G.

Multi-roller milling. Stan. i instr. 24 no.5:33 My '53. (MLRA 6:6)
(Milling machines)

BOGDANOV, V.M.; YAKOVLEV, A.G.

Universal jig for drilling holes. Stan. i instr. 24 no.6:35 Je '53. (MLRA 6:7)
(Jigs)

YAKOVLEV, A.G.

Device for lapping holes in machine parts. Stan.i instr. 24 no.12: 32-33 D '53. (MLRA 7:1)
(Grinding and polishing) (Metalwork)

YAKOVLEV, A. G.

USSR/Engineering - Machine Tools

Card 1/1

Author	:	Yakovlev, A. G.
Title	:	Checking the Parallel Alignment of machine ways
Periodical	:	Stan. i Instr. Ed. 1, 35, Jan/1954
Abstract	:	A description is given of a dial-type indicator used for checking the aligrment of machine ways, during the repair and assembly of cutting machines. The author presents, the drawing at the instrument, describes the measurement methods, and lists the nomenclature of components.
Institution	:	.....
Submitted	:	.....

YAKOVLEV, A. G.

USSR/Miscellaneous - Industrial Processes

Card 1/1

Author : Yakovlev, A. G.

Title : Warning-blocking device of a surface grinding-machine

Periodical : Stan. i Instr., No. 5, page 27, May 1954

Abstract : A warning-blocking device for surface grinding-machines was developed to avoid accidents through sudden electrical power cut-off. This device automatically disconnects the AC current with sudden cut-off of the DC-current. Mode of operation of the warning-blocking device is shown in diagram. Drawing.

Institution : ...

Submitted : ...

YAKOVLEV, A. G., and DUMANSKIY, A. V.

"Tartaric Acid Method for the Synthesis of Electronegative Sols, 3. Adsorption of Tartaric Acid and Succinic Acid of Sodium on Aluminum Hydroxide," Bull Soc Chim., 43, 969, 1928; ZhRKhO, 61, 151, 213, 1929; Koll-Z, 48, 154, 1929.

YAKOVLEV, A. G., and DUMANSKIY, A. V.

"Polyatomic Acid Compound during the Synthesis of Electronegative Sols, 5. Oxy-Acid," ZhRKhO, 62, 1665, 1930; Bull. Soc. Chim., 47, 1211, 1930.

YAKOVLEV, A.G.

Chem

Chemistry of the mineral spring Belaya Gorka. A. G. Yakovlev (State Zootekh.-Vet. Inst., Voronezh.). *Gidrokhim. Materialy* 23, 74-81(1955).—The mineral spring Belaya Gorka belongs to the Cl-Na-Ca group: Cl^- 49.3, alkali metals 23.2, and Ca 19.8%. Only small amts. of CO_3 and free CO_2 and traces of SO_4 were found. The chem. compn. did not change during 20 years. This indicates that the spring derives its water from deep-seated basins isolated from contact with the surrounding strata. This also explains the high mineralization and almost total absence of sulfates, the desulfatization being carried out by sulfate-reducing anaerobic bacteria. The high percentage of Ca and the presence of small amts. of compds. of Br, I, As, P, B, and Li makes the mineral spring valuable balneologically.

A. S. Mirkin

YAKOVLEV, A.G.

Casting ceramic parts without gating. Av.prom. 26 no.8:87 Ag '57. (MIRA 15:4)

(Ceramics)

YAKOVLEV, A.G.

USSR/Chemical Technology -- Chemical Products and Their Application. Silicates. Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1676

Author: Yakovlev, A. G.

Institution: Voronezh Zooveterinary Institute

Title: Materials on the Physicochemical Investigation of Mineral Binding Substances. Communication 2. Influence of Surface-Active Additives on the Improvement of the Grinding of Cement Clinker

Original Periodical: Tr. Voronezhsk, zoovet. in-ta, 1956, Vol 13, 231-236

Abstract: The investigation of the surface tension of liquid polydiene hydrocarbons and polystyrenes at the liquid-air interface and of benzene-water solutions by the maximum bubble pressure method has established the possibility of their utilization as hydrophobic additives as well as grinding-promoters in the grinding of cement clinker. For Communication 1 see Referat Zhur - Khimiya, 1956, 72502.

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PISARENKO, Aleksandr Pavlovich, prof.; POSPELOVA, Kseniya Aleksandrovna, dots.; YAKOVLEV, Aleksandr Georgiyevich, dots.; VOYUTSKIY, S.S., prof., retsenzent; NAZAROV, V.I., prof., retsenzent; TAUBMAN, S.S., prof., retsenzent; BARAMBOYM, N.K., prof., retsenzent; STUKOVNIN, I.D., red. izd-va; YEZHOVA, L.L., tekhn. red.

[Course in colloid chemistry] Kurs kolloidnoi khimii. Moskva, Gos.izd-vo "Vysshaia shkola," 1961. 241 p. (MIRA 14:12)
(Colloids)

PRIMAK, N.N.; YAKOVLEV, A.G.

Thermal castration of millet. Agrobiologiia no.4:613-614 Jl-Ag '64.
(MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zernobobovykh kul'tur, laboratoriya genetiki i tsitologii.

YAKOVLEV, A.G.

New methods should be progressive. Put' i put. khoz. 5 no.3:18 Mr '61. (MIRA 14:3)

1. Nachal'nik Topkinskoy distantsii puti, st.Topki, Tomskoy dorogi.
(Railroads—Management)

SIVEL'KIN, V.V.; YAKOVLEV, A.G.

Problem concerning the electric power supply of the oil bearing regions of the Tatar A.S.S.R. Trudy Kazan.fil.AN SSSR.Ser.energ.i vod.khoz. no.2:109-110 '61. (MIRA 15:3)
(Tatar A.S.S.R.--Electric power distribution)

YAKOVLEV, Avenir Ivanovich

(Sci Res Inst of Sanitation of the Ministry of Health RSFSR)
Academic degree of Doctor of Medical Sciences, based on his defense, 26 July 1954, in the Council of the Sci Res Inst of Sanitation of the Ministry of Defense USSR, of his dissertation entitled: "Variability of the Virus of Japanese Encephalitis."

Academic degree and/or title: Doctor of Sciences

Sci Res Institute Sanitation Govt of Red Army (USSR)

SO: Decisions of VAK, List no. 26, 17 Dec 55, Byulleten' MVO SSSR, Uncl. JPRS/NY 548

YAKOVLEV, A.I.; KHANDUYEV, TS.TS.; KLEPUKOV, A.A.

Micro-agglutination of Rickettsia and viruses observed by fluorescence microscopy. Vop.virus 3 no.6:369-372 N-D '58.
(MIRA 12:1)

(RICKETTSIA,
micro-agglut., luminescence microscopy (Rus))
(VIRUSES,
same)
(AGGLUTINATION,
micro-agglut. of Rickettsia & viruses, luminescence microscopy (Rus))

YAKOVLEV, A.I., doktor meditsinskikh nauk; IGUMNOV, A.I.

Use of luminescenal microscopy in microbiology. Voen.-med. zhur. no.11:41-45 N '61. (MIRA 15:6)
(MICROBIOLOGY)
(FLUORESCENCE MICROSCOPY)

POLOZOV, A.I.; YAKOVLEV, A.I.

Method for producing purified live cultures of R. burneti. Vop. virus. 6 no.6:746-748 N-D '61. (MIRA 15:2)
(RICKETTSIA)

YAKOVLEV, A.I.; POLOZOV, A.I.

Change in the complement-fixing activity of antigens prepared from Rickettsia burnetii. Zhur.mikrobiol., epid.i immun. 33 no.8:74-79 Ag '62. (MIRA 15:10)
(RICKETTSIA) (ANTIGENS AND ANTIBODIES) (COMPLEMENT FIXATION)

SOKOLOV, M.I.; KRAVCHENKO, A.T.; YAKOVLEV, A.I.

Review of the periodical "Vorosy virusologii "for 1961. Vop. virus. 7 no.3:373-376 My-Je'62. (MIRA 16:8)
(VIROLOGY—PERIODICALS)

YAKOVLEV, A.I.; ANDREYEV, V.A.

Use of the drip-laminar method in producing complement fixation reaction in experimental viral and rickettsial infections. Lab. delo 9 no.3:47-50 Mr '63. (MIRA 16:4)

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR.
(COMPLEMENT FIXATION) (RICKETTSIAL DISEASES) (VIRUS RESEARCH)

ACC NR: AP6021591 (N) SOURCE CODE: UR/0402/66/000/003/0376/0376

AUTHOR: Dzhivanyan, T. I.; Yakovlev, A. I.

ORG: Poliomyelitis and Viral Encephalitis Institute, Academy of Medical Sciences, SSSR (Institut poliomyelita i virusnykh entsefalitov AMN SSSR)

TITLE: Using serotyping to determine antigenic properties of inactivated tick-borne encephalitis vaccine

SOURCE: Voprosy virusologii, no. 3, 1966, 376

TOPIC TAGS: serotyping, vaccine, inactivated vaccine, tick borne encephalitis, antigen, antigen property, ANIMAL PARASITE, ENCEPHALITIS

ABSTRACT:
The complement-fixation reaction can be used for rapid determination of antigenic activity of tick-borne encephalitis vaccine. Use of this test as a preliminary indicator of vaccinal activity during production is suggested. [W.A. 50; CBE No. 10]

SUB CODE: 06/ SUBM DATE: none/

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YAKOVLEV, A.I.

Organization of the lubrication unit. Mashinostroitel' no.10: 10-12 O '63. (MIRA 16:12)

ROLIK, A.I.; KOSHVANETS, A.Ye.; YAKOVLEV, A.I.

Study of the operation of axial fans in the cooling system of high-speed PS motors. Energ. i elektrotekh. prom. no.3:38-42 Jl-S '63. (MIRA 16:10)

1. Khar'kovskiy aviatsionnyy institut.

ROZNO, A.I.; YAKOVLEV, A.I (Yalta)

Celomic cysts of the pericardium. Vrach.delo no.11:143-145 N '62. (MIRA 16:2)

1. Rentgenologicheskoye otdeleniye (zav. - kand.med.nauk A.I. Yakovlev) Instituta imeni I.M. Sechenova, Yalta.
(PERICARDIUM—TUMORS) (DIAGNOSIS, RADIOSCOPIC)

YAKOVLEV, A.I.

Device for Inoculating Cast Iron with an Alloy of Ferrosilicon and Magnesium. A. P. Zavilikov and A. I. Yakovlev (*Liteinoe Proizvodstvo*, 1955, (3), 30–31). [In Russian]. A device successfully used for the safe inoculation of cast iron with magnesium alloys is described in which these alloys are introduced below the iron surface.—S. K.

MG

BORISENKO, Aleksandr Ivanovich, kand.tekhn.nauk, dotsent; YAKOVLEV, Aleksandr Ivanovich

Hydraulic resistance of medium-sized electrical machines. Izv.vys. ucheb.zav.; elektromekh. 5 no.10:1137-1144 '62. (MIRA 15:11)

1. Zaveduyushchiy kafedroy gazotermodinamiki i reaktivnykh dvigateley Khar'kovskogo aviatsionnogo instituta (for Borisenko). 2. Vedushchiy inzhener laboratorii promyshlennoy aerodinamiki Khar'kovskogo aviatsionnogo instituta (for Yakovlev).
(Electric machinery—Cooling)

27564
S/170/61/004/010/019/019
B108/B102

26.5200

AUTHORS: Borisenko, A. I., Zimin, E. P., Yakovlev, A. I.

TITLE: Flow of a liquid and heat exchange in the gap between two rotating coaxial cylinders with initially axial motion of the liquid

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 4, no. 10, 1961, 129-133

TEXT: Thermal calculations for certain kinds of electromotors require knowledge of the velocity and temperature fields between stator and rotor. Therefore, the authors studied the laminar flow of a liquid between two coaxial cylinders axis-z with the radii r_1 and r_2 ($r_2 > r_1$). Density ρ, specific heat c_p, viscosity μ, and heat conductivity λ of the liquid are assumed to be constant. Steady flow and heat transfer are described by the equations $\rho(\vec{W}\nabla)\vec{W} = -\nabla p + \mu\Delta\vec{W}$ (1), $\rho c_p \vec{W}\nabla T = \lambda\Delta T + \mu D$ (2), $\mathrm{div}\vec{W} = 0$ (3), where μD is the function of viscous dissipation. The conditions $d/d\rho = 0$ and $W_r = 0$ are postulated. Consequently, $W_z = W_z(r)$. Under

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these conditions one may write $p = \varphi(r) + \Pi z$, where $\Pi = -\frac{dp}{dz} = \text{const}$, so that $\frac{\partial p}{\partial r} = \frac{d\psi}{dr}$ and $W_\varphi = W_\varphi(r)$. Eqs. (1) - (3) assume the form

$$\rho \frac{W_\varphi^2}{r} = \psi', \tag{8}$$

$$\Pi + \mu\left(W_z'' + \frac{1}{r} W_z'\right) = 0, \tag{9}$$

$$W_\varphi'' + \frac{1}{r} W_\varphi' - \frac{W_\varphi}{r^2} = 0. \tag{10}$$

The primes indicate differentiation with respect to r. The solutions to these equations are $W_z = C_1 \ln r - \frac{\Pi}{4\mu} r^2 + C_2$ (11), $W_\varphi = C_3 r + C_4/r$ (13), and $\psi(r) = \int(r) + C_5$, where $\int(r) = \frac{C_3^2}{2} r^2 + 2C_3 C_4 \ln r - C_4^2/2r^2$. The constants C_i may be determined from boundary conditions. Assuming that

$z = 0$ and $p = p_1$ at the inlet and $z = L$, $p = p_2$ at the outlet of the flow channel, one obtains $\Pi = -(p_1 - p_2)/L$. The calculations show that the velocity distribution is independent of the temperature distribution. The energy balance equation (2) assumes the form

$$\rho c_p W_z \frac{\partial T}{\partial z} = \lambda \left(\frac{\partial^2 T}{\partial r^2} + \frac{1}{r} \frac{\partial T}{\partial r} + \frac{\partial^2 T}{\partial z^2} \right) + \mu \left(\frac{dW_\varphi}{dr} - \frac{W_\varphi}{r} \right)^2 + \mu \left(\frac{dW_z}{dr} \right)^2. \quad (15)$$

For this equation, a solution of the form $T = Az + \theta(r)$ (16) may be found. Elementary calculations show that

$$\theta = -\frac{\Pi(\Pi + \rho A C_4)}{64 \mu \lambda} r^4 + \frac{1}{4} \left(C_2 + \frac{C_1 \Pi}{\lambda} - \frac{\rho A C_1 C_4}{2\lambda} \right) r^2 - \frac{\mu C_4^2}{\lambda r^2} - \frac{\mu C_1}{2\lambda} (\ln r)^2 + \frac{\rho A C_1 C_4}{4\lambda} r^2 \left(\ln r - \frac{1}{r} \right) + D_1 \ln r + D_2. \quad (17)$$

The constants D_1 and D_2 can be determined from boundary conditions. For numerical calculations, either the temperature gradient on the cylinders or the specific fluxes q_1 and q_2 on the walls of the cylinders may be given. The following relation is found for A:

$$A = \frac{\partial T_m}{\partial z} = \frac{2(q_1 r_1 + q_2 r_2)/(r_1 + r_2) + \int_{r_1}^{r_2} (\mu D)\, dr}{\rho c_p \int_{r_1}^{r_2} W_z\, dr} \qquad (19),$$

where T_m is the mean temperature of the liquid. There are 3 Soviet references.

SUBMITTED: February 20, 1961

Card 4/4

YAKOVLEV, A.I.

New data on S.S.Nezhdanovskii's works on aeronautics. Trudy Inst.ist. est.i tekh. 38:221-249 '61. (MIRA 14:5)
(Nezhdanovskii, Sergei Sergeevich, 1880-1940)
(Aeronautics)

ABRAMOV, R.R.; ALEKSEYEV, N.S.; ARKHANGEL'SKIY, N.A., prof. [deceased]; GUREVICH, B.S.; ZAYTSEV, V.G.; KEDRIN, Ye.A.; MIRONOVA, L.V.; OSTANOVSKIY, T.S., dots.; PALLADOV, S.S., dots.; SERGEYEV, M.Ye.; TER-OVAKIMYAN, I.A.; TSEREVITINOV, B.F.; SHCHEGLOV, L.M.; YAKOVLEV, A.I.; BORISOVA, G.A., red.; MEDRISH, D.M., tekhn. red.

[Study of manufactured goods; concise course] Tovarovedenie promyshlennykh tovarov; kratkii kurs. [By] P.R.Abramov i dr. Izd.2., perer. Moskva, Gostorgizdat, 1963. 768 p. (MIRA 16:11)

(Commercial products)

LYUBIMOV, R.V.; OBORIN, B.I.; SHIRYAYEV, S.A.; DOBRIN, Z.Ye.; SHALKOV, K. A.; YAKOVLEV, A.I.

Tunnel kiln operating on liquid fuel for burning fireclay articles. Ogneupory 26 no.11:494-497 '61. (MIRA 17:2)

1. Vsesoyuznyy institut ogneuporov (for Lyubimov, Oborin, Shiryayev).
2. Borovichskiy kombinat ogneuporov (for Dobrin, Shalkov, Yakovlev).

PAVLOV, A.V.; YAKOVLEV, A.I.

Effect of the bearing area of the action of rock pressure on the supports. Zap. LGI 48 no.1:25-27 '63. (MIRA 17:8)

YAKOVLEV, A.I.

Modernization of vertical milling machines for contour machining of configurated parts. Mashinostroitel' no.4:15-17 Ap'64
(MIRA 17:7)

BORISENKO, A.I., prof.; YAKOVLEV, A.I., inzh.

Study of the cooling of an enclosed d.c. machine. Elektrotekhnika 35 no.6:54-60 Je '64. (MIRA 17:8)

YAKOVLEV, A.

IVIN, K.; KULIKOVSKAYA, N.; MARKOVNIKOV, V.; YAKOVLEV, A.

Results of testing the TBU-1 trolley bus. Zhil.-kom. khoz. 7 no.3:9-12 '57. (MLRA 10:4)

(Trolley buses)

YAKOVLEV, A.I.

MARKOVNIKOV, V.L., kand.tekhn.nauk; YAKOVLEV, A.I., kand.tekhn.nauk; KULIKOVSKAYA, N.M., kand.tekhn.nauk

Investigating the bending loads active on semiaxles. Avt.i trakt. prom. no.10:21-24 O '57. (MIRA 10:12)

1. Akademiya kommunal'nogo khizyaystva.
(Automobiles--Axles) (Strains and stresses)

YAKOVLEV, A., kand.tekhn.nauk; KULIKOVSKAYA, N., kand.tekhn.nauk

Determining the assembly quality of reduction gears of MTB-82D trolley busses. Zhil.-kom.khoz. 7 no.12:14-15 '58. (MIRA 11:12)
(Trolley busses) (Gearing--Measurement)

SOV-113-58-8-5/21

AUTHORS: Kulikovskaya, N.M. and Yakovlev, A.I., Candidates of Technical Sciences

TITLE: On the Calculation of Axial Forces in the Cardan Shaft (K raschetu osevykh sil kardannogo vala)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 8, pp 17-19 (USSR)

ABSTRACT: Theoretical research made on the slit coupling of a cardan-shaft trolley-bus by V.L. Markovnikov, Candidate of Technical Sciences, showed that the friction factor could vary from 0.05 to 0.2 according to the state of the slit coupling and lubrication conditions. The friction factor and the axial forces were determined by experiments under operating conditions. The tests were carried out on the transmission of the "TBU-1" type trolley-bus. The values fluctuated between 0.04 and 0.06. the maximum of the curve represented in figure 6 being $\mu = 0.05$. But certain μ values determined by tests attained 0.11 to 0.12. Experiments confirmed the considerations based on the theory, although the μ value did not attain 0.2 during the tests. This is due to the comparatively low wear of the slit coupling. In 1954,

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SOV-113-58-8-5/21

On the Calculation of Axial Forces in the Cardan Shaft

A.K. Frumkin published the experimental values of the axial forces and the friction factor for different type trucks. The friction factor was about 0.145, attaining 0.18 to 0.22 Taking into consideration an eventual seizing of the slit coupling, A.K. Frumkin recommends that μ =0.4 to 0.45. The maximum μ values of 0.11 to 0.12 obtained during the tests on the trolley-bus are sufficiently close to the value of 0.145 determined during tests on cars. There are 3 diagrams, 3 graphs and 1 Soviet reference.

ASSOCIATION: Akademiya kommunal'nogo khozyaystva (Academy of Communal Economy)

1. Shafts--Analysis 2. Shafts--Friction 3. Couplings--Applications 4. Transmissions--Test methods

Card 2/2

SOV-113-58-10-9/16

AUTHORS: Kulikovskaya, N.M., Yakovlev, A.I., Candidates of Technical Sciences

TITLE: On the Calculation of the Power Transmission Loads of Automobiles with Electric Motors (K raschëtu nagruzok silovykh peredach avtomobiley s elektrodvigatelyami)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 10, p 29-31 (USSR)

ABSTRACT: For investigating the load conditions of power transmissions in electrically driven vehicles, it is necessary to determine the law of torque changes of the electric motor during different working conditions of the automobile. This is necessary for evaluating the influence of inertia of the motor on the working conditions of the power transmission. For determining the inertia moment it is necessary to know the electromagnetic moment of the motor. The basic data for determining the electromagnetic moment is obtained by oscillographic recording of current change process in the armature and the electromotive force by a special measuring coil. The electromagnetic moment of the motor may be calculated according to the following formula:

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On the Calculation of the Power Transmission Loads of Automobiles with Electric Motors

$$M_{elm} = 974 \frac{IE}{n} \text{ kgm}$$

whereby M_{elm} - electromagnetic moment of the motor in kgm; I - armature current of the motor in amperes; E - e.m.f. of the armature in volts; n- rotation speed of the motor armature in rpm. The electromotive force of the armature is

$$E = N \frac{p}{a} \cdot \frac{n}{60} \Phi 10^{-8} \text{ volts}$$

whereby N - number of armature conductors; a - number of parallel branches of the armature coil; Φ - magnetic current of the main poles in mx. This results in the following equation:

$$M_{elm} = 974N \frac{p}{a} \cdot \frac{I\Phi}{60} 10^{-8} \text{ kgm}$$

The calculation method explained by the author was used for determining data on the traction motor "DK-204" used in the trolley bus "TBU-1". There are one diagram, one graph and one table.

ASSOCIATION: Akademiya kommunal'nogo khozyaystva (Academy of Municipal Economy)

Card 2/2

1. Automotive industry---USSR 2. Automatic transmissions---Torque 3. Electric motors---Magnetic moments 4. Mathematics---Applications

LUCHAY, G.; MAKSIMOV, A.; YAKOVLEV, A.

Testing the performance of KTM-2 and KTP-2 cars. Zhil.-kom. khoz. 9 no.7:24-25 '59. (MIRA 12:11)
(Kalinin--Streetcars--Testing)

KULIKOVSKAYA, N.M.; MAGNICHKINA, V.P.; YAKOVLEV, A.I.

Automation of the traction substations of streetcars and trolley buses. Sbor.nauch.rab.AKKH no.13:93-104 '62. (MIRA 16:4)
(Electric substations) (Streetcars) (Trolley buses)

YAKOVLEV, A.I.; MAKSIMOV, A.N.

Work conditions of traction transmission on streetcars.
Sbor.nauch.rab.AKKH no.13:119-137 '62. (MIRA 16:4)
(Streetcars)

YAKOVLEV, A.I.; SVIRIDENKO, I.S.; AKSENOV, M.I.

Testing new streetcars and trolley buses. Sbor.nauch.rab.AKKH no.13:138-146 '62. (MIRA 16:4)
(Streetcars--Testing) (Trolley buses--Testing)

YAKOVLEV, A. I., kand. tekhn.nauk; TYURIN, V. P., inzh.; EYDINOV, A. A., inzh.

Dynamic indices of new types of streetcars. Nov. tekh.zhil.-kom.khoz.:Gor.dor.-most.khoz. i transp. no. 2:31-46 '63. (MIRA 17:5)

AKSENOV, M. I., inzh.; YAKOVLEV, A. I., kand. tekhn. nauk

Interurban trolleybus transportation in the Crimea. Mov. tekh.zhil.-kom.khoz.:Gor.dor.-most.khoz. i transp. no. 2: 100-116 '63. (MIRA 17:5)

POTEMKIN, P.S.; SHUMILIN, A.A.; SHALKOV, K.A. [deceased]; YAKOVLEV, A.I.

Simultaneous grinding and drying of fireclays in shaft mills. Ogneupory 28 no.2:63-67 '63. (MIRA 16:2)

1. Vsesoyuznyy institut ogneuporov (for Potemkin, Shumilin).
2. Borovichskiy kombinat ogneuporov (for Shalkov, Yakovlev).

YAKOVLEV, A. I., kand. tekhn. nauk; SVIRIDENKO, I. S., kand. tekhn. nauk; KOZLOVSKIY, A. B.

Characteristics of the performance of power transmissions in case of a joint and separate electric drive. Avt. prom. 29 no.5:31-33 My '63. (MIRA 16:4)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut i Akademiya kommunal'nogo khozyaystva.

(Motor vehicles—Power transmissions)
(Electric driving)

YAKOVLEV, A.I.

Data on the development of drilling practices in the United States. Trudy VNIIBT no.9:99-109 '63. (MIRA 17:9)

L 23171-66 EWT(m) DIAAP GS

ACC NR: AT5028949 (A) SOURCE CODE: UR/0000/63/000/000/0236/0239

41

AUTHOR: Yakovlev, A. I.

ORG: none

TITLE: The use of radioactive isotopes in monitoring the cementing process in the construction of foundations for heavy hydraulic structures

SOURCE: Vsesoyuznyy seminar po primeneniyu radioaktivnykh izotopov v izmeritel'noy tekhnike i priborostroyenii. Frunze, 1961. Radioizotopnyye metody avtomaticheskogo kontrolya (Radioisotope methods of automatic control); trudy rasshirennogo soveshchaniya, v. 1. Frunze, Izd-vo AN KirgSSR, 1963, 236-239

TOPIC TAGS: radiation dosimeter, radiation detector, radiation counter, radioisotope, general construction

ABSTRACT: The monitoring of the cementing process in the injection of various mortars is discussed. Radioactivity densimeters are presently used for the continuous measurement of the composition of mortar as it is injected. The disadvantages of existing densimeters, (e. g. weight, periodic clogging of the sensing element, etc.) are enumerated. A new dosimeter, employing Cesium 137, which overcomes many of the

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L 23171-66
ACC NR: AT5028949

shortcomings of those previous systems, is described. The relation of measured radioactive intensity is derived as a function of various system parameters. It is stated that when a radiation detector consisting of two counters of the STS-5 type is used in a measuring interval of 12 seconds with a Cs-137 gamma-ray source, mortar density can be measured with less than 1% error. The radiation detectors and circuitry of the densimeter and a detailed description of the circuit and system are given. It is stated that this densimeter could also be used for measuring the parameters of glycerine and bituminous emulsions in mining operations. Orig. art. has: 2 figures.

SUB CODE: 18,13/ SUBM DATE: 21Mar63/ ORIG REF: 002/ OTH REF: 000

Card 2/2

YAKOVLEV, A.I.

Modernization of some types of machine tools. Mashinostroitel' no.8: 15-16 Ag '64. (MIRA 17:10)