

GRIGOR'YEV, L.M. (Velikiye Luki)

Differentiation of embryonic skeletal muscles in vitro [with summary  
in English]. Arkh.pat. 20 no.4:56-66 '58. (MIRA 11:5)

1. Iz patologoanatomicheskogo otdeleniya (zav. L.M. Grigor'yev)  
Velikolukskoy oblastnoy hol'nitsy (glavnyy vrach-zasluzhennyy  
vrach Latvyskoy SSR A.K. Glushkov)

(MUSCLES, embryology

growth & differentiation of explanted embryonic skeletal  
musc. (Rus)

GRIGOR'YEV, L.M. (Velikiye Luki, ul. Karla Libknekhta, d. 3, kv. 9)

Secondary differentiation of explanted skeletal muscles. Arkh.  
anat.gist. 1 embr. 35 no.6:101-103 N-D '58. (MIRA 12:1)

1. Patologoanatomicheskoye otdeleniye Velikolukskoy oblastnoy bol'-  
nitsy (glavnyy vrach D.F. Martynov).

(MUSCLES, physiol.

secondary differentiation of explanted skeletal musc.  
(Rus))

GRIGOR'YEV, L.M.

Secondary differentiation of embryonic cardiac muscles on the outside of organism. In Russian. Cs.morfologie 8 no.1:1-4 '60.

(KEAI 9:5)

1. Iz patologo-anatomicheskoy laboratoriy Velikoluskoy oblastnoy bol'nitsy. Zav. laboratoriyey L.M. Grigor'yev. Glavnyy vrach D.F. Martynov.

(HEART)

GRIGOR'YEV, L.M.

Development of the sarcolemma in conditions of growth and differentiation of embryonic skeletal muscles on the outside of organisms. In Russian. *Cs. morfologie* 8 no.1:5-9 '60. (EMAI 9:5)

1. Iz Velikolukskoy oblastnoy bol'nitsy. Glavnyy vrach - Martynov, D.F. (MUSCULOSKELETAL SYSTEM)

GRIGOR'YEV, L.M.

Secondary differentiation of skeletal muscle fibres of adult animals on the outside of organisms. In Russian. *Cy.morfologie* 8 no.1:10-14 (KRAI 9:5) '60.

1. Patologo-anatomicheskoye otdeleniye Velikolukskoy oblastnoy bol'nitsy - Glavnyy vrach Martynov, D.P.  
(MUSCULOSKELETAL SYSTEM)

GRIGOR'YEV, L.M.

Growth and secondary differentiation of the heart muscle of adult animals outside the organism. Zhur. ob. biol. 21 no.6:465-467 (MIRA 14:1) '60.

1. Patolog-anatomicheskoye otdeleniye 2-y oblastnoy bol'nitsy v g.Velikiye Luki.  
(HEART—MUSCLE) (TISSUE CULTURE)

GRIGORJEV, L.M. [Grigor'yev, L.M.]

Secondary differentiation of explanted heart muscle in adult  
animals. *Cesk. morf.* 12 no.2:141-151 '64

l. g. Velikie-Luki, 2-ya Oblastnaya bol'nitsa; glavnyy vrach  
D.F.Martynov.

\*

GRIGOR'YEV, L. N., Eng.; MIKHAYLOV, G. P., Dr. Tech. Sci.; SERDACHEN, M. P., Eng.

"Use of Combined Designs" p. 97-105 in book  
Increasing the Quality and Efficiency of Machinery, Moscow, Mashgin. 1957,  
626pp.



MIKHAYLOV, G.P. [deceased]; GRIGOR'YEV, L.N.

Welded metal structures with various plastic properties. Sbor.  
st.Ural.politekh.inst. no.65:85-88 '58. (MIRA 12:4)  
(Steel, Structural)

GRIGOR'YEV, L. N.

GRIGOR'YEV, L. N.: "Heat evolution in the boiling of binary mixtures."  
Min Higher Education USSR. Kazan' Chemico-technological  
Inst. Tashkent, 1956  
(Dissertation for the Degree of Candidate in Technical  
Sciences)

So: Knizhnaya Letopis', No. 18, 1956

57-2-20/32

AUTHORS: Grigor'yev, L. N. , Usmanov, A. G.

TITLE: Emission of Heat in the Boiling of Binary Mixtures (Teploot-dacha pri kipenii binarnykh smesey)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 2, pp. 325-332, (USSR)

ABSTRACT: The dependence of the coefficients of dissipation of heat on the composition of the mixture is investigated here and an attempt is made to determine the mechanism of the process in the boiling of the mixtures. At first the influence upon the mechanism of the process of steam-generation in the boiling of binary mixtures is investigated and it is shown that the data existing in publications are very contradictory. For this reason the investigation of the process of heat emission was performed during the boiling of some binary mixtures. The tests were made on a large scale at natural convection under atmospheric pressure. Two apparatus were erected, a large one with windows in which a visual observation and the photographing of the boiling process of the mixture of ethyl alcohol and water

Card 1/3

57-2-20/32

Emission of Heat in the Boiling of Binary Mixtures

took place, and a small apparatus in which the fundamental tests on the emission of heat during the boiling of the mixtures were made. The two apparatus did not differ in their mode of operation. Based on the tests the following was found:

- 1.) The mechanism of the boiling process of binary mixtures considerably differs from that of one-substance liquids.
- 2.) The composition of the boiling mixture influences the process of heat emission during boiling. This influence takes effect in the dependence of the value of the radius of curvature at the smallest nodule of unevenness, which acts as center of steam-generation, on the concentration of the boiling mixture.
- 3.) An equation (7) is derived here for the determination of the radius of curvature of the smallest nodule of unevenness acting as center of steam generation in the boiling of binary mixtures of liquids. This equation was confirmed in a qualitative respect.
- 4.) The coefficients of heat emission in the boiling of binary mixtures are considerably smaller than those of pure components of which the mixture consist. At a certain concentration of the mixture a well marked minimum of the function  $\alpha = f(x_1)$  is observed.  $x_1$  - Mol-concentration according to the component with lower boil-

Card 2/3

7-2-20/52

Emission of Heat in the Boiling of Binary Mixtures

ing point index "1" refers to the liquid. The authors were given advice by G. N. Krushilin, Corresponding Member of the AS USSR. There are 8 figures, and 3 references, 5 of which are Slavic.

SUBMITTED: December 13, 1956

AVAILABLE: Library of Congress

1. Binary compounds-Heat emission

Card 3/3

0071

24.5200  
AUTHORS:

Grigor'yev, L. N., Usmanov, A. G.

S/170/59/002/11/019/024  
B014/B014

TITLE:

Heat Exchange in Boiling Azeotropic Mixtures

PERIODICAL:

Inzhenerno-fizicheskiy zhurnal, 1959, Vol 2, Nr 11, pp 114-118 (USSR)

ABSTRACT:

Formula (1) which represents the dependence of the radius of curvature  $\rho_0$  of the smallest elevations acting as evaporation centers upon the composition of the boiling mixture, was derived by the authors in an earlier paper (Ref 1) for the heat exchange in boiling binary, azeotropic mixtures. In the present paper, the authors studied the effect of the complex B in equation (1), which is represented in equation (3). The effect of the quantity B on the heat-exchange coefficient depends on the respective sign, and the signs of the factors of B represented in (4) are studied separately. The sign of the left-hand expression of (4) may be negative or positive according to the composition of the mixture. According to Storonkin, the sign of the right-hand expression of (4) is obtained from formula (5). This sign is shown to depend on the difference in evaporation heat of the two components of the mixture. For the major part of the non-azeotropic mixtures studied by the authors the last-mentioned expression has a negative sign (Table 1). Figure 1 further indicates that the sign of the differential expression denoted by B has a positive sign for seven of the investigated

Card 1/2

Heat Exchange in Boiling Azeotropic Mixtures

68771  
S/170/59/002/11/019/024  
B014/B014

mixtures. Therefore, complex B has a negative sign, and  $q_0$  must have a maximum and, consequently, the heat-exchange coefficient a minimum which depends on the composition of the boiling mixture. These theoretical considerations were confirmed by experimental results (Ref 1). Results of experiments performed on three azeotropic mixtures are graphically shown in figures 2-4. The right-hand expression of (4) had a positive sign for two of the three mixtures. The left-hand expression of (4) had a maximum or minimum for all of the three mixtures, which means that it had reversed signs before and after attaining the bend point. It is thus possible to explain the fact that the heat-exchange coefficient of azeotropic mixtures has a maximum and a minimum (Figs 2-4). There are 4 figures, 2 tables, and 4 Soviet references.

ASSOCIATION: Khimiko-tekhnologicheskii institut im. S. M. Kirova, g. Kazan'  
(Institute of Chemical Technology imeni S. M. Kirov, City of Kazan')

Card 2/2

GRIGOR'YEV, L.N.; USMANOV, A.G.

Conditions of similarity for heat transfer during boiling of  
binary mixtures. Trudy KKHTI no.26:32-41 '59. (MIRA 15:5)  
(Heat—Transmission) (Ebullition)



S/862/62/002/000/013/029  
A059/A126

AUTHOR: Grigor'yev, L.N.

TITLE: Investigation of the heat transfer in boiling binary mixtures

SOURCE: Teplo- i massoperenos. t. 2: Teplo- i massoperenos pri fazovykh i khimicheskikh prevrashcheniyakh. Ed. by A.V. Lykov and B.M. Smol'skiy. Minsk, Izd-vo AN BSSR, 1962.. 120 - 127

TEXT: In this paper, the mechanism of heat transfer in boiling binary mixtures is investigated, and an attempt is made to establish experimentally the dependence of the coefficient of heat transfer in boiling liquids on the composition of the mixture. For the radius of curvature of the least prominence of the surface roughness acting as a steam-forming center, the earlier formula:

$$r_0 = \frac{2\sigma}{\Delta p} = \frac{2\sigma}{\rho' \Delta t} \quad (1)$$

is used, where  $\sigma$  is the coefficient of surface tension,  $\rho'$  the derivative of saturation pressure with respect to the saturation temperature which is determined from the Clapeyron-Clausius equation:

Card 1/4

S/862/62/002/000/013/029  
A059/A126

Investigation of the heat transfer in ....

$$p' = \left( \frac{dp}{dt} \right)_s = \frac{r \gamma^{(1)} \gamma^{(2)}}{AT_s (\gamma^{(1)} - \gamma^{(2)})}$$

where  $\Delta t = t_w - t_g$ , is the overheating of the wall as compared to the boiling point,  $r$  is the heat of evaporation,  $\gamma^{(l)}$  and  $\gamma^{(g)}$  are the specific gravities of the liquid and the vapor, respectively, and  $T_s$  is the absolute saturation temperature, in  $^{\circ}\text{K}$ . The equation:

$$p_0 = 2\sigma / \left[ \frac{\gamma^{(2)} - \gamma^{(1)}}{v^{(2)} - v^{(1)}} + \frac{x^{(2)} - x^{(1)}}{v^{(2)} - v^{(1)}} \left( \frac{\partial^2 \varphi}{\partial x^2} \right)_{p,T} \frac{dx}{dT} \right] \Delta t \quad (5)$$

was finally obtained, where  $v$  is the molar volume,  $\eta$  the molar entropy,  $x$  the molar concentrations of the low-boiling component, and  $\varphi$  the molar thermodynamic Gibbs potential; the index (2) refers to vapor, and the index (1) to liquid. The sign before the second fraction in equation (5) depends on the sign of the difference of the heats of evaporation of the low-boiling and the high-boiling component in the mixture. Thus, the mechanism of heat transfer in boiling mixtures differs from that in pure liquids. The variation of the vapor pressure when two different liquids are mixed leads to a variation of steam formation in

Card 2/4

S/862/62/002/000/013/029  
A059/A126

Investigation of the heat transfer in ....

boiling by which, in turn, heat transfer is influenced. Three fundamental groups of mixtures of liquids soluble in each other were found to exist, namely: 1) those which do not form azeotropes for which  $\lambda_1 - \lambda_2 < 0$ ; 2) azeotropes for which  $\lambda_1 - \lambda_2 < 0$ ; and 3) azeotropes for which  $\lambda_1 - \lambda_2 > 0$  ( $\lambda_1$  and  $\lambda_2$  being the partial molar heats of transition of the first and the second components, respectively, from the first phase into the second. The critical equation:

$$\frac{\alpha d_0}{\lambda} = f \left( \frac{\nu}{a}; \frac{q d_0}{r \alpha \gamma^{(2)}}; \frac{r}{c_p T_s}; \frac{q + q_v}{q}; \left[ 1 + \frac{(x^{(2)} - x^{(1)})^2}{x^{(2)} (1 - x^{(2)})} \right] \right), \quad (16)$$

obtained in an earlier paper by the author is given, where  $d_0$  is the diameter of the separating bubble,  $\lambda$  the coefficient of heat conduction of the boiling liquid,  $r$  the heat of evaporation of the mixture,  $q_h$  the amount of heat used up to evaporate the mixture,  $\nu$  the coefficient of kinematic viscosity, and  $a$  the tem-

Card 3/4

Investigation of the heat transfer in ....

S/862/62/002/000/013/029  
A059/A126

perature coefficient of thermal conductivity of the boiling liquid. Storonkin and G.N. Kruzhilin are mentioned. There is 1 figure.

ASSOCIATION: Kazanskiy khimiko-tehnologicheskii institut (Kazan' Institute of Chemical Technology)

Card 4/4

Shibokov, L.N.

Formation of a new phase in the boiling of binary mixtures.  
Inzh.-fiz. zhur. 6 no.8:66-69 Ag '63. (MIRA 16:10)

1. Khimiko-tehnologicheskij institut im. S.M.Kirova, Kazan'.

GRIGOR'YEV, L. N.; KHAYRULLIN, I. KH.; USMANOV, A. G.

"Experimental investigation of critical heat flows with boiling binary mixture."

paper submitted for 2nd All-Union Conf on Heat and Mass Transfer, Minsk, 4-12  
May 1964.

Chemical-Technical Inst, Kazan'.

GRIGOR'YEV, L.P.  
KOLESOV, V.I., professor; GRIGOR'YEV, L.P.

Diagnosis and treatment of acute pancreatitis. Vest.khir.76  
no.10:23-30 N '55. (MLRA 9:1)

1. Iz kliniki obshchey khirurgii (sav.--prof. V.I.Kolesov)  
1-go Leningradskogo meditsinskogo instituta im. I.P.Pavlova.  
(PANCREATITIS  
diag. & ther. in acute cases)

~~GRIGOR'YEV, L. P.~~

"Investigation of Heat Transfer at Boiling of Binary Mixtures."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.



GRIGOR'YEV, L. Ya.

USSR

Vol. 3c

1952. PLANING UNITS - ONE LINE FOR MECHANIZATION OF MINING  
OPERATIONS. Lyubimov, B.N., Ivanov, I.V. and Grigor'ev, L. Ya.  
(Ugol (Coal), Jan. 1955, 24-29). A discussion of the relative merits  
of chain type cutters and coal planes leads to an illustrated description  
of three promising "dynamic" planes which unlike the "static" type with  
its steady cut, are suitable for anthracite. Plane VNR-1 is made to  
vibrate by the rotation of unbalanced masses, plane AS-1 has a spring  
mechanism and four large chisel-shaped cutters, and plane VDS-1 has four  
large electro-pneumatic hammers. (L).

SOV/124-58-5-6248

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 164 (USSR)

AUTHORS: Prigorovskiy, N.I., Bortkevich, V.I., Grigor'yev, L.Ya.

TITLE: A Method of Stress and Force Investigation of Components of Impact-type Mechanisms (Metodika issledovaniya napryazheniy i usiliy v detalyakh mekhanizmov udarnogo deystviya)

PERIODICAL: V sb.: Izmereniye napryazheniy i usiliy v detalyakh mashin. Moscow, Mashgiz, 1955, pp 188-213

ABSTRACT: A description of measuring, amplifying, and recording devices is given for measuring impact parameters as applied to the investigation of an electric hammer. The recording was performed on an oscillograph with a mechanical tape-transport attachment with speeds of up to 10m/sec and filmed cinematographically. Test results for an OMG-10-type hammer are given.

N.P. Rayevskiy

1. Power hammers--Stresses 2. Power hammers--Impact shock  
3. Power hammers--Testing equipment 4. Motion picture photography--  
Applications

Card 1/1

ALEKSANDROV, B.F., inzh.; BALYKOV, V.M., inzh.; BARANOVSKIY, P.I., inzh.;  
BOGUTSKIY, N.V., inzh.; BUN'KO, V.A., kand.tekhn.nauk, dotsent;  
VAVILOV, V.V., inzh.; VOLOTKOVSKIY, S.A., prof., doktor tekhn.nauk;  
GRIGOR'YEV, L.Ya., inzh.; GRIDIN, A.D., inzh.; ZARMAN, L.N., inzh.;  
KOVALEV, P.F., kand.tekhn.nauk; KUZNETSOV, B.A., kand.tekhn.nauk,  
dotsent; KUSNITSYN, G.I., inzh.; LATYSHEV, A.F., inzh.; LEYBOV,  
R.M., doktor tekhn.nauk, prof.; LEYTES, Z.M., inzh.; LISITSYN, A.A.,  
inzh.; LOKHANIN, K.A., inzh.; LYUBIMOV, B.N., inzh.; MASHKEVICH,  
K.S., inzh.; MALKHAS'YAN, R.V.; MILOSERDIN, M.M., inzh.; MITNIK,  
V.B., kand.tekhn.nauk; MIKHEYEV, Yu.A., inzh.; PARAMONOV, V.I.,  
inzh.; ROMANOVSKIY, Yu.G., inzh.; RUBINOVICH, Ye.Ye., inzh.;  
SAMOILYUK, N.D., kand.tekhn.nauk; SMEKHOV, V.K., inzh.; SMOLDY-  
REV, A.Ye., kand.tekhn.nauk; SNAGIN, V.T., inzh.; SNAGOVSKIY,  
Ye.S., kand.tekhn.nauk; FEYGIN, L.M., inzh.; FRENKEL', B.B., inzh.;  
FURMAN, A.A., inzh.; KHORIN, V.N., dotsent, kand.tekhn.nauk; CHET-  
VEROV, B.M., inzh.; CHUGUNIKHIN, S.I., inzh.; SHELKOVNIKOV, V.N.,  
inzh.; SHIRYAYEV, B.M., inzh.; SHISHKIN, N.F., kand.tekhn.nauk;  
SHPIL'BERG, I.L., inzh.; SHORIN, V.G., dotsent, kand.tekhn.nauk;  
SHTOKMAN, I.G., doktor tekhn.nauk; SHURIS, N.A., inzh.; TERPIGOREV,  
A.M., glavnyy red.; TOPCHIIYEV, A.V., otv.red.toma; LIVSHITS, I.I.,  
zamestitel' otv.red.; ABRAMOV, V.I., red.; LADYGIN, A.M., red.;  
MOROZOV, R.N., red.; OZERNOY, M.I., red.; SPIVAKOVSKIY, A.O.,  
red.; FAYBISOVICH, I.L., red.; ARKHANGEL'SKIY, A.S., inzh., red.;  
(Continued on next card)

**ALEKSANDROV, B.F.**---(continued) Card 2.

BELYAYEV, V.S., inzh., red.; BUKHANOVA, L.I., inzh., red.; VLASOV, V.M., inzh., red.; GLADILIN, L.V., prof., doktor tekhn.nauk, red.; GREBTSOV, N.V., inzh., red.; GRECHISHKIN, F.G., inzh., red.; GONCHAREVICH, I.F., kand.tekhn.nauk, red.; GUDALOV, V.P., kand.tekhn.nauk, red.; IGNATOV, N.N., inzh., red.; LOMAKIN, S.M., dotsent, kand.tekhn.nauk, red.; MARTYNOV, M.V., dotsent, kand.tekhn.nauk, red.; POVOLOTSKIY, I.A., inzh., red.; SVETLICHNIYY, P.L., inzh., red.; SAL'TSEVICH, L.A., kand.tekhn.nauk, red.; SPERANTOV, A.V., kand.tekhn.nauk, red.; SHSTLER, G.A., inzh., red.; ABARBARCHUK, F.I., red.izd-va; PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

[Mining; an encyclopedic handbook] Gornoe delo; entsiklopedicheski spravochnik. Glav.red.A.M.Terpigorev. Chleny glav.redaktsii A.I. Baranov i dr. Moskva, Gqs.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.7. [Mining machinery] Gornye mashiny. Redkol.toma A.V.Topchiev i dr. 1959. 638 p. (Mining machinery) (MIRA 13:1)

GRIGOR'YEV, L.Ya., nauchnyy sotrudnik

Use of a Kirschner wire in arthrodesis and resections of the knee  
joint. Zhurav. Belor. 6 no.6:63-64 Je '60. (MIRA 13:8)

1. Minskij nauchno-issledovatel'skiy institut travmatologii i ortopedii.  
(dir. .. prof. R.M. Minina, nauchnyy rukovoditel' - prof. B.N. Tsytkin).  
(KNEE—SURGERY)

GRIGOR'YEV, L. Ya.

Osteosynthesis with a metallic needle in fracture of the forearm.  
Zdrav. Bel. 7 no.5:51-53 My '61. (MIRA 14:6)

1. Minskiy nauchno-issledovatel'skiy institut travmatologii i  
ortopedii (direktor - professor R.M.Minina, nauchnyy rukovoditel'-  
professor B.N.TSyppkin [deceased]).  
(INTERNAL FIXATION IN FRACTURES) (ARM-FRACTURE)

GRIGOR'YEV, L.Ya.

Use of Kirschner wire in dislocations of the acromial end of the clavicle. Zdrav.Bel. 8 no.2:53-54 F '62. (MIRA 15:11)

1. Minskiy nauchno-issledovatel'skiy institut travmatologii i ortopedii (dir. - prof. R.M.Minina, nauchnyy rukovoditel' - prof. B.N.TSykin [deceased]).

(CLAVICLE--DISLOCATION)  
(INTERNAL FIXATION IN FRACTURES)

GRIGOR'YEV, Lev Yakovlevich; ASTRATOV, N.A., kand. tekhn. nauk,  
retsensent; NARTOV, I.M., kand. tekhn. nauk, nauchn.  
red.; YEROMITSKAYA, Ye.Ye., red.

[Ship vessels operating under pressure; determination  
of stresses and deformations] Sudovye sosudy, rabotaiushchie  
pod davleniem; opredelenie napriazhenii i deformatsii. Le-  
ningrad, Sudostroenie, 1965. 194 p. (MIRA 18:6)



[N] L 3135-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m) WW/EM  
AM5022501 BOOK EXPLOITATION UR/ 621.181.1

35  
33  
B+1

Grigor'yev, Lav Yakovlevich

Marine pressure vessels; determination of stress and deformation (Sudovyye sosudy, rabotayushchiye pod davleniyem; opredeleniye napryazheniya i deformatsiy) Leningrad, Izd-vo "Sudostroyeniya", 1965, 194 p. illus., biblio.

TOPIC TAGS: steam boiler, marine engine, pressure vessel, turbine design

PURPOSE AND COVERAGE: This book is intended for engineers and designers, engaged in the field of marine propulsion or the design of pressure vessels used in various branches of engineering. It may also be useful to scientific workers and students specializing in strength and rigidity calculations of similar structures. Methods of strain and stress calculation of axisymmetrical pressure vessels, e.g. marine boilers, housings of steam and gas turbines, internal combustion engines, various heat exchangers, etc., are covered.

Card 1/2

L 3135-66

AM5022501

2

TABLE OF CONTENTS:

Foreword -- 3

Ch. I. Shells of Revolution -- 5

Ch. II. Annular Plates and Bodies -- 75

Ch. III. Vessel Calculations -- 97

Bibliography -- 193

SUB CODE: ME

SUBMITTED: 29Mar65

NO REF SOV: 052

OTHER: 010

Card

2/2

27411

24.4100 1327 1191 1513

S/096/61/000/010/004/006  
E194/E355

AUTHOR: Grigor'yev, L.Ya., Engineer

TITLE: Some Cases of Strength Calculations of Welds

PERIODICAL: Teploenergetika, 1961, No. 10. pp. 65 - 68

TEXT: In the design of various kinds of heat-exchanger, constructions are often encountered that consist of a branch pipe or tube welded to a flat or spherical sheet. If the materials of which the pipe and sheet are made have different coefficients of thermal expansion, or if they have the same coefficient of expansion but during the process are at a different temperature, considerable stresses may be set up in the weld. This article is concerned with the calculation of these stresses in application to thin sheets (thickness not more than one-fifth of minimum dimension in plan) and thin envelopes (ratio of thickness to radius of curvature less than 0.05). Moreover, it is assumed that the displacements of both sheets and envelopes are small compared with the thickness. Expressions are first derived for the radial displacement of the edges of a hole in a flat sheet subject to uniform stress  
Card 1/6

4

2711  
S/096/61/000/010/004/006  
E194/E355

Some Cases of .....

and for the angle of bending of the edges of the hole if a uniformly distributed bending moment is applied to it. Similar formulae are then derived for a hole in a spherical sheet and for a round cylindrical envelope. Calculations are then made for the combined elements, pipe and sheets. The displacement stresses and torques, taken with appropriate signs, should be the same on each of the elements and if the positive directions of angular and linear displacement coincide, the displacements are given the same sign and vice versa. In this case, with reference to Fig. 4, the following equations are obtained:

X

$$\left. \begin{aligned}
 u_{\eta\eta} &= \Delta_x u \\
 \varphi &= -\varphi_1 \\
 Q &= Q_x \\
 M &= M_1
 \end{aligned} \right\} \quad (7)$$

Card 2/6

27411

S/096/61/000/010/004/006  
E194/E355

Some Cases of ....

where:

$$u_{n\eta} = u + \alpha_{n\eta} \cdot t_{n\eta} \cdot r \quad (8)$$

$$\Delta_x^u = \Delta_x^i + \alpha_u \cdot t_u \cdot r \quad (9)$$

where

$\alpha_{n\eta}$ ,  $\alpha_u$  are the coefficients of linear expansion of sheet and cylinder, respectively,  
 $t_{n\eta}$ ,  $t_u$  are the temperatures of sheet and cylinder reckoned relative to some initial temperature and are considered positive if the components are heated,  
 $\varphi$  is the angle through which the edges of the hole are turned,  
 $\Delta_x^i$  is the horizontal displacement.

The suffix ' $n\eta$ ' refers to the sheet and ' $u$ ' to the cylinders.

4

Card 3/6

27411

S/096/61/000/010/004/006  
E194/E355

Some Cases of ....

In formulae (8) and (9) the first terms on the righthand side correspond to displacement of the elements by the stresses  $Q$  and  $Q'_x$  and the second terms to thermal displacement of the elements. From the system of Eqs. (7), together with Eqs. (8) and (9) it is possible to obtain two equations with two unknowns  $Q$  and  $M$  from which the required values of stress  $Q$  and torque  $M$  can be calculated. The shear and bending stresses in the weld may be calculated from the following formulae.

Shear stress (Fig. 4):

$$\tau = Q'_x/k \tag{10}$$

Bending stress:

$$\sigma = \pm \frac{M'_1}{(\sqrt{2})^2} = \pm \frac{12M'_1}{k^2} \tag{11}$$

Similar formulae are then derived for the case when the pipe is  
Card 4/6

27411

S/096/61/000/010/004/006  
E194/E355

Some Cases of ....

welded to both sides of the sheet, assuming that the bending moment from the sheet to the pipe is transmitted by tangential stresses in the welds. For this case the shear stress in the weld is given by the following equation:

$$\tau = 2Q'_x/k \quad (16).$$

There are no bending stresses in the weld. Similar equations are then derived for the system of a tube joining a spherical sheet. The systems of equations obtained are generally similar to those above and the method of use is much the same. It should be noted that the calculations given in the article relate only to stresses that arise during the process of change of temperature of the elements considered. These stresses are superimposed on various residual manufacturing stresses (if these have not been relieved) and on stresses due to external loading, etc., to give the resultant stress distribution or stressed condition of the design. There are 8 figures and 4 Soviet references.

Card 5/6

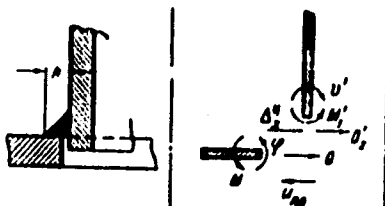
27411

S/096/61/000/010/004/006  
E194/E355

Some Cases of ....

ASSOCIATION: Baltiyskiy zavod (Baltic Works)

Fig. 4:



Card 6/6



GRIGOR'YEV, L.Ya., inzh.

OMG-type electric hammers. Mekh. stroi. 18 no.12:23-24  
D '61. (MIRA 16:7)

(Hammers)

GRIGOR'YEV, M.

Monopolies in the mineral fertilizers industry. "Report of the United States Federal Trade Commission on mineral fertilizers industry." Reviewed by M. Grigor'ev. Vnesh. terg. 27 no.1:36 '57. (United States--Fertilizers and Manures) (MLRA 10:4)

GRIGOR'YEV, M., otv.s.a vypusk

[Instructions for building one-family dwellings] Rekomendatsii-  
sovety po vypolneniiu otvetstvennykh konstruktsei individual'-  
nykh zhilykh domov. Kurgan, Izd-vo gazety "Krasnyi Kurgan,"  
1958. 9 p. (MIRA 12:3)

1. Kurgan (Province). Ispolnitel'nyy komitet.  
(Building)

GRIGOR'YEV, M. ~~████~~

USSR/ Electronics

Card 1/1 Pub. 89 - 27/33

Authors : Grigor'yev, M., and Sidorov, B. (Frunze and Moscow, Resp.)

Title : The "Zvuk" hearing aid as an amplifier for a defect detector,  
Fastening tube panels

Periodical : Radio 2, page 52, Feb 56

Abstract : The first author tells how the commercial hearing aid, the "Zvuk," can be used in connection with other devices as an amplifier in detecting breaks and short circuits in telephone cables. A method for fastening tube panels without the use of rings is dealt with in the second article.

Institution : .....

Submitted : .....

AUTHOR: Grigor'yav, M. (Riga) SOV/107-59-1-39/51

TITLE: The TV Sets "SEVER", "ZENIT", "EKTRAN", and "LUCH" with the 43LK2B Kinescope (Televizory "SEVER", "ZENIT", "EKTRAN", "LUCH" na kineskope 43LK2B)

PERIODICAL: Radio, 1959, Nr 1, p 47 (USSR)

AUTHOR: The author suggests a method for adapting the 43LK2B kinescope to the "SEVER", "ZENIT", "EKTRAN", and "LUCH" TV sets. He describes the new circuit to be made and lists parts to be interchanged. There are one circuit, one table, and one Soviet reference.

Card 1/1

GRIGOR'YEV, M.; LANGER, V.; PERKO, Yeyno; BERGSTREM, Arne.

The Friendship Cup. Za rul. 18 no.4:14-17 Ap '60. (MIRA 13:8)

1. Rukovoditel' chekhoslovatskoy sportivnoy delegatsii (for Langer).
2. Rukovoditel' finskoy sportivnoy delegatsii (for Perko). 3. Rukovoditel' shvedskoy sportivnoy delegatsii (for Bergstrem).  
(Motorcycle racing)

GRIGOR'YEV, M.

There are many hidden potentialities. Za rul. 18 no.8:11 Ag  
'60. (MIRA 13:9)

1. Spetsial'nyy korrespondent zhurnala "Za rulem," Kursk.  
(Kursk--Motorcycle racing)

S/058/62/000/004/005/160  
A058/A101

AUTHORS: Shtromberger, L. V., Grigor'yev, M. A.

TITLE: Piezocrystal manometric pickup

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 17, abstract 4A136  
("Nauchn. yezhegodnik. Saratovsk. un-t, Fiz. fak. i N.-i. in-t  
mekhan. i fiz., 1955". Saratov, 1960, 23 - 27)

TEXT: A design is proposed for an oil manometer based on the gas-pressure dependence of the active resistance of a piezocrystal oscillating in a gas. X- and AT-cut quartz plates were used as the piezocrystal. For exciting the plates and measuring their active resistance an oscillator circuit was used. The method is suitable for inertialess pressure measurements in the range from  $10^{-1}$  to  $10^3$  mm Hg.

L. Filippov

[Abstracter's note: Complete translation]

Card 1/1



SEMYKHIN, K.I., otv. red.; KORCHENYUK, Ya.T., starshiy nauchnyy sotr., red.; GRIGOR'YEV, M.A., kand. sel'khoz. nauk, red.; SUKACHEV, V.P., red.; BOGDANOVICH, M.V., red.; NIKOLAYCHUK, G.M., red.; SERDYUK, B.M., red.; KVITKA, S.P., tekhn. red.

[Scientific works of the Veselyy Podol Agricultural Experiment Station for 1927-1958] Nauchnye trudy Veselopodolianskoj opytno-selektsionnoi stantsii za 1927-1958 gg. Kiev, Izd-vo Ukrainskoi akad. sel'khoz. nauk, 1961. 156 p. (MIRA 15:3)

1. Kiev. Vsesoyuznyy nauchno-issledovatel'skiy institut sakharnoy svekly. 2. Zaveduyushchiy otdelom selektsii sakharnoy svekly Veselopodolyanskoy opytno-selektsionnoy stantsii, Semenovskiy rayon, Poltavskaya oblast' (for Sukachev). 3. Zaveduyushchiy laboratoriyey fitopatologii Veselopodolyanskoy opytno-selektsionnoy stantsii, Semenovskiy rayon, Poltavskaya oblast' (for Bogdanovich). 4. Zaveduyushchiy laboratoriyey agrokhimii Veselopodolyanskoy opytno-selektsionnoy stantsii, Semenovskiy rayon, Poltavskaya oblast' (for Nikolaychuk).

(Poltava Province--Agricultural experiment stations)  
(Poltava Province--Sugar beets)

40797  
S/263/62/000/017/005/011  
1011/1211

24 7760

**AUTHORS:** Shtromberger, L. V. and Grigor'yev, M. A.

**TITLE:** A piezo-electric manometric transducer

**PERIODICAL:** Referativnyy zhurnal. Otdel'nyy vypusk, Izmeritel'naya tekhnika, no 17, 1962, 31-32. abstract 32.17.208. "Nauchn. ezhegodnik. Saratovsk un-ta. Fiz fak i N.-i. in-t mekhan. i fiz., 1955" Saratov, 1960, 23-27

**TEXT:** A low inertia manometric transducer is developed. A piezo-electric quartz plate which is a part of a self-oscillating electro mechanical system serves as its basic element. The active resistance (C) of the plate-resonator is composed of C caused by internal friction, by friction in the supports and in the surface layers and of C caused by radiation losses. The last component depends on the environment surrounding the quartz, which makes it possible to establish a relation between a variation of the active C of the quartz and a change in the pressure of the surrounding gas. The known magnitude of the radiation C of a flat-bottom oscillating in an infinite screen is used for the evaluation of the equation connecting the overall equivalent C of the quartz with the radiation losses. It is shown that the overall equivalent C of the quartz will be a linear function of the gas density and pressure alone if the friction magnitude in the supports and the surface friction losses are stabilised. The electric circuit of the instrument excites the oscillations in the piezo-electric plate and allows for a continuous measurement of its equivalent active C. Pressures in the interval of  $10^{-1}$  to  $10^3$  mm Hg can be measured by this method. There are 2 figures. Bibliography: 4 titles.

[Abstracter's note: Complete translation.]

Card 1/1

37411

S/142/62/005/001/004/012  
E192/E582

9.1400  
6.4300

AUTHORS: Grigor'yev, N.A., Kats, L.I. and Tsimring, Sh.Ye.

TITLE: Measurement of the standing-wave ratio by means of a directional coupler and a phase-shifter at millimetre waves

PERIODICAL: Izvestiya vysshikh uchobnykh zavedeniy, Radiotekhnika, v. 5, no. 1, 1962, 47 - 50

TEXT: A simple method of measurement of the standing-wave ratio (SWR) by means of a directional coupler in conjunction with a phase-shifter is described. The measurement system is illustrated in Fig. 1. This consists of:  
K - klystron oscillator; A - attenuator;  $\Pi$  - measuring line; HO - directional coupler;  $\Phi$  - phase-shifter;  $\Pi A$  - variable attenuator;  $\Pi$  - plunger and  $\Delta A$  - an amplifier with an indicator.

+

It is assumed that reflections from the generator and detector can be neglected and that the phase-shifter has a constant attenuation (independent of the phase change) and does not

Card 1/3

S/142/62/005/001/004/012  
E192/E582

Measurement of ....

introduce any reflections. The problem consists of finding an expression for the modulus of the reflection coefficient on the basis of the readings of the galvanometer, which is connected through a square-detector at the output of the directional coupler. It is shown that the modulus of the reflection coefficient of the load is expressed by:

$$|\Gamma| = \frac{|E_2|}{|E_1|} = |\Gamma_{us}| \frac{(\sqrt{\alpha_1} \pm \sqrt{\alpha_2})}{(\sqrt{\alpha_1^{(0)}} + \sqrt{\alpha_2^{(0)}})} \quad (7)$$

where  $\alpha_1$  and  $\alpha_2$  are the maximum and minimum readings of the galvanometer when the load is connected, while

$\alpha_1^{(0)}$  and  $\alpha_2^{(0)}$  are the maximum and minimum galvanometer readings when the load is shorted;  $\Gamma_{us}$  is the modulus of

the reflection coefficient in the plane of the load when the latter is short-circuited. The standing-wave ratio is therefore expressed by:

Card 2/4

$$KCB = \frac{1 + |\Gamma|}{1 - |\Gamma|} = \frac{\sqrt{\alpha_1^{(0)}} + \sqrt{\alpha_2^{(0)}} + (\sqrt{\alpha_1} \pm \sqrt{\alpha_2}) |\Gamma_{us}|}{\sqrt{\alpha_1^{(0)}} + \sqrt{\alpha_2^{(0)}} - (\sqrt{\alpha_1} \pm \sqrt{\alpha_2}) |\Gamma_{us}|} \quad (8)$$

Measurement of ....

S/142/62/005/001/004/012  
E192/E382

It is seen from Eqs. (7) and (8) that the SWR when measured by the above method is independent of the attenuation of the waveguide section which connects the measured load. This is the main advantage of the method in comparison with the method based on a measuring line. The method was compared experimentally with the measuring-line method and it was found that the results were in good agreement. However, the possibilities of the method have not been fully investigated due to the fact that its errors have not been analyzed in detail. There are 2 figures.

ASSOCIATION: Kafedra obshchey fiziki Saratovskogo gos. universiteta im. N.G. Chernyshevskogo (Department of General Physics of Saratov State University im. N.G. Chernyshevskiy)

SUBMITTED: April 21, 1961

Card 3/4

GRIGOR'YEV, M.A.; KATS, L.I.; TSIMRING, Sh.Ye.

Measurement of the standing wave ratio in the microwave band  
by means of a directional coupler and a phase shifter. Izv.  
vys. ucheb.; radiotekh. 5 no.1:47-50 Ja-F '62. (MIRA 15:5)  
(Microwave measurements)  
(Wave guides)

GRIGOR'YEV, M.A., kand.sel'skokhozyaystvennykh nauk

Effect of the depth of bare fallow plowing on soil moisture and  
winter wheat yield. Zemledelie 6 no.9:73-74 S '58.

(MIRA 11:9)

1.Vesel-Podolyanskaya opytno-selektcionnaya stantsiya.  
(Wheat) (Plowing) (Soil moisture)

ADAMOVICH, A.V., kandidat tekhnicheskikh nauk; GRIGOR'YEV, M.A.; LEBEDEV, S.A.  
kandidat tekhnicheskikh nauk

Centrifugal filters for cleaning oil in automobiles. Avt. i trakt.  
prom. no.8:3-9 Ag'55. (MIRA 8:11)

1. Nauchno-issledovatel'skiy avtomotorny institut  
(Automobiles--Engines--Oil filters)



GRIGOR'YEV, M. A. Cand Tech Sci -- (diss) "Study of the performance of centrifugal oil purifiers with reactive hydraulic rotor drives." Mos, 1959. 22 pp (Min of Higher Education USSR. Mos Automechanical Inst), 110 copies (KL, 45-59, 146)

RAMAYYA, K.S., doktor tekhn.nauk; LEBEDEV, S.A. , kand.tekhn.nauk;  
ZAVEL'SKIY, V.S.; GRIGOR'YEV, M.A.

Effect of oil impurity on the wear of engines. Avt.prom. no.1:  
8-11 Ja '59. (MIRA 12:1)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni  
nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut.  
(Automobiles--Lubrication)

GRIGOR' YEV, T.M.H.

307/5055

PHASE I BOOK EVALUATION

Vsesoyuznaya konferentsiya po treniyu i imosno v mashinakh. 3d. 1958.

Osnovnaia teoreticheskaia teoriya maziti. Oprey skol'zheniya. Srazha i smazochnye materialy (hydrodynamic Theory of Lubrication, Slip Bearings, Lubrication and Lubricant Materials) Moscow, Izd-vo AN SSSR, 422 p. Russian slip inserted. 1,300 copies printed. [Series: 1st study, V. 3]

Sponsoring Agency: Akademiya nauk SSSR, Institut mashinovedeniya. Reep. Eds. for the Section "Hydrodynamic Theory of Lubrication and Slip Bearings": Ye. M. Gut'yar, Professor, Doctor of Technical Sciences; and A. K. D'yachkov, Professor, Doctor of Technical Sciences; Reep. Ed. for the Section "Lubrication and Lubricant Materials": G. V. Vinogradov, Professor, Doctor of Chemical Sciences; Ed. of Publishing House: M. Ya. Klebanov; Tech. Ed.: O. M. Ous'kova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.  
COMMENT: The collection, published by the Institut mashinovedeniya AN SSSR (Institute of Science Machines Academy of Science USSR) contains papers presented at the III Vsesoyuznaya konferentsiya po treniyu i imosno v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in hydrodynamic Theory of Lubrication and ... 307/5055

Use of Lubricant Materials

Kolesnikov, A. I. Special Features of the Behavior of Plastic Lubricants in Roller Bearings	291
Auzanikov, Ye. S. On a Rational Regime for Lubricating Automobiles Through Pressure Lubricators	299
Lebedev, V. G., E. P. Stepanov, and V. A. Gerasimenko. Selection of Lubricant Materials for Reduction Gears Operating Under Low-Temperature Conditions	306
Lebedev, S. A. (deceased), and M. A. Grigor'yev. Wear of Components With Various Methods of Working the Oil in the Lubrication System of an Automobile Engine	313
Kreenido, Ye. G., and V. I. Sharapov. Oils Produced by a New Method, and Their Effect on the Wear of Engines	321
Travitskiy, I. A., and A. S. Lozar. Investigation of the Wear of the Components of Automobile Engines Operating With Various Oils	328
Bl'ovich, I. I. Theoretical Foundation of the Requirements for the Operational Qualities of Oils Used in Internal-Combustion Engines	338
Chemical Composition and Operational Lubrication Materials	
Bruchina, A. V. Reduction of Wear in Engines Operating on Shifernaya Diesel Oil by Means of Alkaline Additives	344
Zaslavskiy, Yu. S., G. I. Shor, and M. M. Shneyzerova. Mechanism of Protecting Friction Surfaces From Corrosion Wear With the Aid of Additives to the Oils	348
Krym, S. E., and O. P. Yevdokimov. Oils of Optimal Chemical Composition Groups	356

GRIGOR'YEV, M.A., kand.tekhn.nauk

"Automobile and tractor centrifuges" by G.P.Pokrovskii. Avt.prom.  
no.10:45-46 0 '60.. (MIRA 13:11)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni  
nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut.  
(Motor vehicles--Engines--Oil filters)

GRIGOR'YEV, Mikhail Aleksandrovich, kand. tekhn. nauk; FOKROVSKIY,  
Georgiy Pavlovich, kand. tekhn. nauk; GONIKBERG, Ye.M., inzh.,  
retsensent; ZHURAVLEVA, M.N., inzh., red.; TIKHANOV, A.Ya., tekhn.  
red.

[Centrifuges used in automobiles and tractors; theory, design and  
operation] Avtomobil'nye i traktornye tsentrifugi; teoriia, konstruk-  
tsiia, raschet i ekspluatatsiia. Moskva, Gos. nauchno-tekhn. izd-vo  
mashinostroit. lit-ry, 1961. 180 p. (MIRA 14:11)  
(Centrifuges) (Motor vehicles—Engines—Oil filters)

GRIGOR'YEV, M.A., kand.tekhn.nauk; SMIRNCV, G.A.

~~Dimension series for centrifuges.~~ Avt.prom. 28 no.5:17-20  
My '62. (MIRA 15:5)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni  
nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut  
i Gosudarstvennyy soyuznyy nauchno-issledovatel'skiy traktornyy  
institut.

(Motor vehicles--Engines--Oil filters)

BRAY, I.V.; KUDINOV, Yu.A.; BELYAVSKIY, I.Yu.; GRIGOR'YEV, M.A.,  
kand. tekhn. nauk, retsentsent; GALANOVA, M.S., red.izd-  
va; DEMKINA, N.F., tekhn. red.

[Filters for fine purification of diesel fuel] Fil'try ton-  
koi oohistki diesel'nogo topliva. Moskva, Mashgis, 1963.  
126 p. (MIRA 16:6)  
(Diesel fuels) (Filters and filtration)

GRIGOR'YEV, M.A., kand. tekhn. nauk; SMIRNOV, G.A., inzh.

Standardization of the rotors of tractor and motortruck oil centrifuges. Trakt. i sel'khoz mash. 33 no.11:15-18 N '63.  
(MIRA 17:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut (for Grigor'yev). 2. Gosudarstvennyy soyuznyy nauchno-issledovatel'skiy traktorny institut (for Smirnov).



ANDRUSHKEVICH, V.S.; BULNIKOVA, N.P.; GRIGOR'YEV, M.A.; ZHARKOV,  
Yu.D.; SHITSYN, N.I.; STAL'MAKHOV, V.S.; TRUBETSKOV, D.I.;  
SHVEDOV, G.N.; SHEVCHIK, V.N.; NOSKOVA, R.F., red.

[Electronic superhigh-frequency devices] Elektronnye pribory  
sverkhvysokikh chastot. Saratov, Izd-vo Saratovskogo univ.,  
1964. 187 p. (MIRA 18:4)

GRIGOR'YEV, M.A., kand.tekhn.nauk; PIMENOV, A.M.

Single-cylinder carburetor unit for evaluating operating characteristics of motor oils. Avt.prom. 31 no.5:10-13 My '65.

(MIRA 18:5)

1. Tsentral'nyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.

L 41031-66 EWT(M)/1 DJ

ACC NR: AP6018624 (A)

SOURCE CODE: UR/0065/66/000/006/0048/0052

AUTHOR: Grigor'yev, M. A.; Pimenov, A. M.; Zelenskaya, R. G.

ORG: NAMI, VNII NP

TITLE: Evaluation of service qualities of automotive oils by engine tests

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 6, 1966, 48-52

TOPIC TAGS: lubricant, lubricating oil

ABSTRACT: In order to provide appropriate equipment for the testing of automotive motor oils in the Soviet Union the NAMI-1 test unit was developed and used at NAMI for comparative engine tests, evaluating the test results by the UIM-6 method, US method 344-T (USA Standard No. 691, March 1959), and also by the PZV method. The unit includes a single cylinder engine, corresponding to a section of engine ZIL-130. The unit permits rating of piston deposits, varnish, piston ring coking, wear of the cylinder-piston section, low-temperature deposits, and the oxidizability of oils and bearing corrosion. Lubricants type A, B, and C were rated, represented by oil AC-2<sup>1</sup>/<sub>5</sub> with admixtures of 0.7, 0.7, and 0.25% additive Santolub 493, and of 0.7, 1.5, and 4% additive Monto 613, respectively. Standard gasoline A-76<sup>1</sup> was used in 100-hr runs. Method UIM-6 gave higher ratings for ring mobility than method 344-T, and the latter permitted a differentiation by points of piston grooves and seals, although the final results for both methods were similar. The types of deposit, however, may differently

Card 1/2

UDC: 665.521.5

34  
6

L 41031-66

ACC NR: AP6018624

affect engine performance and correspond to different service properties of motor oils. Method 344-T is employed by various organizations in the Soviet Union and is widely used in other countries. Thus, an important modification of the method without suitable research is hardly expedient. Orig. art. has: 1 table and 1 figure.

SUB CODE: 11/ SUBM DATE: none/ OTH REF: 001

Card

212 *llh*

GRIGOR'YEV, M.G.

Traumatology and orthopedics in the Chinese People's Republic.  
Ortop.travm.i protes. 21 no.2:76-79 P '60. (MIRA 13:12)  
(CHINA-ORTHOPEDIA)

BLOKHIN, V.N.; GRIGOR'YEV, M.G.; KOZHEVNIKOV, A.I.; KOROLEV, B.A.; MATYUSHIN,  
I.F.; PARIN, B.V.; TSIMKHES, I.L.; KALININA, G.V.; FEDOROV, A.M.;  
KOLOKOL'TSEV, M.V.; SOKOLOV, V.V.; PRILUCHNAYA, O.A.; SHUMILKINA,  
Ye.I.; ABRAMOV, Yu.G.; RYURIKOV, A.Kh.; IKONNIKOV, P.I.; VOZNESENSKIY,  
I.Ya.; TEPLOV, S.V.; MIZINOV, N.N.; KUKOSH, V.I.

V.M.Durmashkin; obituary. Ortop., travm. i protez. 21 no.8:81 Ag  
'60. (MIRA 13:11)

(DURMASHKIN, VIKTOR MARKOVICH, d. 1960)

GRIGOR'YEV, M.G., polkovnik; GRISHIN, N.I., kand. tekhn. nauk, inzhener-  
podpolkovnik; YEMEL'YANOV, V.T., polkovnik, red.; MURASHOVA, L.P.,  
tekhn. red.

[Tactics and weapons of infantry units of foreign armies] Taktika  
i vooruzhenie pekhotnykh podrazdelenii inostrannykh armii. Moskva,  
Voenizdat, 1963. 271 p. (MIRA 16:6)  
(INFANTRY--EQUIPMENT)

GRIGOR'YEV, M.I. (Minsk)

Potentialities for the increase of labor productivity. Stroi,  
truboprov. 5 no.10:11-12 0'60. (MIRA 13:10)  
(Gas, Natural--Pipelines)



GRIGOR'YEV, M. M.

USSR / Magnetism. General Problems.

F-1

Abs Jour : Ref Zhur - Fizika, No 3, 1957, 6824

Author : Grigor'yev, M.M., Kirko, I.M.

Title : Investigation of the Magnetization of a Structure Modeling a Magnetodielectric.

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 7, 1501 - 1508

Abstract : An experimental verification of the theoretical calculations of the magnetic properties of magnetodielectrics was carried out with models prepared of spherical particles 12.5 and 6.25 mm in diameter, and cylindrical particles 1 and 1.2 mm in diameter, made of material having a known magnetic permeability. The model particles were mixed in various proportions with quartz sand and the mixture was formed into toroidal specimens. The measurements were carried out with a constant magnetizing field and with an alternating field at frequencies from 0.1 to 20 kc. The experimental results have shown that best agreement between the experiment and the calculations is obtained when the demagnetizing factor of the structure is

Card : 1/2

USSR / Magnetism. General Problems.

F-1

Abs Jour : Ref Zhur - Fizika, No 3, 1957, 6824

Abstract : determined from the following equation:  $N = \frac{N_0}{1 + 3v}$  (No is the demagnetizing factor of an isolated particle, and v the volume concentration). Thus, N depends nonlinearly on the concentration of the ferromagnetic particles and is independent of the permeability of the material of the particles. The Ollendorf formula gives results that are in agreement with the data of the experiment only for  $v < 0.3$ . The Lichtenecker formula gave no agreement between the calculated and experimental values of the permeability of the structure. The measurements in the alternating fields made possible an investigation of the dispersion of the permeability of the structure and a calculation of the permeability of the spherical particles. The application of the methods of similarity theory to magnetization in an alternating field makes it possible, first, to determine the permeability and losses in a ferroelectric at one frequency or at one concentration from measurements made at another frequency or at another concentration and secondly they lead to an estimate of the permeability of the particles used in actual ferroelectrics.

Card

: 2/2

ASLANOV, A.Ye.; GRIGOR'YEV, M.M.

Work experience of the interfactory school in the study of  
new equipment and processes at the Badaev brewery. Spirt.-  
prom. 28 no.2:41-42 '62. (MIRA 15:3)  
(Brewing--Study and teaching)

GRIGOR'YEV, M.M.

Make better use of the productive capacity. Spirt. prom. 28  
no.6:39-41 '62. (MIRA 16:10)

1. Pivovarennyy zavod im. Badayeva.

ACCESSION NR: AT4042295

8/0000/63/003/000/0179/0188

AUTHOR: Grigor'yev, M.N.

TITLE: Experimental investigation of the magnetic fields of cylindrical inductors

SOURCE: Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. Voprosy\* magnitnoy gidrodinamiki (Problems in magnetic hydrodynamics); doklady\* sovoshchaniya, v. 3. Riga, izd-vo AN LatSSR, 1963, 179-188

TOPIC TAGS: magnetic field, inductor, cylindrical inductor, travelling magnetic field, inductor core

ABSTRACT: The author presents the results of an investigation of the magnetic fields of two cylindrical inductors of a traveling-wave field. The first inductor (LITs-1) was a linear cylindrical inductor with no external magnetic conductor, consisting of a one-way winding and a core of transformer steel. The number of polar pairs of the inductor equalled 5, the mean value of the polar pitch was 6.85 cm, the number of turns per phase and polar pair was 392. The core of this inductor consisted of 18 blocks fastened on a cylinder of laminated insulation with a diameter of 10 cm. The blocks were glued together of strips of E4AA transformer steel (sheet thickness: 0.35 mm). The external diameter

Card 1/2

ACCESSION NR: AT4042295

of the core was 13.9 cm, the length 68.5 cm, and the width of the working channel of the inductor 2.1 cm. The second inductor (LITs-2) was also a linear cylindrical inductor with unilateral winding but, in contrast to the first, it had an external magnetic conductor consisting of 18 blocks arranged in a circle 18.1 cm in diameter. The blocks were glued together of strips of E1 transformer steel 0.5 mm in diameter. Each block had 30 square grooves containing cylindrical coils of 20 turns each. This inductor had the same core as the first, but with a working channel of 2.1 cm in width. The investigations of the magnetic fields of the inductors were made under both "load" and "no-load" conditions. The variations made in the "load" condition are described in the article. The resistivity of the material of the cylinder was  $0.238 \text{ ohms} \cdot \text{mm}^2/\text{m}$ . The fields were measured by means of a device consisting of a cylindrical coil, probe, and tube-type volt-meter. The results of the study of the magnetic field and its behavior in both inductors are discussed at length in the paper with particular attention to the radial component of induction. Findings are presented in the form of graphs. Orig. art. has: 12 figures.

ASSOCIATION: none

SUBMITTED: 04Dec63

ENCL: 00

SUB CODE: EM, IE

NO REF SOV: 005

OTHER: 000

Card 2/2

ACCESSION NR: AT4042296

S/0000/63/003/000/0199/0193

AUTHOR: Grigor'yev, M. N.

TITLE: Experimental study of pondermotive forces in linear cylindrical inductors

SOURCE: Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamiko. 3d, Riga, 1962. Voprosy\* magnitnoy gidrodinamiki (Problems in magnetic hydrodynamics); doklady\* soveshchaniya, v. 3. Riga, Izd-vo AN LatSSR, 1963, 189-193

TOPIC TAGS: inductor, linear inductor, cylindrical inductor, pondermotive force, travelling magnetic field

ABSTRACT: The author presents the results of an experimental determination of the pondermotive forces acting on a hollow metal cylinder in the travelling-wave field of a linear cylindrical inductor. The measurements were performed with two inductors (LITs-1 and LITs-2), described in detail in a previous article. A graph is presented illustrating the results of a measurement of the pondermotive force acting on a hollow lead cylinder in the inductor LITs-2. The phase current values in the inductor windings ran from 2 to 10 amperes within a frequency range of 50 - 520 cps. Figures are given for the depth of penetration of the travelling-wave field into the metal at different

Card 1/2

ACCESSION NR: AT4042296

frequencies. All curves showed a maximum in the 130-140 cps region. The results of the measurements described in this article were compared with the rated values obtained on the basis of a formula (given in the text) for the pressure developed by a planar two-way pump. The author shows that this formula can be used with an accuracy sufficient for engineering calculations in the case of the kind of cylindrical inductors discussed in this article, in the region where the pressure maximum is observed. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 04Dec63

ENCL: 00

SUB CODE: EM, IE

NO REF SOV: 003

OTHER: 000

Card

2/2



GRIGOR'YEV, M.N.

USUR/ Physics - Ferro-dielectrics

Card 1/1 Pub. 22 - 21/53

Authors : Grigor'ev, M. N., and Kirko, I. M.

Title : Mock-up of the magnetization of ferro-dielectrics

Periodical : Dok. AN SSSR 102/4, 733-736, Jun 1, 1955

Abstract : Studies of the effective magnetic penetrability of ferro-dielectrics, which are fine ferrous balls pressed into an insulating material, are described. The study was conducted with the help of models in the form of torroids made out of ferrous balls of 1 1/2" in diameter pressed into an insulator (quartz sand). The studies were carried in DC and AC fields. Eight references: 1 German and 7 USSR (1931-1954). Graphs.

Institution : The Acad. of Sc., Lat. SSR, Institute of Physics

Presented by : Academician M. A. Leontovich, November 4, 1954

GRIGOR YEV, M. IV

021 318 12

12040 INVESTIGATION OF THE MAGNETIZATION OF A  
STRUCTURE WHICH SIMULATES MAGNETOELECTRONS

REPORT BY M.N. GRIGOR'YEV and I.M. KOPPEL  
Zh. tekh. fiz. Vol. 26 No. 7 1950; 2 1952. In Russ.

The investigation was made by means of a hollow toroid  
having a square cross-section and a ratio of outer to inner radii  
of 1.375. The coil was filled with a mixture of sand and magnetic  
balls or magnetic cylinders whose concentration of the magnetic  
particles was varied from 0.14 to 0.8 and the maximum number  
of particles which could be inserted into the coil was 580 spheres  
or 310 000 cylinders. Permeability of the medium as a function of  
concentration was measured for both types of particles, and it is  
shown that the results do not agree with either F. Ollendorf's results  
or Lichtenecker's formulae. A new formula is therefore proposed  
which coincides with the experimental results and shows that the  
demagnetization factor is independent of the permeability of a mag-  
netic material. The measurements were also made with alternating  
fields and the complex permeability was plotted as a function of  
frequency with concentration as a parameter. R. S. Sidorenko

14(5)

SOV/93-58-12-4/16

AUTHOR: Vadetskiy, Yu. V., Karimov, V.Kh., Grigor'yev, M.N., Ivanov, V.P.,  
Il'yasov, Ye.P.

TITLE: New Methods for the Elimination of Intense Flushing Fluid Absorption  
in Drilling (Novyye metody likvidatsii intensivnogo pogloshcheniya  
promyvochnoy zhidkosti pri burenii skvazhin)

PERIODICAL: Neftyanoye khozyaystvo, 1958, Nr 12, pp 20-26 (USSR)

ABSTRACT: The Tatar oil workers in cooperation with the VNIIBT and TatNII In-  
stitutes developed successful methods for the elimination of intense flushing  
fluid absorption in drilling [Ref 1,2,3]. It was determined experimentally that  
a permeable stratum is best shut off by plugging the channels near the bore of  
the well and in the case of several permeable formations by plugging the lower  
stratum first and maintaining a dynamic balance in the well [Ref 4]. This is  
shown in the case of the Romashkino Oilfield (Fig 1). The negative effect of  
the upper strata on the cementing process can be minimized by withdrawing the  
fluid from the well after pumping in the cement slurry. The fluid can be re-  
moved either by air lift or by bailing. The calculations for the air lift [Ref

Card 1/3

New Methods for the Elimination (Cont.)

SOV/93-58-12-4/16

3,5,6] are made in seven steps, including the verification of the through-put of the air lift by means of Melikov's formula

$$q_{\text{maks}} = 13.4 F \frac{h^m \text{ din}}{L} \sqrt{d} - 1.45 F w_s [m^3/\text{sec}],$$

where  $q_{\text{maks}}$  is the maximum fluid

through-put of the air lift,  $F$  - the area of the cross section of the annular space, in sq m,  $L$  - the distance from the mouth of the well to the coupling,

$h_{\text{din}}$  - the depth of the coupling below the dynamic level, created during the operation of KSE-3M compressors,  $d$  - the reduced diameter of the annular cross section, and  $w_s$  - the air velocity. The calculations are simplified by using special Tables 1-3. The bailing process is employed under the following conditions,

$$q \ll \frac{60V}{t_{\text{sr}}} [m^3/\text{hr}] \quad \text{and} \quad T \ll \frac{t_{\text{sr}}}{60} \frac{H}{l_{\text{ar}}}$$

where  $q$  is the fluid requiring bailing,  $V$  - the inside area of one drilling line, in  $m^3$ ,  $t_{\text{sr}}$  - the average time for lifting one drilling line, in minutes,  $T$  - the initial setting of the slurry, in hours,  $H$  - the depth at which the end of the drill pipe is set, and  $l_{\text{ar}}$  - the average length of the drilling line. These formulas were applied to a well drilled by a 6" EBSH rig. The Petroleum Institute of the

Card 2/3

New Methods for the Elimination (Cont.)

SOV/93-58-12-4/16

Academy of Sciences USSR determined experimentally that strata of extreme permeability and subject to caving can be shut off with the aid of auxiliary casing strings called "letuchki" (Fig 2). The above techniques for the elimination of flushing fluid absorption in drilling were successfully adopted by the Tatburneft' Trust. They conclude that the techniques for the elimination of fluid absorption must be adapted to the absorption intensity, that when permeability exceeds 100 cu m/hr the stratum be plugged with cement and a dynamic level maintained in the well, and that in cases of extreme permeability and cavitation the strata be shut off with auxiliary casing or bypassed by drilling new bore holes. There are 2 figures, 3 tables, and 6 Soviet references.

Card 3/3

Caliger yes M.N.

PLASMA I BOOK REPRODUCTION 807/3753

Abstracts and Bibliography. Institute of Physics

Electromagnetic Processes in Metals (Electromagnetic Processes in Metals) Ed. by A. L. Litvak. Moscow, 1979. 300 p. (Series: Inst. Study, No. 11) Reprints 4000 copies printed.

Eds.: A. Tytch'baum; Tech. Ed.: A. El'yevich; Editorial Board: V. G. Vitol, T. K. Kaluzh', I. M. Kirko (Resp. Ed.), and Ya. Ya. El'yevich.

NOTE: This book is intended for physicists interested in electromagnetic processes in metals.

CONTENTS: This is a collection of fifteen articles by various authors on the investigation of electromagnetic waves in metals by modern methods. The articles treat the propagation of electromagnetic waves in a variable field on a layered network consisting of chole coils with superconducting tubes and constant resistances; external fields produced by superconducting tubes which have been magnetized in a constant uniform field oriented along the axis; the possibility of using galvanic baths and other models for investigating fields of a continuously distributed electromagnetic force, particularly turbulent fields; the investigation of a system of interacting cylindrical particles; determination of the interaction relationships for the motion of an synchronous engine rotor with stationary mechanical characteristics (rotational moment, period of rotational oscillations around the point of equilibrium and attenuation ratio) when the ally is close to unity; the problem of equilibrium and stability of a cylindrical cylindrical conducting body placed in the transverse electric field of a circular inductor; the motion of a sphere in magnetic hydrodynamics; the reflection of the ideal incompressible liquids with infinite conductivity; a study of phenomena in the turbulent flow of liquid metal in induction pumps under the effect of a traveling magnetic field; the operating principle of a pump and the investigation of their electromagnetic and hydrodynamic characteristics; alternating-current induction pumps as suggested by I. A. Tytch'baum; the construction of bearings producing thermal energy by an induced current. No personalities are mentioned.

El'shteyn, I. K. Modeling of the Electrical Field of Electromagnetic Pumps in a Galvanic Bath and an Electrical Conducting Paper	11
Orlov'yan, M. M. Some Problems of Magnetizing a System of Interacting Cylindrical Particles	57
Kozlov, B. F. Relationship Between the Magnetic Losses in a Ferrite Core With an Open Magnetic Circuit	75
Ermiid', Yu. K. Oscillatory Motion of a Conducting Axially Symmetrical Body in a Rotating Magnetic Field	85
Ermiid', Yu. K. Problem of a Conducting Cylinder in a Traveling Magnetic Field of a Cylindrical Inductor	127
Osipov, A. F. The Motion of a Sphere in a Viscous Conducting Fluid in a Longitudinal Magnetic Field	133
Demidov, B. Ya., and V. Ya. Kuznetsov. Behavior of Hydrodynamic Waves at the Boundary of Two Media	139
Kirko, I. M., Ya. Ya. El'yevich, and I. A. Tytch'baum (Revised) and L. Ya. Vit'man. Model of an Infinitely Long Channel With Liquid Metal in a Traveling Magnetic Field	143
Mikhelson, B. F. Calculation of D-C Conduction Pumps for Liquid Metals	155
Pliginskii, M. V. Use of Diagrams for Determining the Parameters of Induction Pumps	165
Pliginskii, M. V. Analytic Calculation of Functions $\Psi(\beta, A)$ and $\Psi(\beta, A)$	181
Shchegolev, B. P. Low-Temperature Isolation Rotors With an Opening of Circular Cross-Section in the Channel	187

DRYUCHENKO, Daniil Maksimovich; GRIGOR'YEV, M.N., red.; KUZ'MINYKH,  
A.A., red. izd-va; VDO... red.

[Recent development in the repair and maintenance of lumbering machinery at the Experimental Logging Camp of the Central Scientific Research Institute for Mechanization and Use of Power in Lumbering] Novoe v tekhnicheskoy obsluzhivani osnovnykh lesozagotovitel'nykh mekhanizmov v opytnom lesopromkhoz TsNIIME. Moskva, Goslesbumizdat, 1962. 69 p.

(MIRA 16:7)

(Lumbering--Machinery)

GRIGOR'YEV, M. S.

"Intertrachial Narcosis," Khirurg., No.1, 1948.

Second Surgical Clinic, Mil. Med. Acad. im. Kirov



1949, p. 5.

1949. J. J. J. -- Intracellularly in the ... original ...  
... ..  
... ..

CO: ... .. Vol. 37, 1949.

GRIGOR'EV, K. S.

Intratracheal anesthesia in chest surgery. Izd. 2., perer i dop. Moskva. Izd-vo Akademii med. nauk SSSR, 1950. 89 p. (51-37407)

RD85.1537 1950

GRIGOR'YEV, M. S.; ANICHKOV, M. N.

Controlled respiration in surgery of thoracic organs in  
intratracheal anesthetisation with curare derivatives.  
Khirurgiia, Moskva no.8:13-23 Aug. 1950. (CIML 20:1)

1. Of the Second Faculty Surgical Clinic (Head -- P. A.  
Kupriyanov, Active Member of the Academy of Medical Sciences  
USSR), Military Medical Academy imeni S. M. Kirov.

GRIGOR'YEV, M.S.; ANICHKOV, M.N.

Bronchial tamponade and drainage of sputum from the bronchial tree in pneumonectomy and lobectomy for pulmonary abscesses. Khirurgiia, Moskva no. 6:23-27 June 1952. (CML 22:4)

1. Of the Military Medical Academy imeni S. M. Kirov.

GRIGOR'YEV, M. S.

Mar/Apr 53

USSR/Medicine - Curare-Like Compounds

"Experimental Surgical Application of Domestic Compounds of Curare-Like Action, in Combination With Intratracheal Anesthesia," M. S. Grigor'yev, M. N. Anichkov, Second Faculty Surgical Clinic, Military-Med Acad S. M. Kirov  
Vest Khirurg Vol 73, No 2, pp 12-17

Advocates use of domestic comds with curare-like effect: Dyplatsin and Fyrolaxon, as auxiliary drugs to ether or nitrous oxide anesthesia. Asserts no after effects were observed in lengthy operations, when "Controlled breathing" was applied. States that expts showed the superiority of the domestic compds over imported curare.

26777

GRIGOR'YEV, M.S.

KUMPRIYANOV, P.A., professor; GRIGOR'YEV, M.S., professor [reviewers]; MESHALKIN, Ye.N. [author].

"Techniques of intubation narcosis." E.N.Meshalkin. Reviewed by P.A. Kupriyanov, M.S.Grigor'ev. Vest.khir. 73 no.5:78-79 S-0 '53. (MLRA 6:11)  
(Anesthesia) (Meshalkin, E.N.)

GRIGOR'YEV, M.S.; LIBOV, S.L.; ANICHKOV, M.N.; GADZHIEV, S.A.

On the occasion of the 60th birthday of Petr Andreevich Kuprianov.  
Vest.khir. 73 no.6:67-69 N-D '53. (MLBA 6:12)  
(Kuprianov, Petr Andreevich, 1893- )

GRIGOR'EV, ~~professor~~; ANICHKOV, M.H., kandidat meditsinskikh nauk  
(Leningrad)

Clinical application of diplacin in surgery. Klin. med. 32 no.11:  
25-30 N '54. (MLRA 8:1)

1. Iz voyenno-meditsinskoy akademii imeni S.M.Kirova.  
(ANESTHESIA, INHALATION  
nitrous oxide with diplacin)  
(MUSCLE RELAXANTS  
diplacin in inhalation anesth., with nitrous oxide)



GRIGOR'YEV, M. S.

**Summaries of papers presented at the XXVI Congress of Surgeons of the USSR, Moscow, 20 - 27 January 1955, included:**

Pre-Operative Treatment and Post-Operative Care of  
Patients with Chronic Suppurative Processes in the Lungs.

M. S. GRIGORYEV and I. A. TRUKHALYOU

**SOURCE: ~~XXXXXXXXXX~~-A-46013 (Official Publication) Unclassified.**

KUPRIYANOV, P.A., professor; GRIGOR'YEV, M.S., professor. (Leningrad, 14  
ul. Klyeyeva, d.15, kv.07)

Some questions of analgesia and the training of anesthesiologists.  
Vest.khir. 75 no.6:104-108 J1 '55. (MLRA 8:10)

1. Deystv.chlen AMN SSSR (for Kupriyanov)  
(ANESTHESIOLOGY,  
in Russia, progr. & training of anesthesiologists)

(Maksim Semenovich)

GRIGOR'YEV, M.S.; ANICHKOV, M.N.; KUPRIYANOV, P.A., redaktor

[Curare and curarelike preparations in surgery] Kurare i kurare-  
podobnye preparaty v khirurgii. Pod red. P.A.Kupriyanova.  
Leningrad, Medgiz, 1957. 84 p. (MLBA 10:7)  
(CURARE)

V

USSR/Pharmacology and Toxicology. Muscle Relaxants.

Abs Jour: Ref Zhur-Biol., No 19, 1958, 89868.

Author : Grigoryev, M.S.

List

Title : Experimental Use of Muscle Relaxants in Combination with Anesthesia.

Orig Pub: Khirurgiya, 1957, No 1, 43-57.

Abstract: Paralyon (I), ditheline (II), diploacine and d-tubocurarine were administered to 1,855 patients; of these, in 930 during operations on the organs of the thoracic cavity, and in 936 on organs of the abdominal cavity. In its curari-form effect, the longest action was observed with I. Four to five ml of 0.1% solution of I in combination with H<sub>2</sub>O fully relaxed the skeletal muscles for a period

Card : 1/3

V-23