OR[illegible]OV, V. [illegible]

[illegible]iagnosis of calcification of the fallopian tubes. Akush. i gin. no.1:132-133 '63. (MIRA 17:[illegible])

1. Iz khirurgicheskogo otdeleniya (nachal'nik [illegible]M. [illegible]) zheleznodorozhnoy bol'nitsy stantsii Perm' (nachal'nik [illegible]) Sverdlovskoy zheleznoy dorogi.

L 05405-67 EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD/WB

ACC NR: AT6022412 (N) SOURCE CODE: UR/2752/65/000/068/0045/0059

36

AUTHOR: Orlov, V. A.

B

ORG: None

16

TITLE: Conditions for acid cleaning of marine assemblies

SOURCE: Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 68, 1965. Tekhnicheskaya ekspluatatsiya morskogo flota (Technical operation of the merchant marine), 45-59

TOPIC TAGS: hydrochloric acid, hydrogen embrittlement, corrosion inhibitor, marine equipment, cleaning technique, carbonate, phosphate

ABSTRACT: The author presents the results of a study on the effect of hydrochloric acid concentration, temperature, pickling time, the amount of PB-5 inhibitor on hydrogen embrittlement and corrosion of steel. The effect of temperature and acid concentration on the rate of cleaning scale, rust and incrustation from low-carbon steel is determined. Experimental data are given on the amount of acid used during metal cleaning. The results of the study show that 1 g/l of PB-5 inhibitor added to 20% hydrochloric acid has the maximum effect on decreasing metal corrosion. Corrosion and hydrogen embrittlement increase rapidly as the temperature of the hydrochloric acid solution with PB-5 inhibitor rises past 20-25°C. Optimum cleaning rate is achieved

UDC: 629.12:621.82-004.55

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L 05405-67

ACC NR: AT6022412

at 20-25°C for high hydrochloric acid concentration with little improvement at higher temperature. On the other hand, cleaning rate increases with temperature for low acid concentration, but the optimum temperature interval is not much higher (25-30°C). Hydrochloric acid concentration has a greater effect than temperature on dissolution of carbonate and phosphate incrustation. 20% hydrochloric acid concentration containing 5-8 g/l of PB-5 inhibitor at 20°C can be considered optimum for hydrogenation, corrosion losses and cleaning rate. Orig. art. has: 8 figures, 5 tables, 1 formula.

SUB CODE: 13,7/ SUBM DATE: None/ ORIG REF: 015

Card 2/2

ORLOV, V.A., starshiy burovoy master.

Using core drills for underground prospecting boreholes. Gor. zhur. no.7:77 Jl '57. (MLRA 10:8)

1. Shakhta Novaya, rudoupravleniya imeni K. Libknekhta.
(Boring machinery)

ORLOV, V.; VAL'TER, M., red.; PAEGLIS, Ya.[Paeglis, J.], tekhn. red.

[Cleaning of steam boilers with acids; practices of the Riga Ship Repairing and Shipbuilding Plant of the Ministry of the Fleet] Kislotnaia ochistka parovykh kotlov; opyt Rizhskogo sudoremontno-sudostroitel'nogo zavoda MMF. Riga, TSentr. biuro tekhn. informatsii, 1960. 25 p. (MIRA 14:11)
(Riga—Boilers, Marine—Maintenance and repair)

ORLOV, V.

Experimental checking on cathodic removal of rust from metal.
Rech. transp. 19 no.3:44-46 Mr '60. (MIRA 14:5)

1. Nachal'nik tsentral'noy laboratorii Rizhskogo sudoremontno-sudostroitel'nogo zavoda.
(Hulls (Naval architecture)--Corrosion)

GRIBANOV, Vladimir Ivanovich; ORLOV, Vladimir Andreyevich; KOCHUROV, N.I., dots., retsenzent; BELETSKIY, G.A., insh., red.; DUDUSOVA, G.A., red. izd-va; SHCHETININA, L.V., tekhn. red.

[Carburetors for internal combustion engines] Karbiuratory dvigatelei vnutrennego sgoraniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 201 p. (MIRA 14:5)
(Carburetors)

28537
S/133/61/000/018/004/015
A004/A101

1.1800

AUTHORS: Orlov, V.A., Prokof'yeva, M.I.

TITLE: Electrochemical method of parkerizing sheet steel

PERIODICAL: Referativnyy zhurnal. Mashinostroyeniye, no. 18, 1961, 68, abstract 18B459 ("Sudostroyeniye", 1961, no. 2, 45 - 48)

TEXT: The authors describe the results of research work carried out at the Rizhskiy sudostroitel'no-sudoremontyy zavod (Riga Ship Building and Repair Plant), to find a method of passivating sheet steel which would produce a protracted corrosion protection during the storage of the steel in the open air and preserve the phosphate film as primer under the lacquer and paint coating. A method of electrochemical d-c parkerizing was selected which yields a coating characterized by a finely crystalline structure, density, good adhesion and high protective properties. Specimens from Cr .3 (St.3) sheet steel were parkerized under the following conditions: temperature 20°C, current density - 2.5 amp/dm², duration - 10 minutes. To check the mechanical properties of the phosphate layer, the sheets were subjected to working on bending rollers and on a pendulum type bending machine. Based on these tests, the conclusions can be drawn that phos-

Card 1/2

28537
S/[illegible]/[illegible]/[illegible]/[illegible]/[illegible]/[illegible]5
A004/A101

Electrochemical method of parkerizing sheet steel

phate coatings obtained by the cathode electric parkerizing method together with the application of a drying oil will protect metals from corrosion for at least 8 months; the electric parkerizing process can be carried out in a wide temperature range (the baths can be mounted in the open air); phosphate coatings do not require special drying prior to applying the drying oil. The authors report on the organization at the Plant of a section for the chemical cleaning of sheet steel from dross and rust with subsequent electric parkerizing. There are [illegible] references.

N. Alekseyev

[Abstracter's note: Complete translation]

Card 2/2

ORLOV, V.

Acid methods of cleaning steam boilers and anchor chains. Rech. transp. 20 no.5:33-35 My '61. (MIRA 14:5)

1. Nachal'nik tsentral'noy laboratorii Rizhskogo sudoremontno-sudostroitel'nogo zavoda.
(Boilers, Marine—Cleaning)

ORLOV, V.

Oil removal from steam boilers and main condensers. Mor. flot 21 no.12:21-22 D '61. (MIRA 14:12)

1. Nachal'nik tsentral'noy laboratorii Rizhskogo sudoremontnogo zavoda.

(Boilers, Marine—Maintenance and repair)

ORLOV, V.

Steam boiler protection by phosphate vapor plating. Rech. transp. 21 no.6:25 Je '62. (MIRA 15:7)

1. Nachal'nik TSentral'noy laboratorii Rizhskogo sudostroitel'nogo i sudoremontnogo zavoda.
(Rollers, Marine—Corrosion)
(Vapor plating)

ORLOV, V.; SOLOV'YEVA, Z.; RUDNOVA, A., inzhener-khimik; KOVALEV, N.; KHAKHEL', L.

Draw ship repair plant laboratories into doing creative work. Mor. flot 22 no.11:36-37 N '62. (MIRA 15:12)

1. Nachal'nik TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Orlov). 2. Starshiy inzhener-fizik TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Solov'yeva). 3. Starshiy tekhnik TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Kovalev). 4. Starshiy laborant TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Khakhel').

(Ships--Maintenance and repair)

ORLOV, V.A., inzh.; RATNIKOV, V.V.

Cold phosphate coating of ship hulls and superstructures. (MIRA 15:6)
Sudostroenie 28 no.6:54-55 Je '62.
(Phosphate coating) (Ships--Maintenance and repair)

OHLOV, V.A., inzh.; MYAGKOV, N.P., inzh.

Improving the corrosion protection of ballast tanks. Sudostroenie 28 no.11:53-55 N '62. (MIRA 15:12)
(Hulls (Naval architecture)—Corrosion)

ORLOV, V.

Acid cleaning of steam boilers. Mor. flot 23 no.1:35-36 Ja '63. (MIRA 16:4)

1. Nachal'nik laboratorii Rizhskogo sudoremontnogo zavoda.
(Boilers, Marine--Cleaning)

ORLOV, Valentin Aleksandrovich, aspirant

Design of an optimum controller for regulating the operation of an electric arc steel smelting furnace. Izv. vys. ucheb. zav.; elektromekh. 7 no.9:1120-1129 '64 (MIRA 18:1)

1. Institut avtomatiki i telemekhaniki, Moskva.

ORLOV, V.A. (Moskva)

Synthesis of the transfer function of an optimal controller.
Avtom. i telem. 26 no.1:50-57 Ja '65. (MIRA 18:4)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

L 43928-66 EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/HM/WB/

ACC NR: AP6027432 SOURCE CODE: UR/0125/66/000/007/0054/0057

51 B

AUTHOR: Chekotilo, L. V.; Artamonov, V. L.; Orlov, V. A.

ORG: [Chekotilo, Artamonov] Electric Welding Institute im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR); [Orlov] First State Bearing Plant (Pervyy gosudarstvennyy podshipnikovyy zavod)

TITLE: Submerged-arc welding of oxidation-resistant austenitic Kh25N20S2 steel and Kh18N35S3 alloy

SOURCE: Avtomaticheskaya svarka, no. 7, 1966, 54-57

TOPIC TAGS: austenitic steel, chromium steel, nickel alloy, resistant steel, metal welding/Kh25N20S2 steel, Kh18N35 alloy

ABSTRACT: Automatic submerged-arc welding of oxidation-resistant Kh25N20S2 steel and Kh18N35S3 alloy (both are susceptible to hot cracking owing to a high silicon content) can be done sucessfully with EP532(Kh25N20SRI) electrode wire containing 2.5—3% silicon and 0.4—0.7% boron and an ANF-22 flux. The wire should be 2.0—2.5 mm in diameter. For wires with a boron content over 0.5%, ANF-23 flux should be used. To reduce further the weld cracking, preheating to 200—250C is recommended. The joints welded with EP532 wire possess a fairly high heat resistance. For instance, the rupture life at 900C of Kh25N20S2 alloy welds austenized at 1100C and aged at 750C for 5 hr was 177 hr under a stress of 2.5 kg/mm^2 and 705 hr under a stress of 2 kg/mm^2. Due to a high silicon content in EP532 wire, the welds are not susceptible

Card 1/2 UDC: 621.791.756:669.15-194

L 43928-66

ACC NR: AP6027432

to carburization and are oxidation resistant at high temperatures. The new method of automatic welding has been successfully introduced in the industry. Orig. art. has: 4 figures and 4 tables.

[TD]

SUB CODE: 11, 13/ SUBM DATE: 13Jan66/ ORIG REF: 004/ ATD PRESS: 5060

Card 2/2

L 38742-66 EWT(l)/EWT(m)/EWP(j)/T/EWP(v) IJP(c) BM/WW
ACC NR: AP6025669 SOURCE CODE: UR/0413/66/000/013/0143/0143

INVENTOR: Levin, A. Ya.; Orlov, V. A.

ORG: none

TITLE: Thermal- and acoustic-insulation covering for aircraft cabins and compartments. Class 62, No. 183593

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 143

TOPIC TAGS: acoustic insulation, heat insulation, aircraft cabin environment

ABSTRACT: An Author Certificate has been issued for a thermal- and acoustic-insulating covering for cabins and compartments in transport aircraft, the skins of which are made up of sections of longitudinal and transverse load-bearing units using porous material laid onto the skin in one or several layers. To better utilize the thermal- and acoustic-insulation properties of the materials (e. g., of ultra thin glass wool), to facilitate installation and removal, and to protect cooled surfaces from water condensation, the covering is made in the form of separate blocks coated with a waterproof film. These blocks are then placed in the section frames of the skin and secured to the latter around the edges by a plastic strip having an adhesive layer which provides hermetic sealing and ease of removal. Polyisobutylene or some other nonsetting adhesive is used to bond the blocks to the skin. [WH]

SUB CODE: 11/ 01/ SUBM DATE: 20Jul64/ ATD PRESS: 5047
UDC: 629.135/138

Card 1/1

ACCESSION NR: AP4039940 S/0191/64/000/006/0006/0009

AUTHOR: Orlov, V. A.; Tarakanov, O. G.

TITLE: Copolymerization of di- , '-chloroethyl ester of vinylphosphonic acid.

SOURCE: Plasticheskiye massy*, no. 6, 1964, 6-9

TOPIC TAGS: vinylphosphonic acid ester copolymer, copolymerization, vinylphosphonate methacrylic acid copolymer, vinylphosphonic ester styrene copolymer, vinylphosphonate allyl alcohol copolymer, polymerization mechanism, induction period, relative reactivity, styrene, allyl alcohol, vinylphosphonic acid dichlorethyl ester

ABSTRACT: The kinetics of copolymerization of di- β, β'-chloroethyl ester of vinylphosphonic acid (DCVP) with methacrylic acid (MAK), with styrene and with allyl alcohol were studied. Freshly recrystallized benzoyl peroxide was used as the initiator. In the concentration range of 0.2-2.0% by weight of the monomer the relation between the initial polymerization rate (v_{init}) and initiator concentration (C) is linear: $v_{init} = 2.35\sqrt{C} - 0.019$. The polymerization rate-temperature relation for 10% MAK-90% DCVP in vacuum is expressed by $\lg v_{init} = -5210/T +$

Card 1/3

14.1, where v_{init} is percent of volume reduction of the reaction mass in 1 minute and T is the absolute temperature. The presence of atmospheric oxygen produces an induction period, but then polymerization proceeds more rapidly than in vacuum. This induction period is reduced with increase in temperature in the 50-80C range. The polymerization mechanism involves initiation due to the decomposition of the initiator and termination resulting from the recombination of two polymeric radicals. Regardless of initial monomer mixture, the copolymer is enriched in MAK; the relative reactivity of DCVP and MAK was calculated: $r_1 = 0.1$, $r_2 = 1.7$. The relative reactivity of DCVP and styrene were also found: $r_1 = 0.2$, $r_2 = 2.2$. DCVP is more active on copolymerization than the diethyl ester of vinylphosphonic acid. DCVP did not copolymerize (or there was only a small amount of conversion at low alcohol concentrations) with allyl alcohol at 50-100C and starting mixtures containing 5-50% allyl alcohol, probably due to the inhibiting action of the OH group on DCVP. "S. A. Sokolov participated in the experimental work." Orig. art. has: 3 tables and 4 figures.

ASSOCIATION: None

ACCESSION NR: AP4040497 S/0190/64/006/006/1157/1157

AUTHORS: Orlov, V. A.; Tarakanov, O. G.

TITLE: Thermal destruction of polyurethanes (letter to the editor)

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 6, 1964, 1157

TOPIC TAGS: polyurethane, toluylenediisocyanate ethyleneglycol polyurethane, hexamethylenediisocyanate ethyleneglycol polyurethane, polyurethane thermal destruction, destruction product, polyurethane specific viscosity

ABSTRACT: Studies were conducted on thermal decomposition (in vacuum) of a polyurethane based on toluylenediisocyanate and ethyleneglycol (I) and of polyurethane based on hexamthylenediisocyanate and ethyleneglycol (II). The composition of gases and volatile products obtained at 250C was analyzed chromatographically. Specific viscosities of polymer solutions heated at 190C were recorded. It was found that the decomposition of polyurethane I started at 170C, of polyurethane II at 190C. The gaseous phase contained carbon dioxide, ethylene oxide, acetaldehyde, and a number of unidentified products. The thermal decomposition of polyurethane I yielded nearly twice as much carbon dioxide as the

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ACCESSION NR: AP4040497

decomposition of polyurethane II. The volatile decomposition products of polyurethane I contained large amounts of toluylenediamine and only a little ethyleneglycol, while the thermal decomposition products of polyurethane II contained substantial quantities of ethyleneglycol but no free hexamethylenediamine. The specific viscosity of the solutions of polyurethane I dropped sharply after the beginning of heating, while polyurethane II became insoluble. The authors conclude that the patterns of thermal destruction suffered by polyurethanes I and II differ substantially.

ASSOCIATION: none

SUBMITTED: 27Feb64 DATE ACQ: 06Jul64 ENCL: 00

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

Card 2/2

TARAKANOV, O.G.; VAKHTINA, I.A.; ORLOV, V.A.

K' etics of gas evolution in the reaction of toluylenediisocyanate with water. Plast. massy no.12:45-46 '64.

(MIRA 18:3)

ORLOV, V. A.

Orlov, V. A. -- "Investigation of Mech a nized Bunker Coal-Mixing Apparatus." Min Railways USSR, Moscow Order of Lenin and Order of Labor Red Banner Inst of Engineers of Railroad Transport imeni I. V. Stalin, Moscow, 1955 (Dissertation for the Degree of Candidate in T$_e$chnical Sciences)

SO: Knizhnaya Letopis', N$_o$. 23, Moscow, Jun 55, pp 87-104

BUSH, V.K.; ORLOV, V.A.

Our complaints against factory suppliers. Avtom., telem. i sviaz' no.3:39 Mr '57. (MLRA 10:4)

1. Elektromekhanik Leningrad Varshavskoy distantsii signalizatsii i svyazi Oktyabr'skoy dorogi (for Bush).
(Railroads--Equipment and supplies)

ORLOV, V.A

ORLOV, V.A.

Construction deficiencies in banner mechanisms. Avtom., telem. i svias' 2 no.2:31-32 F '58. (MIRA 11:1)

1. Starshiy elektromekhanik Bologovskoy distantsii signalizatsii i svyazi Oktyabr'skoy dorogi.
(Railroads--Signaling--Equipment and supplies)

ORLOV, V.A.

Improve the working conditions of railroad station attendants.
Avtom., telem. i sviaz' 4 no.10:39 O '60. (MIRA 13:10)

1. Starshiy elektromekhanik Kalinskoy distantsii signalizatsii i svyazi Oktyabr'skoy dorogi.
(Railroads--Employees)

ORLOV, V.A.

Protection of electric switch drives from frost. Avtom., telem. i svias' 6 no.10:33-34 O '62. (MIRA 16:5)

1. Starshiy elektromekhanik Kalininskoy distantsii signalizatsii i svyazi Oktyabr'skoy dorogi. (Railroads--Switches)

ORLOV, V.A.; [illegible]

Thermal [illegible] polyurethanes. [illegible]
157 Je '62 [illegible] RA [illegible]

FOMENKO, B.A.; ORLOV, V.A.; TARAKANOV, O.G.

Studying the kinetics of polyurethane formation by the change of the specific volumetric resistance of the thermosetting system. Plast.massy no.10:47-49 '64. (MIRA 17:10)

L 54973-65 EWI(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 WW/RM

ACCESSION NR: AP5012103 UR/0191/65/000/005/0012/0015
678.664.01:536.49

29
B

AUTHOR: Orlov, V. A.; Tarakanov, O. G. 15 15

TITLE: Study of the thermal degradation of polyurethane made from toluylene diisocyanate and ethylene glycol

SOURCE: Plasticheskiye massy, no. 5, 1965, 12-15

TOPIC TAGS: polyurethane degradation, polymer thermal degradation, toluylene diisocyanate, ethylene glycol

ABSTRACT: The thermal degradation of polyurethane in a vacuum was studied at 170-270C by measuring the kinetics of gas evolution and weight loss, and by analyzing the products. The degradation proceeds as follows:

$$R-\underset{\underset{H}{|}}{N}-\overset{\overset{O}{\|}}{C}-OR_1 \longrightarrow \underset{(I)}{R-\overset{\overset{H}{|}}{N}\cdot} + CO_2 + \underset{(II)}{\cdot R_1} \qquad A$$

The first radical may be stabilized by adding hydrogen and changing it into an amine:

$$R-\overset{\overset{H}{|}}{N}\cdot + H\cdot \longrightarrow R-NH_2 \qquad B$$

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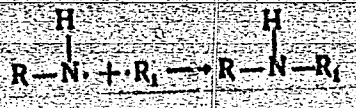
In addition, it may react with radical II, forming a secondary amine:



C

Ethylene oxide, acetaldehyde, and an unidentified component, probably ethylene, were observed in the gas phase. All these compounds may be products of the transformations of radical II. The above mechanism was confirmed by changes in the molecular weight, its pronounced decrease during thermal degradation indicates that the molecules do not contain reactive isocyanate groups able to enter into cross-linking reactions. The mechanism was also supported by determinations of CO_2 in the gas phase. Orig. art. has: 7 figures and 5 formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 000 OTHER: 010

Card 2/2

L 62173-65 EPF(c)/EPR/EWP(j)/EWA(c)/EWT(m)/T Pc-4/Pr-4/Ps-4 RPL JAJ/RM/EM
ACCESSION NR: AP5014685 UR/0191/65/000/006/0011/0013
678.664'420.01:536.495

AUTHOR: Orlov, V.A.; Tarakanov, O.G.

TITLE: Thermal degradation of polyurethane made from hexamethylene diisocyanate and ethylene glycol

SOURCE: Plasticheskiye massy, no. 6, 1965, 11-13

TOPIC TAGS: thermal degradation, polyurethane, hexamethylene diisocyanate, ethylene glycol, toluylene diisocyanate, polymer heat stability

ABSTRACT: The article discusses the effect of the structure of the isocyanate on the thermal stability of polyurethanes I and II (I = polyurethane prepared from toluylene diisocyanate, II - from hexamethylene diisocyanate and ethylene glycol). The

I. 62173-65

ACCESSION NR: AP5014685

CO_2, an amine, an olefin, or a secondary amine, while in II, the urethane group splits into the isocyanate and an alcohol. It is concluded that the isocyanate substituent affects the decomposition of the urethane group. The mechanism of this influence is elucidated. Summing up all the data obtained, the authors find that polyurethane II is more heat-stable than polyurethane I. Orig. art. has: 4 figures and 4 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: OC, MT

NO REF SOV: 001 OTHER: 004

ORLOV, V.A., inzh.

Multichannel telemetering unit for transmission of measurement data from a moving object to fixed recording equipment. Trudy MAI no.120:59-80 '60. (MIRA 13:9)
(Telemeter)

KRASIL'NIKOV, D.D.; YFIMOV, N.N.; NIFONTOV, M.A.; ORLOV, V.A.

Relation between the intensity of the ionization burst and the shower intensity in high-pressure chambers. Trudy IAFAN SSSR. Ser. fiz. no.4:15-18 '62. (MIRA 15:12)
(Ionization) (Cosmic rays)

L 24164-65 EWT(d) IJP(c)

ACCESSION NR: AP5003969 S/0103/65/026/001/0050/0057

AUTHOR: Orlov, V. A. (Moscow)

TITLE: Synthesis of the transfer function of an optimal controller

SOURCE: Avtomatika i telemekhanika, v. 26, no. 1, 1965, 50-57

TOPIC TAGS: optimal controller transfer function, transfer function synthesis, optimal controller

ABSTRACT: The problem of determining the optimal parameters and the optimal structure of an automatic controller is studied in the case when the transfer function of the controlled system, the disturbing force f, and the performance functional are given. Assuming that the performance functional is of the form

$$I_1 = \int_0^\infty x^2 dt, \qquad (1)$$

where x is the control error, the performance of the controller is constrained by the inequality

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L 24164-65

ACCESSION NR: AP5003969

$$I_s = \int_0^\infty q dt < A, \qquad (2)$$

where q is the loss function and the Laplace transform of the disturbing force f(t) is expressed by a rational fraction with poles located in the left half of the complex plane and in the origin, the problem under study is reduced to the synthesis of a controller transfer function which minimizes the performance functional (1). The transfer function of the optimal controller is sought as the ratio of Laplace transformers of the extremals u*(t) (u(t) is the control function) of the functional (1) under conditions (2). A variational method is presented for determining the extremals u*(t) and x*(t). The problem of determining the initial conditions for the control error x(t) and its derivatives is analyzed. Two examples illustrate the theory. Orig. art. has: 1 figure and 68 formulas. [LK]

NO REF SOV: 005 OTHER: 000 ATD PRESS: 3175

Card 2/2

S/194/62/000/002/061/096
D273/D301

AUTHOR: Orlov V. A.

TITLE: Analysis of transistor voltage converters with capacitive storage

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 2, 1962, abstract 2-5-51p (V sb. Poluprovodnik, pribory i ikh primeneniye, no. 7, M., "Sov. radio", 1961, 260-274)

TEXT: In analyzing the circuit elements of a symmetrical multivi-
orator of a transistorized converter with capacitive output (for
example, photographic flash guns) the thermistor parameters are
worked out, as well as the inductance of the transistor and the in-
fluence of the output rectifier circuit. The value of the elements
of the inverter circuit - capacity and resistance - are determined
from the working rate of the PT which, alternately closing and ope-
ning, pass[illegible] through the collector winding of the transis-
tor. The transistor in the inverter circuit does not [illegible]

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cause no particular demand is made upon it. The maximum capability of the efficiency factor in such a system is not more than 50%. A converter based on a thermistor type П202 (P202) with a storage capacity of 800 microfarads and an output voltage of 300 V has a charge time of 15 seconds. 5 references. [Abstracter's note: Complete translation.]

Card 2/2

ORLOV,Vladimir

On the threshold of the atomic age. Tekh.mol.23 no.11:1-6 N'55.
(Atomic power) (Nuclear reactors) (MIRA 8:12)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

Orlov, V.A.

SHEFTER, Ya.I., kandidat tekhnicheskikh nauk; ORLOV, V.A., inzhener

Some problems of statics and dynamics of the centrifugal regulating device for the D-18 windmill. Sel'khozmashina no.5:17-22 My '55. (MLRA 8:6)

1. Vsesoyuznyy institut mekhanizatsii sel'skogo khozyaystva.
(Windmills)

ORLOV, V.A., inzhener.

IG-1 clearance measuring instrument. Energetik 4 no.10:28-29 O '56.
(MLRA 9:11)

(Telemeter) (Electric lines--Overhead)

86118

9,6180

S/112/59/000/012/046/097
A052/A001

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 12, p. 145, # 24894

AUTHOR: Orlov, V.A.

TITLE: ИДД-3 (IDD-3) Measurer of Dynamic Deformations

PERIODICAL: V sb.: Eksperim. izuch. mekhan. usiliy v gidrogeneratorakh. Moscow-Leningrad, Gosenergoizdat, 1957, pp. 115-125

TEXT: A 4-channel device for measuring dynamic deformations by means of strain gauges is described. In the 0-500-cycle frequency band the frequency error is $\leq 4\%$. Nonlinearity of amplitude characteristic is $\leq 3\%$. The strain gauges can form a bridge or half-bridge circuit. Balancing is carried out by the real and reactive components. To the bridge output a phase-sensitive indicator is connected.

G.L.A.

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

Card 1/1

ORLOV, V.A. inzh.

Methods for using electric strain gauges. Elek. sta 29 no.10:75-79 O '58. (MIRA 11:11)
(Strain gauges)

8(6) SOV/112-59-5-8832

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 5, p 60 (USSR)

AUTHOR: Orlov, V. A.

TITLE: ORGRES Equipment for Measuring Dynamic Deformations

PERIODICAL: Naladochnyye i eksperim. raboty ORGRES, Nr 15, 1958, pp 194-201

ABSTRACT: Strain-gauging equipment developed by ORGRES for measuring static and dynamic strains in wires, towers, insulators, etc., is described. The equipment is intended for mechanically testing the 400-kv Volga-Moscow transmission line. Models IDD-3, IDD-3M, IDD-4M of the strain gauge are considered.

F.F.V.

Card 1/1

ORLOV, V.A., insh.

Investigating the regulation of wind electric power plants with the D-18 windmill. Nauch. trudy VIESKH 4:226-256 '59.
(MIRA 13:11)

(Windmills)

ANDRIANOV, Viktor Nikolayevich, prof.; BYSTRITSKIY, Dorian Naumovich; VASHKEVICH, Konstantin Petrovich; SEKTOROV, Vladimir Rafailovich; OKLOV, V.A., red.; VORONIN, K.P., tekhn.red.

[Wind-powered electric power plants] Vetroelektricheskie stantsii. Pod obshchei red. V.N.Andrianova. Moskva, Gos.energ.izd-vo, 1960. 319 p. (MIRA 14:3)
(Electric power plants) (Wind power)

ORLOV, V.A.

Study of the regulation of wind electric power plants with stabilized wind-driven generators. Elektroenergetika no.4:115-132 '61. (MIRA 14:8)

(Wind power) (Electric power plants)

ORLOV, V. A.

Cand Tech Sci - (diss) "Rural wind-electric stations and windpower equipment with stabilizer wind-motor (statics and dynamics of control)." Moscow, 1961. 18 pp with diagrams; 1 page of charts; (Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev); 200 copies; price not given; (KL, 6-61 sup, 222)

ORLOV, Vadim Aleksandrovich; SHAROGORODSKIY, S.G., red.

[Small electric current sources] Malogabaritnye istochniki toka. Moskva, Voenizdat, 1965. 191 p. (MIRA 18:12)

ORLOV, V. A., Engineer Cand Tech Sci.

"Investigation of Equalizing Tanks With Resistance." Sub 22 Jun 51, Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V.V. Kuybyshev

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

SOV/112-57-9972

8 (6)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 5, p 49 (USSR)

AUTHOR: Orlov, V. A.

TITLE: Hydraulic Resistances of the Connection Between the Turbine Penstock and the Equalizing Reservoir at a Hydroelectric Station (Gidravlicheskiye soprotivleniya uzla primykaniya turbinnykh truboprovodov k uravnitel'nym rezervuaram)

PERIODICAL: Tr. Mosk. inzh.-stroit. in-ta, 1956, Nr 16, pp 35-46

ABSTRACT: Six various models of the connection between an equalizer reservoir and a penstock were investigated. Investigated were sets of conditions: the turbine fully closed and the turbine open. The second set of conditions was studied in two versions: (a) the penstock supplied from the reservoir only; (b) a load thrown on the hydroelectric station. Hydraulic resistances were investigated under steady-state flow conditions within the range of the square-law resistances for various diaphragm conditions. The problem of the influence

Card 1/2

Hydraulic Resistances of the Connection Between the Turbine Penstock and the . . . .

of acceleration in the diaphragm upon the value of hydraulic resistance in the connection was considered. It is assumed that the above results of investigations can be used for actual conditions provided the simulation is done according to Froude. Bibliography: 3 items.

I.I.O.

24-6-10/24

ORLOV, V.A.

AUTHORS: Krivchenko, G. I. and Orlov, V. A. (Moscow).

TITLE: Investigation under natural conditions of the non-steady state regimes in pressure water systems of hydraulic power stations. (Naturnye issledovaniya neustanovivshikhsya rezhimov v napornykh vodovodakh gidroelektrostantsiy).

PERIODICAL: "Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk" (Bulletin of the Ac.Sc., Technical Sciences Section), 1957, No.6, pp. 110-118 (U.S.S.R.)

ABSTRACT: The results are described of tests under natural conditions of the non-steady state processes in the water piping feeding the Mingechaur hydraulic power station during switching on and switching off of load. The tests were carried out in 1954 and 1955 in the Chair for utilisation of water power of the Moscow Civil Engineering Institute imeni V. V. Kuybyshev (Moskovskiy Inzhenergo-Stroitel'niy Institut im. V. V. Kuybysheva). The arrangement of the water feeding structures to each unit of the Mingechaur hydraulic power station andthe location of the metering apparatus are shown in Fig.1, p.111. The water is fed to the type PO-211 turbine of 65 000 kW at 125 r.p.m. through a 4.4 m dia. pipe system; under normal operating conditions the pressure at the turbine varies between 49 and 65 m head.

Card 1/3

Investigation under natural conditions of the non-steady state regimes in pressure water systems of hydraulic power stations. (Cont.)

The tests were carried out before the water reservoirs were filled to the scheduled capacity and the static head varied between 45.1 and 46.0 m. The load relief during the tests amounted to about 50% in the tests 1, 2, 3 and 100% in the tests 4,5,6,7 and 8 in terms of the total load at 45 m head and was effected by the following two methods:
a) without disconnecting the generator from the power system by closing fully the guide vanes of the turbine and running the generator as a compensator (tests 1,2, 4 and 5); in these tests the guide vanes were fully closed for 60 secs and then they were opened to a position corresponding to no-load.
b) By disconnecting the loaded set from the power system (tests 3, 6, 7 and 8).
In the first mentioned case the r.p.m. remained constant, whilst in the second case it changed considerably. Switching on of load of 60% from zero (tests 9 and 10) was effected by shifting the guide vane limiter from a 15% opening to a 55% opening, whilst the generator remained connected to the power system. On the basis of the obtained theoretical and

24-6-16/24

Investigation under natural conditions of the non-steady state regimes in pressure water systems of hydraulic power stations. (Cont.)

experimental results it is concluded that calculation of the hydraulic impact (water hammer) in pressure piping of hydraulic power stations fitted with equalisation reservoirs yields results which are in good agreement with obtained test results if the characteristics of the turbine, the real law governing the closing of the guide vane apparatus, the elastic deformations of the water and the walls of the piping and the inertia of the stream, are taken into consideration. The maximum rise in the level of the reservoirs with additional resistance can be determined very accurately if braking of the speed in the derivations and the rise of the level in the respective reservoir during the time of closing the turbine are taken into consideration. Braking of the speed can also affect the rise in the level of the reservoirs in the case of absence of an additional resistance (e.g. in reservoirs of the differential type). There are 7 figures and 6 references, 5 of which are Slavic.

SUBMITTED: July 10, 1956.

AVAILABLE:

Card 3/3

ORLOV, V.A., dots., kand.tekhn.nauk

Unsteady water balance in surge tanks of hydroelectric power stations. Nauch.dokl.vys.shkoly; stroi. no.2:253-258 '58. (MIRA 12:1)

(Hydroelectric power stations) (Tanks)

ORLOV, V.A., dotsent, kand.tekhn.nauk

Operation of the surge tank of a hydroelectric power station with consideration of the time element in stopping the turbine. Stor. trud. MISI no.35:73-77 '61. (MIRA 14:9)
(Surge tanks) (Hydraulic turbines)

ORLOV, V.

Phosphate and superphosphate coatings on metal structures.
Mor. flot 23 no.7:29 Jl '63. (MIRA 16:8)

1. Nachal'nik tsentral'noy laboratorii Rizhskogo sudoremontnogo zavoda.

SHVEYKIN, V.V.; ORLOV, S.I.; KAUFMAN, M.M.; STOLETNIY, M.F.; NODEV, E.O.
STERN, V.A.; ORLOV, V.A.

Guillotine shears for the hot cutting of round ingots. Metallurg 9 no.1:35-36 Ja '64 (MIRA 18:1)

1. Ural'skiy politekhnicheskiy institut, Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov i Petroural'skiy novotrubnyy zavod.

GUBIN, F.F., doktor tekhn. nauk; KUPERMAN, V.L., kand. tekhn. nauk; BELYAKOV, A.A., retsenzent; KVARDAKOV, A.F., dots., retsenzent; ORLOV, V.A., kand. tekhn. nauk, dots. nauchn. red.

[Economics of water management and hydraulic construction] Ekonomika vodnogo khoziaistva i gidrotekhnicheskogo stroitel'stva. Moskva, Stroiizdat, 1965. 302 p. (MIRA 18:8)

1. Zamestitel' Tekhnicheskogo Soveta Gosudarstvennogo proizvodstvennogo komiteta po energetike i elektrifikatsii SSSR (for Belyakov). 2. Zaveduyushchiy kafedroy gidravliki i gidrosooruzheniy Novosibirskogo inzhenerno-stroitel'nogo instituta im. V.V.Kuybysheva (for Kvardakov).

ORLOV, V.A.

What is space philately? Zem. i vsel. 1 no.3:92-93 My-Je '65.
(MIRA 18:8)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

L 01116-66 EWT(m)/EWP(w)/EPF(c)/EWA(d)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD
ACCESSION NR: AP5019654 UR/0369/65/001/003/0299/0303

AUTHOR: Orlov, V. A.; Glikman, L. A. 55

TITLE: On the mechanism of the hydrogen brittleness of steel

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 3, 1965, 299-303

TOPIC TAGS: hydrogen brittleness, hydrogen saturation, static bending, dynamic bending, low carbon steel, intergranular fracture, intragranular fracture, hydrogen pressure

ABSTRACT: The authors present the results of an experimental investigation performed to determine the question of whether the nature of steel fracture is affected by saturation with hydrogen as well as by conversion from static to dynamic loading (at room temperature) and by conversion from room temperature to low test temperatures. The microscopic investigations of the fracture of steel before and after saturation with hydrogen were performed using notched and non-notched specimens (10x10x55 mm) subjected to static and dynamic bending tests. All specimens were of low-carbon steel. It was found that the development of fracture in specimens before saturation with hydrogen occurs chiefly inside the grains whereas in specimens saturated with hydrogen it occurs mainly along grain boundaries; in this connection, the work of fracture decreases 64%, owing to saturation with hydrogen, while the maximum loading required for bending fracture decreases 28%. Thus, it

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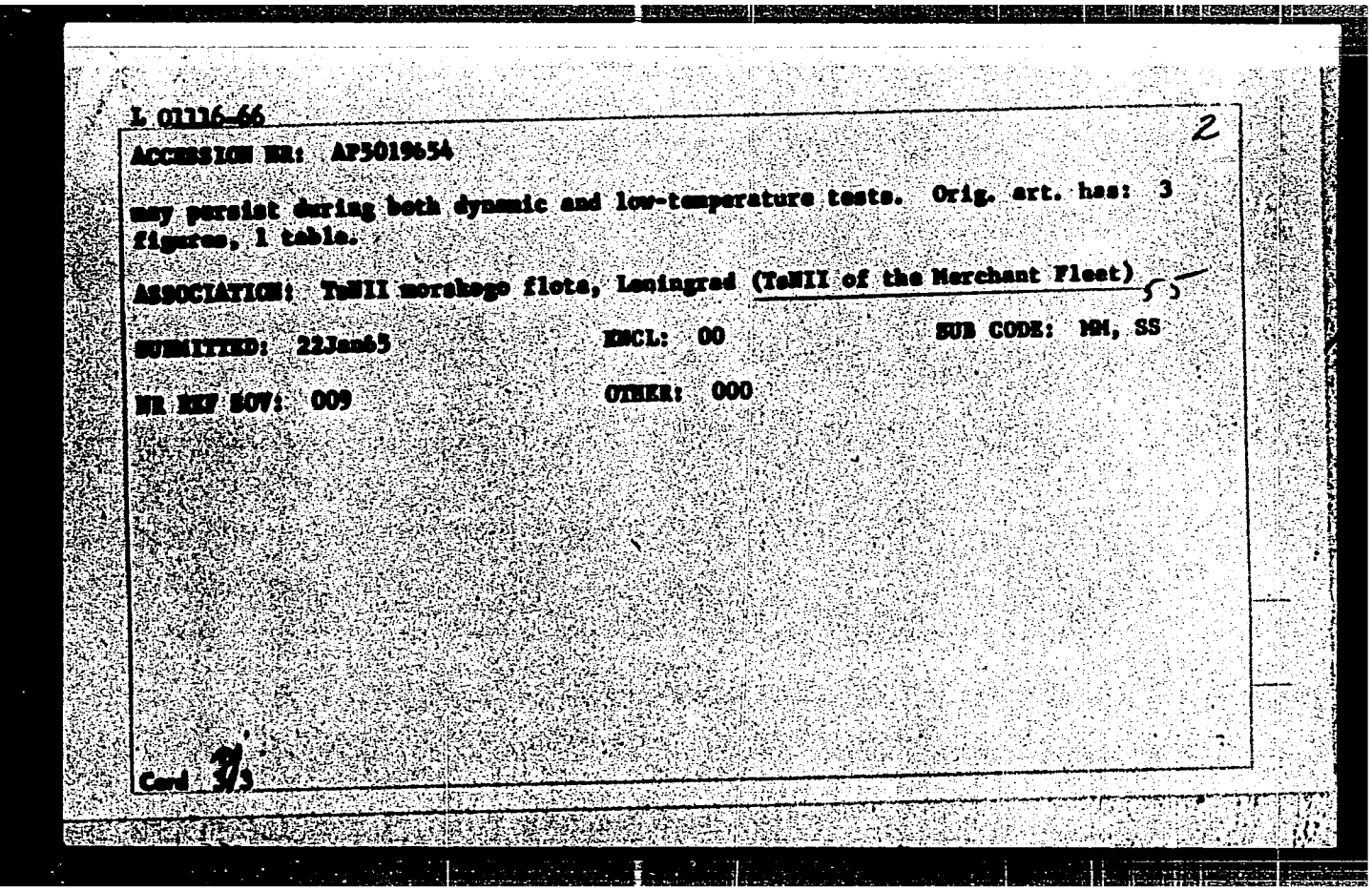
ACCESSION NR: AP5019654

may be concluded that the observed embrittlement and decrease in the work of fracture of the steel following its electrolytic saturation with hydrogen is due mainly to the weakening of the strength of grain boundaries, owing to the preponderant pooling of absorbed hydrogen in the microcavities along the grain boundaries and the resulting additional increase in pressure and hence a decrease in the intergranular (intercrystalline) strength. Therefore, hydrogen brittleness is chiefly associated with transition from intragranular to intergranular fracture, as indicated by both static and dynamic tests. The disappearance of or decrease in hydrogen brittleness following dynamic tests as well as following static tests at low temperatures (-70°C) is due to the reversed development of the microscopic picture of the development of fracture, i.e. transition from intergranular to, mostly, intragranular fracture. The reason for this transition is, in all likelihood, because two factors -- the increase in strain rate and decrease in temperature -- enhance intercrystalline strength to a much greater extent than intracrystalline strength and thus the loss in intercrystalline strength due to the hydrogen pressure may be compensated. The degree of this compensation, of course, depends not only on the material, the change in strain rate, and the decrease in temperature, but also on the degree of the decrease in intercrystalline strength due to the hydrogen pressure; under certain conditions this decrease may be so marked that premature, preponderantly intergranular fracture, i.e. hydrogen brittleness,

Card 2/3



L 01116-66

ACCESSION NR: AP5019654

2

may persist during both dynamic and low-temperature tests. Orig. art. has: 3 figures, 1 table.

ASSOCIATION: TsNII morskogo flota, Leningrad (TsNII of the Merchant Fleet)

SUBMITTED: 22Jan65 ENCL: 00 SUB CODE: MM, SS

NR REF SOV: 009 OTHER: 000

Card 2/3

ORLOV, V.A.

Stamps tell about lunar exploration. Zem. i vsel. 1 no.4:88-89 Jl-Ag '65. (MIRA 18:12)

L 2577-66 EWT(m)/EWP(w)/EPF(c)/EWA(d)/I/EWP(t)/EWP(z)/EWP(b)/EWA(c) IJP(c)
ACCESSION NR: AP5024812 MJW/JD UR/0032/65/031/010/1203/1205
620.192.3

AUTHOR: Gelev, V. A.; Glikman, L. A.

TITLE: Determining the principal points of accumulation and diffusion of hydrogen in steel during electrolytic hydrogen absorption

SOURCE: Zavodskaya laboratoriya, v. 31, no. 10, 1965, 1203-1205

TOPIC TAGS: hydrogen embrittlement, steel, hydrogenation

ABSTRACT: A method is proposed for directly observing the escape of hydrogen permeated into a metal by electrolytic and acid hydrogenation. The points of preferred hydrogen accumulation were determined by observing the places where cracks are developed and propagated in the hydrogenated metal. The specimens were made in the form of square plates with dimensions of 15 × 15 × 0.8 mm. Commercial iron, 45 and 20Kh steel were studied. The specimens were placed on the stage of a metallographic microscope with the surface toward the lens etched and coated with a thin layer of oil immersion. The electrolyte or hydrogenating medium was flooded through a glass tube hermetically sealed to the other side of the specimen with

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L 3577-66
ACCESSION NR: AP5024812

epoxy resin. The specimen served as the cathode during electrolysis while the anode was a helix of platinum wire. The hydrogenation was done in 0.1 n. H_2SO_4 at a current density of 0.05 a/cm^2 and a temperature of 20-21°C. It was found that hydrogen is accumulated and diffused chiefly at grain boundaries. Orig. art. has: 2 figures.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota (Central Scientific Research Institute of the Marine Fleet)

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 002 OTHER: 000

Card 2/2

L 11446-67 EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD/WB
ACC NR: AP6029683 (N) SOURCE CODE: UR/0369/66/002/004/0431/0436

AUTHOR: Kostrov, Ye. N.; Glikman, L. A.; Orlov, V. A.

ORG: TsNII of the Maritime Fleet, Leningrad (TsNII morskogo flota)

TITLE: Corrosion fatigue strength of steels of varying hardness in sea water with cathode protection applied

SOURCE: Fiziko-khimicheskaya makhanika materialov, v. 2, no. 4, 1966, 431-436

TOPIC TAGS: alloy steel, corrosion resistant steel, metal property, corrosion resistance, fatigue strength, fatigue test, metal test

ABSTRACT: Results are presented from a study made to determine whether the effectiveness of cathode protection is reduced in tests with hard steels. Alloyed structural steel 45KhNMFA was tested after hardening and moderate annealing. The corrosion medium used was 3% NaCl. Steels types 20 and 40 were also tested for comparison purposes. The nature of the change of corrosion-fatigue resistance in the NaCl solution as a function of protective current density was identical for the three types of steel. The curve of effectiveness of protection vs current density shows a maximum. Although with the optimal cathode polarization the corrosion-fatigue resistance of the soft steels is practically the same as in air, the maximal limit of corrosion-fatigue strength of the hard steel, with optimal current density, is still 20% less than the

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L 11446-67
ACC NR: AP6029683

same limit in air. The reduction in protection effectiveness with excess current is highest for the hard steel. The curves produced are the result of the interaction of two features: the increased protection due to the cathode effect and the reduction in fatigue strength due to absorption of hydrogen. Orig. art. has: 3 figure and 1 table.

SUB CODE: 11/ SUBM DATE: 14Dec65/ ORIG REF: 008/ OTH REF: 005

Card 2/2 lm

ACC NR: AP6032424 SOURCE CODE: UR/0103/66/000/009/0027/0039

AUTHOR: Orlov, V. A. (Moscow)

ORG: none

TITLE: Method of analysis of invariant and optimal systems with periodic parameters

SOURCE: Avtomatika i telemekhanika, no. 9, 1966, 27-39

TOPIC TAGS: optimal automatic control, automatic control design, automatic control R and D, linear automatic control system

ABSTRACT: The design of invariant and optimal linear systems with periodic parameters can be reduced to analysis of linear differential and integral equations with periodic coefficients and to subsequent selection of correcting circuits for ensuring the invariance or the optimality of the system. This problem was solved

Card 1/2 UDC: 62-501.135

ACC NR: AP6032424

by V. A. Taft ("Principles of the spectral theory and calculation of variable-parameter circuits," Nauka, 1964) on the basis of the Laplace transform combined with the Hill theory, and frequency methods; the system reaction is determined by a z-transform. In this solution, a number of stationary and transient components were neglected. The present article further develops the Taft method, eliminates its simplifying assumptions and z-transform, and presents formulas describing the reaction of a broad class of linear systems with periodic parameters. It is pointed out that such a linear system is actually a system with parallel links and can be, in principle, used for ensuring the invariance; principal conditions of invariance are formulated. A method is given for calculating the transfer function and impulse transient response of a system with periodic parameters. Orig. art. has: 4 figures.

SUB CODE: 13, 09 / SUBM DATE: 25Jan66 / ORIG REF: 007

Card 2/2

KHOVANOV, I.M., kand. tekhn. nauk; ORLOV, V.A., kand. tekhn. nauk;
BOZHAK, G.L., insh.

Mobile inertia-type machine for unloading loose materials from railroad cars. Izv. vys. ucheb. zav.; mashinostr. no. 10: 155-160 '65 (MIRA 19:1)

1. Submitted March 11, 1964.

ORLOV, V.A.

Problems of designing and construction engineering systems in frozen ground. Stroi. v raion. Vost. Sib. i Krain. Sev. no.2: 136-159 '62. (MIRA 18:7)

L 7017-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)

ACC NR: AP5026786 SOURCE CODE: UR/0285/65/000/017/0071/0071

AUTHOR: Orlov, V. A.; Sinayuk, M. S.

ORG: none

TITLE: A protractor for measuring bevels. Class 42, No. 174372

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 71

TOPIC TAGS: mechanical measuring tool, angle measurement instrument

ABSTRACT: This Author's Certificate introduces a protractor for measuring bevels, especially for aircraft parts and shipbuilding equipment. The instrument contains a basic component with a reference plane and a sector scale, and also a rotating component with a vernier and a reference plane. The device is designed for automatic alignment on the surface of the component being measured. A variable bevel is measured without resetting the protractor by fitting out the rotating componant with a spring which holds the instrument in the extreme position. The reference plane of the rotating member is mounted on a rocker.

UDC: 531.741 : 62—432.2

SUB CODE: IE/ SUBM DATE: 25Feb64/ ORIG REF: 000/ OTH REF: 000

Card 1/1

ACC NR: AP6032121 (A,N) SOURCE CODE: UR/0346/66/000/010/0036/0038

AUTHOR: Chernyshev, V. V.; Burtsev, V. I.; Kushnir, A. T.; Orlov, V. A.

ORG: none

TITLE: Immunity to plague in weaned piglets vaccinated with an avirulent, dry, vacoine aerosol

SOURCE: Veterinariya, no. 10, 1966, 36-38

TOPIC TAGS: immunity, plague, pig, biologic aerosol, veterinary medicine, vaccine

ABSTRACT: The time required for vaccination to produce errective immunity, and the duration of immunity, were studied in piglets vaccinated against plague with an avirulent, dry, viral vaccine in aerosol. Healthy, two-month-old, weaned piglets, taken from both vaccinated and nonvaccinated sows, were used. Table 1 shows the results of the attempt to infect piglets, some of which were vaccinated by aerosol and some intramuscularly, with plague. The experimental data showed that by far less vaccine is required for aerosol than for intramuscular vaccination, and that immunity develops after, and is effective for, approximately the same periods with both methods. The authors suggest that wide application of this efficient method will save considerable time for veterinary workers.

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UDC:619:616.988.75-097]:636.4

ACC NR: AP6032121

Table 1. Results of attempt to inject piglets vaccinated by aerosol or intramuscularly against plague (virus dose $1 \cdot 10^5$ LD_{50} ml)

Vaccination method	Vaccine dose	Time of infection after vaccination (days)	Result of injection*
From nonvaccinated sows			
By aerosol...	1,17	2	[illegible]
		4	[illegible]
		6	[illegible]
		8	[illegible]
		15	[illegible]
		[illegible]	[illegible]
		[illegible]	[illegible]
		[illegible]	[illegible]
Intramuscular	1,0	2	[illegible]
		4	[illegible]
		6	[illegible]
		8	[illegible]
		15	[illegible]
		[illegible]	[illegible]
		[illegible]	[illegible]
		[illegible]	[illegible]

Card 2/3

Table 1 cont.

Vaccination method	Vaccine dose	Time of infection after vaccination (days)	Result of injection*
From vaccinated cows			
By aerosol...			
Intramuscular...			

*Numerator - number of animals falling sick; denominator - number of animals in experiment.

Orig. art. has: 1 table

[WA-50; CBE No. 14]
[EL]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 005

Card 3/3

L 08512-67 FSS-2/EWT(l)/EWT(m)/EWP(v)/EWP(j) IJP(c) DS/WW/RM UR/
ACC NR: AM6006278 (A) Monograph

59
58
B+1

Orlov, Vadim Aleksandrovich

Compact current sources (Malogabaritnyye istochni toka) Moscow, Voyenizdat M-va obor. SSSR, 65. 0191 p. illus., tables. 18,000 copies printed.

TOPIC TAGS: electric power source, lightweight power source, chemical energy conversion, semiconductor device

PURPOSE AND COVERAGE: Design and the basic principles of operation of current sources used for supplying compact apparatus are discussed. The chemical and physical processes occurring in current sources, explanations of their electrical and operating characteristics and values, and their range of application are presented. Recent advances in the field of chemical and semiconductor current sources and the basic trends in work on their further development are described. Reference material on current sources manufactured by Soviet industry, methods of their utilization, and the conventional symbols as established by GOST (All-Union State Standards) for chemical current sources are presented so that the reader can solve the problems of supplying any compact apparatus. The book is intended for a wide range of military and civilian readers.

Card 1/2

ORLOV, V.B.

UGBKh-150 automotive rig for drilling hydrogeological wells.
Mash. i neft. obor. no.4:3-4 '63. (MIRA 17:8)

1. PTO Kurskogo soveta narodnogo khozyaystva.

ORLOV, V.B. (Moscow)

Publication of mathematical literature by the State Publishing House of Theoretical and Technical Literature during 25 years. Mat. pros. no.1:229-242 '57. (MIRA 11:7)

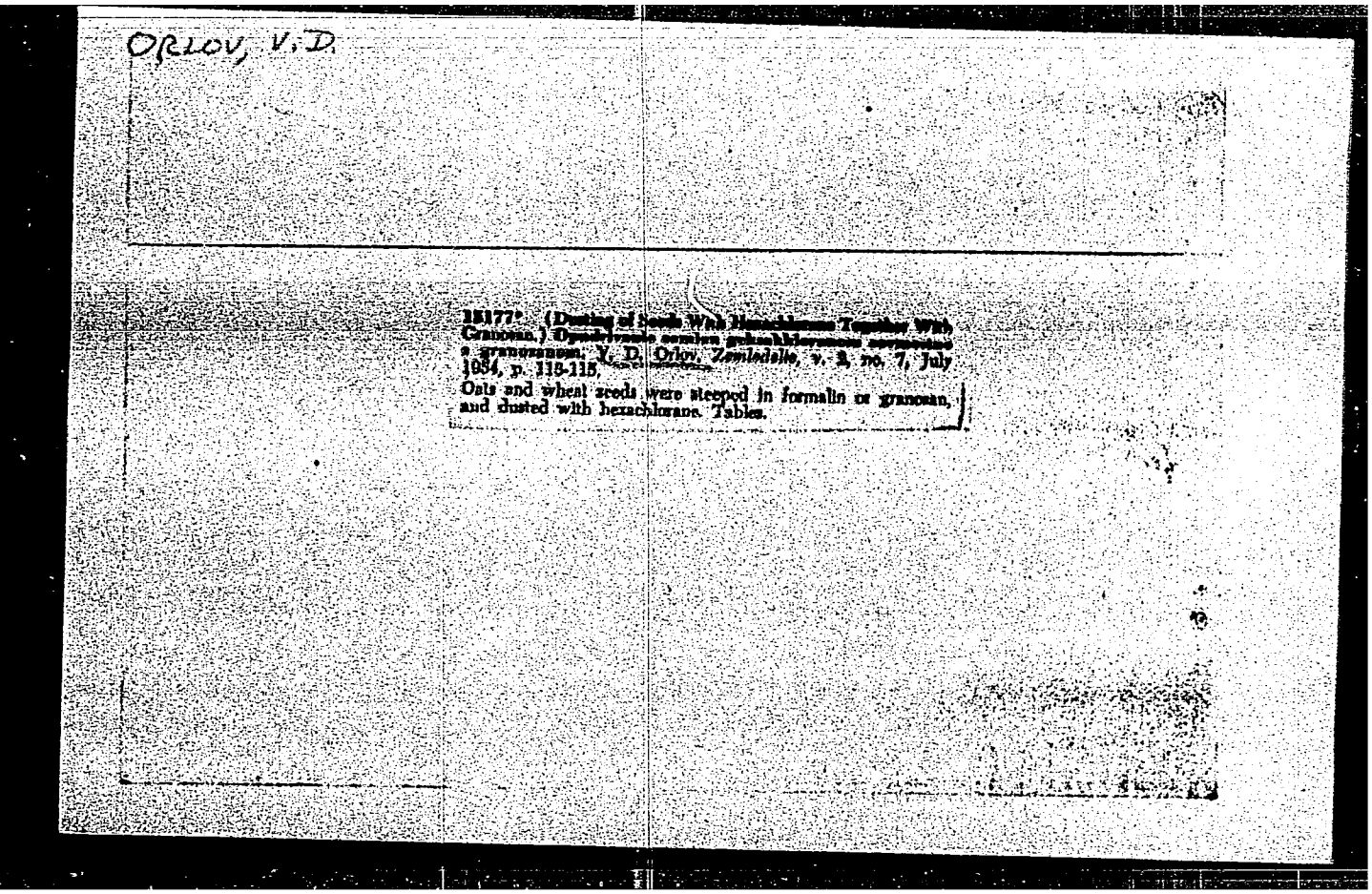
(Mathematics)

BEZBORODOV, Yu.M. (Moskva); ORLOV, V.B. (Moskva)

Machine plays chess. Mat.pros.no.6:139-164 '61. (MIRA 15:3)
(Chess)(Electronic calculating machines)

ORLOV, Vladimir Borisovich, inzh.; [illegible]

[Aid for the innovator] [illegible]
Kursk, Kurskoe knizhn. izd-vo, [illegible].



ORLOV, V.D.

15177* (Dusting of Seeds With Hexachloran Together With Granosan.) Opudrivanie semian gekhkhloranom sovmestno s granozanom. V. D. Orlov, *Zemledelie*, v. 2, no. 7, July 1954, p. 113-115.

Oats and wheat seeds were steeped in formalin or granosan, and dusted with hexachloran. Tables.

TSUKERMAN, S.V.; ORLOV, V.D.; LAVRUSHIN, V.F.; YUR'YEV, Yu.K.

Synthesis of selenophene analogs of chalcones. Zhur. org. khim. 1 no.4:650-653 Ap '65. (MIRA 18:11)

1. Khar'kovskiy gosudarstvennyy universitet imeni Gor'kogo i Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ORLOV, V.F.

Cause of bubble formation in heating water. Fiz.v shkole no.6:36-37 '53. (MLRA 6:10)

1. 20-ya srednyaya shkola stantsiya Novo-Titarovskoy Krasnodarskogo kraya. (Adsorption) (Water)

ORLOV, V.F.

ORLOV, V.F. (stantsiya Novo-Titarovskaya)

Errors in popular scientific literature and in fiction. Khim.v shkole 12 no.5:76-77 S-O '57. (MIRA 10:10)
(Chemistry) (Errors, Popular)

ORLOV, V.F., slesar'; ISTRATIY, P.P., slesar'

Machine for straightening bore rods. Gor. zhur. no.6:71 Je '61.
(MIRA 14:6)

1. Noril'skiy gorno-metallurgicheskiy kombinat.
(Rock drills--Maintenance and repair)

ORLOV, V.P.

Questions and problems on astronomy. Fiz. v shkole 16 no.2:81-83 Mr-Ap '56. (MLRA 9:6)

1.Stantsiya Novo-Titarovskaya Krasnodarskogo kraya.
(Astronomy--Problems, exercises, etc.)

22(1) SOV/47-59-3-42/53

AUTHOR: Orlov V.F.

TITLE: Problems in Astronomy for Pupils

PERIODICAL: Fizika v shkole, 1959, Nr 3, pp 96-97 (USSR)

ABSTRACT: This is a collection of astronomical problems selected from various Soviet novels, tales and popular scientific works, which may be used in school. The article also contains the answers.

ASSOCIATION: st.Novo-Titorovskaya Krasnodarskogo kraya
(Station Novo-Titorovskaya, Krasnodarsk Kray)

Card 1/1

ORLOV, V. F. (Stantsiya Novo-Titarovskaya Krasnodarskogo kraya)

Problem questions on astronomy. Fiz. v shkole 22 no.4:94 Jl-Ag '62. (MIRA 15:10)

(Astronomy—Problems, exercises, etc.)

L 01864-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG/JR/GD

ACC NR: AT6029306 SOURCE CODE: UR/0000/66/000/000/0034/0037

AUTHOR: Orlov, V. K.; Tselishchev, P. A.

ORG: none

TITLE: Experimental investigation of temperature conditions in the jacket of the fuel elements in the zone of the spacer lattices

SOURCE: Moscow. Energeticheskiy institut. Teploobmen v elementakh energeticheskikh ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966, 34-37

TOPIC TAGS: reactor fuel element, nuclear reactor technology, temperature measurement

ABSTRACT: It has been shown previously that, in the channels of a water-water power reactor, heat transfer conditions at the point of contact of the jacket of the fuel element with the strips of the lattice are different outside of this zone. The present experiments were carried out on the water cooling of a seven-element bundle. The experimental tube with a diameter of 10 x 1 mm, made of Type 1Kh18N9T steel, was placed in a round channel with a diameter of 16 mm and a length of 174 mm, heated with a low voltage alternating electric current. Zirconium lattice strips were placed in the central portion of the tube. Strips with a height of 4 mm were located on four levels, two to a level at a distance of 10.2 mm. The wall temperature was measured with

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AUTHOR: Orlov, V. K.; Tselishchev, P. A.

ORG: none

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TITLE: The potential effect of boiling on the hydraulic resistance of the fuel channel of a water-water power reactor 19

SOURCE: Moscow. Energeticheskiy institut. Teploobmen v elementakh energeticheskikh ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966, 42-45

TOPIC TAGS: hydraulic resistance, boiling water reactor

ABSTRACT: In water-water power reactors, under certain operating conditions, there may occur surface and even volumetric boiling which increases the hydraulic resistance and, as a result, decreases the water flow rate. This decrease of the flow rate can be calculated if it is assumed that the heat flux over the cross section of the channel is constant and that, over the length of the channel, it varies according to the law:

$$q = q_{max} \sin \frac{\pi x}{H + 2b} \frac{watts}{cm^2}, \qquad (1)$$

where x is the flow coordinate along the fuel channel, measured from the inlet; H is

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the height of the active zone; q_{max} is the specific heat flux at the middle of the active zone; δ is the height of the screens. The calculations were made for the fuel channels of the water-water power reactor at maximum values of the specific heat flux from 0.58×10^6 to 2.32×10^6 watts/m^2, inlet water velocities from 2 to 5 meters/sec, and inlet water temperatures from 250 to 260°C. The experimental data are shown in a series of figures. In general, the experimental results show that the distribution of the water flow rates over the fuel channels of a water-water power reactor affect substantially only the volumetric boiling. Surface boiling has practically no effect. Orig. art. has: 4 formulas and 2 figures.

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Investigating the cutting of coal with planetary cutter disks. Nauch. trudy KNIUI no.13:38-43 '64 (MIRA 18:1)

Characteristics of the geometry of cutting with planetary cutter disks of mining machinery depending on the adjustment of the disk and the feed ratio. Ibid.:97-107

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