

20529

Theoretical formula for the weight...

S/535/61/000/138/004/008  
EO31/E177

skinning and structure of the spars. The effect of sweepback is also shown. Statistical corrections due to such factors as the effect of the fuselage, the weakening effect of sundry orifices, the weight of stiffeners and the effect of structural design requirements are also briefly discussed. The weight of the remaining elements of the wing may also be determined analogously; although the statistical corrections are not constant, the total effect varies but slightly. M.N. Shul'zhenko is mentioned in the paper for his contributions in this field. There are 11 figures, 1 table and 5 Soviet-bloc references.

X

Card 2/2

FADEYEV, N.N., kand.tekhn.nauk

Theoretical formula for the weight of a tapered wing. Trudy MAI  
no.138:28-47 '61. (MIRA 14:11)

(Airplanes--Wings)

FADEYEV, N., kand.tekhn.nauk

Theory of the soaring flight (to be concluded). Kryl.rod. 14  
no.3:17-19 Mr '63. (MIRA 16:4)  
(Gliding and soaring)

L 10599-63

BDS

ACCESSION NR: AP3001465

S/0085/63/000/004/0025/0026

AUTHOR: Fadeyev, N., Candidate of technical sciences

46

TITLE: Theory of soaring flight

SOURCE: Kryl'ya rodiny, no. <sup>vol #14</sup>4, 1963, 25-26

TOPIC TAGS: soaring flight, motorless flight, sailplane, thermal upcurrents, wind translation, cruise control, sailplane

ABSTRACT: The article (concluding installment of a series of 2, begun in no. 3, 193, of the same periodical) provides the theory for soaring flights in thermal upcurrents for the purpose of achieving the greatest possible mean true airspeed (TAS). The theory is based on the assumption that existing upcurrents are sufficiently intense and sufficiently closely spaced that, upon passing through an area of loss of elevation, a sailplane will always encounter a new updraft. The theory is developed, first, for straight-line soaring in which the author investigates the advantages gained by cruising in substantially straight-course flight through a row of thermal updrafts and downdrafts instead of spiralling upward in the updrafts and descending straight through the downdrafts. The optimal indicated airspeeds (IAS) in the updraft portions and the downdraft portions, respectively, are

Card 1/2

L 10599-63

ACCESSION NR: AP3001465

0

as obtained graphically from the sailplane polar. The advantage gained by using some flap deflection to increase the time of permanence, reduce the sinking speed, and, hence, increase the overall gain in elevation within the updrafts is mentioned. The effect of wind translation in a field of thermal upcurrents is explained. The discontinuous bubble-like shape of detached thermals originally emanating from heated areas of the ground and the self-perpetuating nature of cumulus-cloud-capped thermals are mentioned, and the vectorial addition of the wind velocity to the TAS vector of the sailplane is pointed out. Flight in a prescribed direction is explained in terms of the vectorial addition of the mean-TAS vector with the prevailing mean wind vector, including those portions of a flight in which the sailplane spirals upward within a thermal bubble or chimney and is simultaneously displaced horizontally by the prevailing wind. Flight to a prescribed destination with return to the point of departure and triangle-trek flight: The planning and conduct of flights over two or three prescribed route segments, with due consideration to the mean TAS vector and the mean (and possible time- and route-segment-variable) wind vector, is described. Assuming that the thermal activity may fail to materialize at some point of a flight, the footprint of attainable landing areas, which is circular (and encompassed within a semi-apex angle corresponding to the slope  $(L/D)$  max in the absence of wind and has the shape of distorted oval in the presence of wind, is explained and graphically illustrated. There are 7 figures

Card 2/82 is the present concluding installment.

SOV/120-58-2-34/37

AUTHORS: Soltitskiy, B. P., Endeyev, N. P. and Panashchenko, V. A.

TITLE: A Device for Cutting Thick Plates (Prisposobleniye dlya rezki tolstosloynnykh plastinok)

PERIODICAL: Pribery i Tekhnika Eksperimenta, 1958, Nr 2, p 112 (USSR)

ABSTRACT: In cutting thick plates there is the danger of the plates becoming contaminated by radioactive materials. In the process of cutting, the plates should not come into contact with any surface, or the fingers of the experimenter, which are not absolutely free from contamination by radioactive substances. The device shown in Fig.1 may be used to cut such plates without the danger of contamination by radioactive substances. This is achieved by using two plexiglass plates with longitudinal grooves 2 mm deep which are built into a wooden body 12 x 14 x 15 cm in size. The plate to be cut is attached to this body and is then moved into the cutting and breaking system. The breaking device

Card 1/2

SOV/120-58-2-34/37

A Device for Cutting Thick Plates.

contains a holder which stops the plate from falling out.  
Complete sectional drawing of the device is shown in Fig.1.  
There is 1 figure only.

ASSOCIATION: Institut radiatsionnoy gigiyeny (Institute of Radiation Hygiene)

SUBMITTED: July 16, 1957.

1. Radiation--Safety measures
2. Cutting tools--Operation

Card 2/2

VASIL'YEV, N.V.; DIVINSKIY, Yu.L.; KNAKHOVSKIY, A.A.; FADEYEV, N.S.

Overall mechanized unit for the production of flux. Biol. tekhn.  
ekon.inform.Gos.nauch.-Issl.inst.nauch.i tekhn.inform 17 no.11-31-  
32 N '64. (MIRA 18:3)



VASIL'YEV, N.V., inzh.; DIVINSKIY, Yu.L., inzh.; KNAKHOVSKIY, A.A., inzh.;  
FADEYEV, N.P., inzh.

Equipment for the preparation of flux. Lit. proizv. no.11:  
19-20 N '65. (MIRA 18:12)

ФАДЕЕВ, Н.С.  
FADEYEV, N.S.

Spawning type and fertility of some commercial flounders of  
Sakhalin [with summary in English]. Zool.zhur. 36 no.12:1841-1847  
D '57. (MIRA 11:1)

1. Sakhalinskoye otdeleniye Tikhookeanskogo instituta rybnogo  
khozyaystva.  
(Sakhalin--Flounders)

FADEYEV, N.S.

List and brief biological characteristics of flatfishes inhabiting  
continental shoals along the eastern coast of southern Sakhalin.  
Vop. ikht. no.13:26-34 '59. (MIRA 13:3)

1. Sakhalinskoye otdeleniye Tikhookeanskogo nauchno-issledovatel'skogo  
instituta morskogo rybnogo khozyaystva i okeanografii (TINRO)  
(Sakhalin--Flatfishes)

FADYEV, N.S.

Abundance of flatfishes in the waters of Sakhalin. Trudy sov.  
Ikht. kom. no.10:173-175 '60. (MIRA 13:10)

1. Sakhalinskoye otdeleniye Tikhookeanskogo nauchno-issledovatel'skogo  
institut morskogo rybnogo khozyaystva i okeanografii-(SakhTINRO).  
(Sakhalin--Flatfishes)

FADEYEV, N.S.

Features of the biology of flounder. Priroda 50 no. 3:113  
Mr '61. (MIRA 14:2)

1. Sakhalinskoye otdeleniye Tikhookeanskogo nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii, pochtovoye otdeleniye Antonovo, Chekhovskogo rayona.  
(Flounders)

FADEYEV, N. S.

Dissertation defended for the degree Candidate of Biological Sciences  
~~were defended~~ at the Scientific Council of the Far-East Affiliate (1962)

"Industrial-Biological and Morphological Characteristics of the Yellow-Finned Flounder of Sakhalin."

Vestnik Akad. Nauk, No. 4, pp 119-145

FADEYEV, N.S.

Yellowfin flounder *Limanda aspera* in the eastern part of the Bering Sea.  
Trudy VNIRO 48:281-291 '63. (MIRA 17:2)

1. Tikhookeanskiy nauchno-issledovatel'skiy institut morskogo rybnogo  
khozyaystva i okeanografii.

FADYEYEV, N.Y.

Clamping device for graining machines. Geod. 1 kart. no. 11:63-  
64 N '60.

(MIRA 13:12)

(Map printing)



FADEYEV, O. P. Sand Tech Sci -- (diss) "Study of the effect of open rotors upon  
the performance and axial stress of sinking centrifugal pumps." Mos, 1957.

13 pp (Min of Higher Education USSR. Mos Mining Inst im I. V. Stalin. Chair  
of Mining Mechanics), 120 copies (KL, 4-58-83)

FADEYEV, O.P., kand.tekhn.nauk

Axial force acting on the supporting body of a peat pump having  
a working wheel without a front cup. Torf.prom. 37 no.2:7-9  
'60. (MIRA 13:6)

1. Tul'skiy gornyy institut.  
(Peat machinery)

FADEYEV, O.P.

Controlling centrifugal mine pumps. Nauch. trudy MGI  
no.23:195-207 '58. (MIRA 15:12)  
(Mine pumps)

FADEYEV, O.P., dotsent, kand. tekhn. nauk

Increasing the operational reliability of loading artesian pumps.  
Nauch. trudy Tul. gor. inst. no.4:205-209 '61. (MIRA 16:8)

(Mine pumps)

1. FADEYEV, P. I.
2. USSR (600)
4. Geology and Geography
7. Sands of USSR. P. I. Fadeyev. Part 1. (Moscow, Moscow University Press, 1951).  
Reviewed by M. P. Petrov. Sov. Kniga, No. 6, 1952.

9. ~~Report~~ Report U-3081, 16 Jan. 1953, Unclassified.

FADEYEV, P.I.

MOROZOV, S.S.; SERGEYEV, Ye.M.; FADEYEV, P.I.

Kara Kum sands. Uch.zap.Mosk.un. no.177:3-8 '56.

(MLRA 10:5)

(Kara Kum--Sand)

FADYEV, P.I.

Composition and properties of sands in the Uzboy Valley. Uch.  
zap. Mosk. un. no. 177:9-20 '56. (MLRA 10:5)  
(Uzboy Valley--Sand)

FADEYEV, P.I.

Structural characteristics of surface sand strata in the central  
regions of western Kara Kum. Uch.zap.Mosk.un. no.177:21-28 '56.

(MLRA 10:5)

(Kara Kum--Sand)



**FADEYEV, P.I.; AVEROCHKINA, M.V.**

Deformations of drainage canals in the Meshchera Lowland, their nature and causes. Vest. Mosk. un. Ser. biol., pochv., geol., geog. 13 no. 1:151-161 '58. (MIRA 11:7)

1. Moskovskiy gosudarstvennyy universitet, Kafedra inzhenernoy geologii i gruntovedeniya.  
(Meshchera--Canals)

FADEYEV, P.I.

Permeability of sands to water in the Meshchera Lowland and some methodological problems in determining the seepage coefficient under field conditions with reference to the design of drainage structures. Vest. Mosk. un. Ser. biol., pochv., geol., geog. 14 no.3:161-170 '59. (MIRA 13:6)

1. Kafedra gruntovedeniya i inzhenernoy geologii Moskovskogo universiteta.

(Meshchera--Soil percolation)

FADEYEV, P.I.

Characteristics of sands of southwestern Turkmenia. Zemlevedenie  
5:43-60 '60. (MIRA 15:8)  
(Turkmenistan--Sand)

FADEYEV, P.I.

Granulometric analysis of sands by the sieve method. Vest. Mosk.  
un. Ser. 4: Geol. 16 no.1:74-78 Ja-F '61. (MIRA 14<sup>13</sup>)

1. Kafedra gruntovedeniya i inzhenernoy geologii Moskovskogo  
universiteta.

(Sand)

KOTLOV, F.V., kand. geol.-min. nauk, otv. red.; BEZUK, V.M., doktor geol.-miner. nauk, red.; BELYI, L.D., doktor geol.-miner. nauk, red.; BYKOVA, V.S., kand. geol.-miner. nauk, red.; GOR'KOVA, I.M., doktor geol.-miner. nauk, red.; GUREYEV, A.M., red.; YEMEL'YANOVA, Ye.F., kand. geol.-miner. nauk, red.; KOLOMENSKIY, N.V., doktor geol.-miner. nauk, prof., red.; MAKEYEV, Z.A., doktor geol.-miner. nauk, red.; POL'SHIN, D.Ye., kand. tekhn. nauk, red.; POPOV, I.V., doktor geol.-miner.-nauk, prof., red.; PRIKLONSKIY, V.A., prof., red. [deceased]; RUBINSHTEYN, A.L., doktor geol.-miner. nauk, prof., red.; SERGEYEV, Ye.M., doktor geol.-miner. nauk, prof., red.; FADEYEV, P.I., kand. geol.-miner. nauk, red.; ZOLOTOV, P.F., red. izd-va; ASTAF'YEVA, G.A., tekhn. red.

[Materials on the engineering and geological properties of rocks and methods for their study] **Inzhenerno-geologicheskie svoistva gornykh porod i metody ikh izucheniya; materialy.** Moskva, Izd-vo Akad. nauk SSSR, 1962. 362 p. (MIRA 15:5)

1. Soveshchaniye po inzhenerno-geologicheskim svoistvam gornykh porod i metodam ikh izucheniya, Moscow, 1957. 2. Chlen-korrespondent Akademii nauk SSSR (for Priklonskiy). 3. Moskovskiy gosudarstvennyy universitet (for Sergeyev). 4. Laboratoriya gidrogeologicheskikh problem Akademii nauk SSSR (for Kotlov). 5. Kafedra "Osnovaniya i fundementy" Moskovskogo instituta inzhenerov vodnogo khozyaystva (Rubinshteyn).

(Rocks)

(Engineering geology)

FADEYEV, P.M.

Increase in labor productivity is the most important task of the seven-year plan. Ugol' Ukr. Vol.3 no.5:4-9 My '59.  
(MIRA 12:9)

1. Zaveduyushchiy sektorom ugol'noy promyshlennosti Tsentral'nogo komiteta Kommunisticheskoy partii Ukrainy.  
(Coal mines and mining--Labor productivity)

Z/011/62/019/010/003/009  
E112/E435

AUTHORS: Fadeyev, P.M., Zhigun, I.G., Shumakova, L.B.

TITLE: Waterproof paints, based on synthetic resins

PERIODICAL: Chemie a chemicka technologie. Prehled technicke a hospodarske literatury, v.19, no.10, 1962, 465, abstract Ch 62 6282. (Lakokras. Materialy, no.3, 1962, 50-51)

TEXT: Paints, based on straight resins, such as polystyrene or the epoxies, although waterproof are too brittle for practical application. The addition of bitumen reduces brittleness but causes deterioration of the resistance to both, low and elevated temperatures. The general usefulness of the resin composition is thus impaired. Best results were obtained with coats based on epoxies or polystyrene if plasticizers such as dibutylphthalate and titanium white, cement and other fillers were added. These compositions proved useful as insulating layers against humidity and water in the building trade. 3 tables.

[Abstracter's note: Complete translation.]

Card 1/1

*Ural Affil, Acad. Building & Architecture*

ACCESSION NR: AR3000211

S/0081/63/000/006/0671/0671

SOURCE: RZh. Khimiya, Abs. 67221

AUTHOR: Fadeyev, P. M.; Zhigun, I. G.; Shumakova, L. B.

TITLE: Synthetic resin base waterproof coatings

CITED SOURCE: Lakokrasoch, materialy i ikh primeneniye, no. 3, 1962, 50-51

TOPIC TAGS: synthetic resin, coatings

TRANSLATION: Waterproof coating compositions are described, which dry at 20° and have for their basis PS resins (PS) and epoxy resins EDF-1 and EDF-3 (ER). Toluene solutions of resins were used. Cement, marble flour and marshalit were used as fillers. In the making of light coatings the best results were obtained on using titanium dioxide as filler or pigment. It was found that pure PS and ER base coatings, notwithstanding some good characteristics, are too brittle. Addition of bitu-

Card 1/2



ACCESSION NR: AR3000211

men increases elasticity of the coatings, but lowers their frost resistance and thermal stability. Compositions containing bitumen can be used for interior waterproofing. It is shown that optimal characteristics are exhibited by compositions containing PS and ER with added plasticizers. Such coatings can be recommended for the protection of enclosures utilized under particularly complex conditions. V. Latov

DATE ACQ: 16May63

ENCL: 00

SUB CODE: 00

Card 2/2

38069

S/191/62/000/006/013/016

B117/B138

15.8121

AUTHORS: Fadeyev, P. M., Shibanov, G. N., Gusarova, Ya. I.

TITLE: Hardening of epoxy resins with quinoline derivatives

PERIODICAL: Plasticheskiye massy, no. 6, 1962, 59 - 60

TEXT: An attempt was made to harden epoxy resin ( $\text{ЭА}^2-3$  (EDF-3)) with a mixture of cyclic compounds of the quinoline group (quinoline, isoquinoline, methyl and dimethyl quinoline). These heavy pyridine bases are inexpensive and easily available as by-products of coke production. Their use as hardeners made it possible to increase the filler content (cement) to 250% of the weight of the resin and thereby to lower the cost of the adhesive composition by two thirds. A special advantage of this composition is its long life (up to 48 hrs). Its strength, however, is lower than that of resin hardened with polyethylene polyamine ( $40 \text{ kp/cm}^2$  as against  $70 \text{ kp/cm}^2$ ), but may be increased by heating at  $60 - 80^\circ\text{C}$  for 6 hrs. Adding a certain amount of polyethylene polyamine made it possible to increase the strength of the composition at room temperature ( $18 - 20^\circ\text{C}$ ) from 40 to

Card 1/2

Hardening of epoxy resins with...

S/191/62/000/006/013/016  
B117/B138

70 kp/cm<sup>2</sup>, after heating (60 - 80°C) from 73 to 130 kp/cm<sup>2</sup>. To clarify the function of quinolines during hardening, a resin hardened at 80 and 120°C was extracted with boiling benzene in 6 hrs. Only 9 - 10% of the pyridine bases did not react. Attempts were made to glue concrete samples with the adhesives described. Mechanical tests of the samples gave satisfactory results. Investigation of the use of pyridine bases as hardeners for epoxy resins is continuing. There are 3 tables. The most important English-language reference is: E. S. Narracott, Brit. Plastics, no. 26, 120 (1953).

Card 2/2

FADEYEV, P.M.; SHIBANOV, G.H.; SHEMERYANKINA, M.I.

Role of furfurolein in the hardening of furfuryliden-acetose monomer.  
Plast.massy no.7:19-20 '64. (MIRA 17 10)

FADEYEV, P.P., inzh. (Chelyabinsk)

Device for the automatic check of voltage circuits. Energetik  
14 no.1:26 Ja '66. (MIRA 19:1)

FADEYEV, P. V.  
Ca

PROCESSES AND PROPERTIES INDEX

The use of S-containing mazut for rolling-mill furnaces. V. A. Shadrin and P. V. Fadeev. *Stal* 3, No. 9:10, 84.5 (1943).—Mazut with up to 3% of S can be used safely for heating rolling furnaces. In pull-through furnaces the use of S-contg. mazut causes losses proportional to the amt. of S. Up to 3% of S in the mazut results in a 3.0-3.6% of loss. Mazut with only little S causes 2.0-2.5% of loss. The burning out of metal in billets heated with S-contg. mazut may be covered up during subsequent rolling and therefore go unnoticed. Mazut contg. S can be used safely in heating furnaces, for annealing ingots, for annealing metal which is to be worked yet further and in annealing muffles. H. Hosh

9

AS 3-31.2 METALLURGICAL LITERATURE CLASSIFICATION

GROUP #2	GROUP #1	GROUP #3	GROUP #4
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

S/133/61/000/004/014/015  
A054/A127

AUTHOR: Fadeyev, P. V.

TITLE: Continuous pouring of rimming steel to obtain wire rods  
at an installation of the UICHM Institute

PERIODICAL: Stal', no. 4, 1961, 383

TEXT: At the Redvinskiy metizno-metallurgicheskiy zavod (Redva Metalware and Metallurgical Plant) a method for continuous pouring of rimming steel has been developed. Ingots of this rimmed steel were rolled to high-grade wire rod raw material intended for the manufacture of wires, splints and knurled screws. The quality of these products was not different from that of the same products made from conventional gross output wire rods. In an electric arc furnace of the UICHM Institute, 10 trial melts of rimming steel were made and poured through a 230 x 140 mm crystallizer. Wire rods made from the rimmed steel ingots practically did not differ in surface quality, internal structure and mechanical properties from conventional gross output billets rolled into wire rods. When rolling test ingots to 53-mm<sup>2</sup> square wire rods, waste was approximately  $\frac{1}{3}$  of that occurring in rolling of conventional ingots.

Card 1/1

ORLOV, S.I.; KHUDYAKOV, A.N.; KRIVONOSOV, V.S.; FADEYEV, P.V.;  
PETROV, K.M.; D'YAKONOV, V.A.

At the Ural Research Institute of Ferrous Metallurgy. Stal'  
21 no. 4:366,371,383 Ap '61. (MIRA 14:4)  
(Rolling mills—Accounting) (Steel—Metallurgy)



LAPOTYSHKIN, N.M.; SLIVCHANSKAYA, V.V.; KOKAREKO, N.M.; FADEYEV, P.V.;  
PRAVDINA, T.E.

Rolling electrical steel slabs prepared by continuous casting on  
strip mills with hot reeler. Biul.TSIICHM no.4:38-40 '61.  
(MIRA 14:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii (for Lapotyshkin, Slivchanskaya). 2. Novolipetskiy  
metallurgicheskiy zavod (for Pravdina).  
(Rolling (Metalwork))

FADEYEV, R.

USSR/Chemical Technology - Chemical Products and Their Application, Food Industry I-28

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 13983

Author : Tikhomirov A., Fadeyev R., Batalov A.  
Inst : All-Union Scientific Research Institute of Poultry Industry

Title : New Continuous Operation System of Processing Freshly Killed Ducks and Geese.

Orig Pub : Mynsnaya industriya SSSR, 1956, No 3, 16-19

Abstract : The All-Union Scientific Research Institute of Poultry Industry has designed and built a specimen of a continuous operation chamber for heat processing of killed geese and ducks at 72°. Provision of the chamber has made it possible to mechanize the processes of picking of water fowl and to evolve a conveyer line processing system having an output capacity of 2400 geese or ducks per shift. Operations of heat treatment and picking of

Card 1/2

- 418 -

S/0258/64/004/002/0325/0329

ACCESSION NR: APL037109

AUTHOR: Fadeyev, S. I. (Moscow)

TITLE: Problem of a piston in a medium which is being homogeneously deformed

SOURCE: Inzhenernyy zhurnal, v. 4, no. 2, 1964, 325-329

TOPIC TAGS: piston, deformed medium, gas dynamics, adiabatic flow, homogeneous deformation, shock wave, spherical symmetry

ABSTRACT: Let  $t, r, U, p, \rho$  be time, linear coordinate, velocity, pressure and density of gas in motion  $E$ ;  $t_1, r_1, U_1, p_1, \rho_1$  are the analogous parameters in motion  $E_1$ ;  $\lambda, k, B$  are constant coefficients of proportionality. An upper index (1) denotes parameters of the gas before the shock wave, and (2) — after the shock wave. Let a medium with spherical symmetry, which is being homogeneously deformed, be characterized by the following parameters at time  $T$ :

$$U^{(1)} = \lambda r, \quad p^{(1)}(T) = \text{const}, \quad \rho^{(1)}(T) = \text{const}. \quad (1)$$

Card 1/3

ACCESSION NR: APL037109

When  $t = T$ , a spherical piston begins to move from the center of symmetry according to

$$\dot{r} = F(t), \quad F(T) = 0, \quad (2)$$

where  $F(t)$  and  $dF(t)/dt$  are continuous, single-valued functions on the entire interval of time of motion. The problem is to determine the gas motion which arises. The author restricts consideration to a kinematic pattern of motion E. He finds the trajectory of particles in a neighborhood of the piston. He seeks an approximate solution and studies motion of a piston with positive finite

acceleration for  $t \geq T$ ,  $(d^2F(t)/dt^2) \geq 0$ . For determining motion  $E_1$  he uses the method of decomposition in the parameter  $\varepsilon = (\gamma - 1)(\gamma + 1) = 1/4$ . Solving two inequalities simultaneously, he finds the time  $t^{(2)}$  and the place  $r^{(2)}$  when the

shock wave overtakes a particle moving with velocity  $\lambda r^{(1)}$ . A qualitative flow pattern for  $\lambda > 0$  and  $\lambda < 0$  is given in figures. The use of a self-simulating solution leads to a special law of motion of a piston in E, described in the general case from the initial parameters of the medium. If  $\gamma = 5/3$  and motion  $E_1$  arises

Cord/3

FADEYEV, S.I. (Moskva)

Gas flow in a discharge tube. Inzh.zhur. 1 no.4:137-140 '61.  
(MIRA 15:4)

1. Institut mekhaniki AN SSSR.  
(Gas dynamics)

S/137/61/000/011/055/123  
A060/A101

AUTHORS: Fadeyev, S.I., Lyadov, V.V.

TITLE: Thermite welding of rails

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 49, abstract  
11Ye315 ("Put' i putevoye kh-vo", 1961, no. 4, 38 - 40)

TEXT: The nature of aluminum thermite welding is analyzed and its advantages over arc-welding are indicated. Directions are given for the composition and preparation of the thermite mixture, the requirements upon its components are enumerated, and the industrial sequence of operations is described. The sequence of operations includes the molding of the butts, the heating up to the rail-ends, the welding, and the after-treatment of the butt. ✓

V. Gorb

[Abstracter's note: Complete translation]

Card 1/i

26-2112

39910  
S/258/62/002/001/009/013  
1028/1228

AUTHOR: Fadeyev, S. I. (Moscow)

TITLE: On the creation of a homogeneous gas stream in a discharge tube

PERIODICAL: Inzhenernyy zhurnal, v. 2, no. 1, 1962, 160-163

TEXT: The motion of the high-temperature gas stream created in a discharge tube is examined. At the time  $t = 0$ , an energy release starts according to the equation  $W = At$  at the closed end of a tube which extends indefinitely in the other direction and is filled with gas at rest having definite pressure, density and temperature. The equations of motion of the gas behind the shock wave are solved. A surface of discontinuity, at which the density passes discontinuously to zero while the pressure remains constant, moves behind the gas at constant velocity so that the compressed gas is sandwiched between the shock wave and the surface of discontinuity. The value of  $A$  is determined for three particular cases: a) the internal energy of the gas depends only on the pressure; b) the gas is completely ionized; c) the gas is in a constant magnetic field.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics AS USSR)

SUBMITTED: November 13, 1961

Card 1/1

X

40031

S/258/62/002/002/006/018  
1028/1228

24.4300

AUTHOR: Fadeyev, S. I. (Moscow)

TITLE: Automodel solution of the problem of a plane piston at a null temperature gradient

PERIODICAL: Inzhenernyy zhurnal, v. 2, no. 2, 1962, 254-262

TEXT: The problem of the expulsion of a high-temperature ideal gas by a plane piston moving according to the exponential law  $x(t) = Br^n$  is considered without taking into account the counterpressure. The equations of non-stationary one-dimensional motion of an ideal gas at null temperature gradient are written in non-dimensional variables, together with the boundary conditions. These equations are readily solved for  $n = 1$ , and the solution coincides with the solution for the case of no heat exchange between the particles. In the general case  $n \neq 1$  only numerical integration is possible. The equations are investigated qualitatively and solved in particular cases. An interesting result is that the law of conservation of energy is satisfied only if there is a continuous supply of energy to the front of the shock wave (for  $n < 1$ ), or if there is a continuous withdrawal of energy from the front of the shock wave (for  $n > 1$ ). An explanation is given of this result. As an application, the hydrodynamical processes in a discharge tube are treated by the method of the "magnetic piston". The author thanks A. A. Nikol'skiy for his advice.

J

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics AS USSR)

Card 1/1



FADEYEV, S.I. (Moskva)

Acceleration of plasma by a magnetic field. Inzh.zhur. 2  
no.3:68-73 '62. (MIRA 15:8)

1. Institut mekhaniki AN SSSR.  
(Plasma (Ionised gases)) (Magnetic fields)

FADEYEV, S.I.

For a more efficient utilization of the equipment. Put' 1  
put.khoz. 6 no.12:7-9 '62. (MIRA 16:1)

1. Nachal'nik otдела svarki Glavnogo upravleniya puti i sooruzheniy  
Ministerstva putey/soobshcheniya.  
(Railroads--Equipment and supplies)

L 18034-63  
PI-4/PC-4  
EPA(b)/EWT(1)/BDS AFFTC/ASD/ESD-3/IJP(C)/AFWL/SSD Pd-4/  
ACCESSION NR: AP3000723 S/0258/63/003/002/0367/0373

72  
70

AUTHOR: Fadeyev, S. I. (Moscow)

TITLE: Similar flow of ideal conducting gas

SOURCE: Inzhenernyy zhurnal, v. 3, no. 2, 1963, 367-373

TOPIC TAGS: similarity solution, energy conservation, detonation, perfect gas

ABSTRACT: The similarity solution has been analyzed in a perfect, conducting gas with large but finite thermal conductivity. The flow is assumed planar, cylindrical or spherical with a time-displacement relationship given by equation (1):

$$r_c = Bt^n \quad (1)$$

where

$Y$  = linear coordinate

$B$  = constant

Card 1/2

L 18034-63

ACCESSION NR: AP3000723

2

t = time

n = 2/3, 1/2, 2/5 for plane, cylindrical and spherical expansions, respectively.

A similarity transformation is carried out on the flow equations, and the perfect gas law and general results are stated. A particular solution is then carried out for the case of strong detonation in planar symmetry ( $n=2/3$ ). Numerical results are obtained for temperature, pressure, density, and velocity fields for various thermal conductivity values. In the limit of the conductivity approaching infinity, it is shown that the temperature gradients disappear. "The author thanks A. A. Nikol'skiy for his advice and comments on the work." Orig. art. has: 32 equations and 4 figures.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics, Academy of Sciences, USSR)

SUBMITTED: 01Oct62

DATE ACQ: 21Jun63

ENCL: 00

SUB CODE: AI

NO REF SOV: 005

OTHER: 002

Card 2/2

L 7920-66 EWT(1)/EWP(m)/ETC/EPF(n)-2/ENG(m)/EAA(d)/EPA(w)-2/FCS(k)/EAA(h)/EAA(q)  
ACC NR: AP5026694 IJP(●) SOURCE CODE: UR/0258/65/005/005/0950/0954

AUTHOR: Fadeyev, S. I. (Moscow)

76  
B

ORG: None

TITLE: Hydrodynamic acceleration of a plasma in a discharge tube

SOURCE: Inzhenernyy zhurnal, v. 5, no. 5, 1965, 950-954

TOPIC TAGS: <sup>21, 44, 55</sup> plasma acceleration, discharge tube, hydrodynamic theory, ideal gas, thermodynamics, plasma shock wave  
<sub>1, 21, 44, 55</sub>

ABSTRACT: The article considers the one dimensional plane motion of a non-viscous, non-heat conducting ideal gas, determined by the evolution of energy (per unit of area) according to the law:

$$W = W(t), \quad W(0) = 0, \quad (1.1)$$

where  $W(t)$  is a continuous function, together with its derivatives. The problem re-

UDC:533.95

Card 1/3

L 7920-66

ACC NR: AP5026694

duces to the solution of the problem of a piston, the law of whose motion is connected with Eq. (1.1) above by an equation expressing the conservation of energy. We have:

$$W(t) = \int_0^{r_*} \left( \frac{\rho u^2}{2} + \frac{p}{\gamma - 1} \right) dr,$$

or, taking into account that in the region of the gas discharge plasma, where  $\rho = 0$ ,

$$\int_0^{r_*} \left( \frac{\rho u^2}{2} + \frac{p}{\gamma_* - 1} \right) dr = \frac{P_*}{\gamma_* - 1} r_*.$$

the law for the conservation of energy can be written in the form:

$$W(t) = \frac{P_*}{\gamma_* - 1} r_* + \int_0^t P_* \frac{dr_*}{dt} dt.$$

Here  $r_*$  is the law of motion of a piston, whose role is played by the surface of

Card 2/3

L 7920-66  
ACC NR: AP5026694

the explosion;  $r_0$  is the law of motion of the shock wave;  $\rho$  is the density;  $p_*$  is the pressure on the piston; the internal energy of the quiescent gas is neglected. The results of theoretical calculation are compared with experimental data. Orig. art. has: 16 formulas, 5 figures, and 1 table

SUB CODE: ME, TD/ SUBM DATE:05Jul64/ ORIG REF: 005/ OTH REF: 000

Card 3/3

FADEYEV, S. Kh.

Stoves with cylinders for liquefied gas. Gen. prod. 1963:  
26-28 '63 (ill. 18:2)



FADEYEV, S.M.

Locking washer with flexible teeth. Standartizatsiia 28 no.2:  
47-49 F '64. (MIRA 17:3)

*illegible*  
FADEYEV, Sergey Pavlovich[deceased]; ZYBIN, V.P., doktor tekhn. nauk, retsenzent; POKROVSKIY, A.M., kand. tekhn. nauk, dots., nauchn. red.; FUFAYEVA, G.I., red.

[Preparation of a course project on machine parts] Kursovoe proektirovanie detalei mashin. Moskva, Vysshaya shkola 1964. 302 p. (MIRA 18:2)

1. Zaveduyushchiy kafedroy "Detali mashin" Vsesoyuznogo zaochnogo mashinostroitel'nogo instituta (for Zybin).

FADEYEV, V.

Panoramic photography. Sov.foto 17 no.6:46-49 Je '57. (MLRA 10:8)

1. Starshiy master tsekha "Normal" avtozavoda im. Likhacheva.  
(Photography, Panoramic)

FADEYEV, V.

Improve lifesaving. Voenn. 34 no.3:14 Mr '58. (MIRA 11:4)

1. Nachal'nik Upravleniya spasatel'noy sluzhby Tsentral'nogo  
Komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu  
SSSR.

(Lifesaving)

FADEYEV, V. (g.Kirov)

Fire in a hospital. Pozh.delo 5 no.9:23 8 '59. (MIRA 13:1)  
(Kirov--Hospitals--Fires and fire prevention)

FADEYEV, V.A.

Reproduction of the hare *Lepus europaeus caspicus* Ehrenb.  
in western Kazakhstan. Trudy Inst. zool. AN SSR. 23:150-  
168 '64. (MIRA 17:11)

FADEYEV, V.A.

High rare earth content of rocks in the northern Verkhoyansk  
Range. Inform.biul. NIIGA no.13:54-57 '59.

(MIRA 13:5)

(Verkhoyansk Range--Rare earths)

FADEYEV, V.A.

Rhythmicity of igneous processes as a basis for the division  
of lava formation. Inform. sbor. NIIGA no.31:36-45 '62.  
(MIRA 16:12)



FADEYEV, V.A., inzhener; GORSHENKOV, A.D., inzhener

New upholstery filling material. Der.prom.4 no.5:27 My'55.  
(MLRA 8:10)

1. Mebel'naya fabrika no.2 tresta Mosgornebel'prom.  
(Upholstery)

PADEYEV, V.A., inzhener; GORSHENKOV, A.D., inzhener

Device for veneering curved surfaces. Der.prom.4 no.7:24 J1'55.  
(MLRA 8:10)

1. Mebel'naya fabrika no.2 tresta Mosgornebel'prom  
(Moscow--Veneers and veneering)

FADYEV, V.A.

Machine-tool attachments for dowel hole drilling. Der.prom. 4  
no.11:20-21 N '55. (MLRA 9:2)

1.Glavnyy inzhener mebel'noy fabriki No.2 tresta Mosgermebel'-  
prom.  
(Woodworking machinery--Attachment)

FADEYEV, V.A., inshener.

Device for the manufacture of round table frames of plywood.  
Der.prom. 5 no.1:19-21 Ja '56. (MLRA 9:5)

1. Mebel'naya fabrika No. 2 tresta Mosgornebel'prom.  
(Furniture industry) (Veneers and veneering)

FADEYEV, V.A. inzhener.

Preparing and veneering curvilinear panels. Der.prom.5 no.6:20 Jo '56.  
(MIRA 9:9)

1.Mebel'naya fabrika no.2 tresta Mosgermebel'prom.  
(Plywood)

FADEYEV, V.A., inzhener.

Finishing beech to resemble more valuable types of wood. Der.prom.5  
no.8:19 Ag '56. (MLBA 9:10)

1.Mebel'naya fabrika no.2 tresta Mezgermebel'prom.  
(Wood finishing) (Furniture industry)

FADEYEV, V.A., inzhener.

Inlays with use of colored compositions. Der.prom. 5 no.12:21-  
22 D '56. (MIRA 10:1)

1. Mebel'naya fabrika no.2 tresta Mosgormebel'prom.  
(Cabinetwork) (Marquetry)

FADEYEV, V.A., inzhener.

Design of hollow tops for round tables. Der.prom. 6 no.1:23 Ja '57.  
(MLRA 10:2)

1.Mebel'naya fabrika No.2 tresta Mosgornebel'prom.  
(Tables)



FADMEV, V.A., inzhener.

~~CHAMFERING DEVICE~~  
Chamfering device. Der. prom. 6 no.5:21 My '57.  
(Woodworking machinery)

(MLRA 10:6)

FADEYEV, V.A., inzh.

New designs of the sliding parts of circular extension tables.  
Der.prom. 7 no. 7:24 J1 '58. (MIRA 11:8)

1. Moskovskaya mebel'naya fabrika No. 17.  
(Tables)

L 04044-67 ENT(1)/ENT(m)/ENP(k)/ENP(t)/ETI IJP(c) JD

ACC NR: AR6022140 SOURCE CODE: UR/0276/66/000/002/B004/B004

AUTHOR: Shevelev, A. S. ; Fadeyev, V. Ya.

28  
B

TITLE: Summation of systematic and random errors in the determination of precision machining according to linear dimensions

SOURCE: Ref. zh. Tekhn mashinostr, Abs. 2B29

REF SOURCE: Tr. Kuybyshevsk. aviats. in-t, vyp. 20, ch. 1, 1965, 63-70

TOPIC TAGS: machining, machining error, error, error determination

ABSTRACT: The error of machining by linear dimensions in the general form is:  $\Delta = a + \Delta_{mh}$ , where  $a$  is the value of the variable systematic errors within the limits of the batch of parts, and  $\Delta_{mh}$  is the field of instantaneous dispersal of machining errors. The problem considered is that of the theoretical probability of error summation due to changes in the magnitude of the systematic error in time according to a linear law. It is pointed out that for each part in the batch the numerical value of random and systematic error appears to be of random magnitude. Tables and charts are cited for error determination in machining by linear dimensions, with allowance for production risk, and for determining the percentage of rejects in a

Card 1/2

UDC: 621.9.001.5

L. OhOhh-67  
ACC NR: AR6022140

batch (of parts) in the nonsymmetric arrangement of the dispersion field of dimensions in relation to the field of tolerance. Four figures, 2 tables, and a bibliography of 4 reference items are given. L. Tikhonova. [Translation of abstract].

SUB CODE: 13/

kh

Card 2/2

FADEYEV, V.A.; KOZNETSOV, A.A.

Differences between the intrusive and effusive facies of trap magma.  
Uch. zap. NIIGA Rog.geol. no.3:87-94 164.

(MIRA 18:10)

USHAKOVA, G.V.; FADEYEV, V.A.

Ixodid ticks parasitizing on hares in western Kazakhstan. Trudy  
Inst. zool. AN Kazakh. SSR 22:174-176 '64.

(MIRA 17:12)

FADNYEV, V.G., vitse-admiral, redaktor; POZNAKHIRKO, A.S., kapitan I  
ranga, redaktor; ZUDINA, M.P., tekhnicheskiy redaktor.

[Concise dictionary of sea terms] Kratkii morskoi slovar'.  
Moskva, Voen.isd-vo Ministerstva obor. SSSR, 1955. 119 p.  
(MLBA 9:4)  
(Russian language--Dictionaries) (Navigation--Dictionaries)

V. G

PECHATIN, A.A., inzh.; BEN'KO, M.P.; KAMENSKIY, V.K.; KARTASHEV, R.D.;  
SUTYRIN, M.A.; PADMEYEV, V.G., red.; IGOSHIN, M.G., red.; KARYAKINA,  
M.S., tekhn.red.

[Manual for helmsmen for lifesaving cutters] Posobie motoristu-  
rulevomu spasatel'nogo katera. Moskva, 1957. 188 p. (MIRA 11:5)

1. Vsesoyuznoye dobrovol'noye obshchestvo sodeystviya armii,  
aviatsii i flotu.  
(Navigation) (Motorboats)



FADEYEV, Vladimir Georgiyevich, PECHATIN, Aleksandr Aleksandrovich, SUROVIKIN,  
Vladislav Dmitriyevich, IGOSHIN, M.G., red.; ANDRIANOV, B.I., tekhn.red.;

[Underwater man; arrangement and use of the "Podvodnik-1" diving apparatus] Chelovek pod vodoi; ustroiatvo i ispol'zovanie vodolaznogo apparata "Podvodnik-1". Moskva, Izd-vo DOSAAF, 1958. 149 p. (MIRA 11:9)  
(Diving, Submarine)

MALAKHOV, Z.S., kapitan 1 ranga zapasa; SHAKHGEDANOV, A.A., inzh.-kapitan 1 ranga; LOPATIN, A.M., kapitan 1 ranga; YEMEL'YANOV, N.V., kapitan 1 ranga; BOGOYAVLENSKIY, D.N., kapitan 2 ranga; GORODENKO, B.K., kapitan 2 ranga; VAL'KOV, I.Ya., inzh.-podpolkovnik; NOVOSIL'TSEV, O.N., kapitan-leytenant, BIRINBERG, M.E., inzh.; PADEYEV, V.G., vitse-admiral, obshchiy red.; MASHAROV, A.I., red.; STREL'NIKOVA, M.A., tekhn.red.

[Practical seamanship] Morskaya praktika. Moskva, Voen.izd-vo  
M-va obor.SSSR. Pt.1. 1958. 416 p. (MIRA 12:6)  
(Navigation)

22967  
S/128/000/011/004/007  
A033/A133

11500 also 1160,1496

AUTHORS: Fadeyev, V. G., Tsyganenko, G. I., Slobodyanyuk, L. Z.

TITLE: Casting the stern post of the atomic icebreaker "Lenin"

PERIODICAL: Liteynoye proizvodstvo, no. 11, 1960, 27 - 29

TEXT: The authors point out that the development of the electroslag welding method has made it possible to facilitate the manufacturing processes of large-size body-type castings. The introduction of this method stimulated the development and fabrication of the low-alloyed SL-2 (SL-2) and SL-30 (SL-30) grade steels possessing a good weldability. A typical example of the utilization of such a technology is the casting of the stern post of the atomic icebreaker "Lenin", composed of 9 parts joined by electroslag welding (Fig. 1). While this structure cast in one piece would have required 135 tons of metal, the fabrication by combined casting and welding consumed only 123 tons of liquid metal; the maximum weight of the separate castings did not exceed 25 tons, the maximum overall dimensions of the blanks being 5.5 x 1.7 m. The nine stern post parts were made from SL-2 steel, cast in dry sand molds. The coating mixture was prepared of 85% Millerovo sand and 15% clay paste with a humidity of 0 - 7%, a gas permeability of

Card 1/4

22967

S/123/60/000/011/004/007

A033/A133

Casting the stern post of the atomic icebreaker "Lenin"

150 units, compression strength of 0.45 - 0.55 and rupture strength of 1.5 - 2.0 kg/cm<sup>2</sup>. The core mixture was composed of 60.4% Millerovo sand, 30.2% spent mixture, 9.4% clay paste and 4.0% KT binder. This mixture had a humidity of 5.5 - 6.5%, a gas permeability of 90 units, a compression strength of 0.45 - 0.50 and a rupture strength of 2.5 - 3.0 kg/cm<sup>2</sup>. The cores of the solid parts of the stern post (2, 4, 5, 7, and 8 in Fig. 1) were coated with a mixture composed of 67% Millerovo sand, 13% clay paste and 20% marshallite, of 90 units gas permeability, compression strength 0.45 - 0.55, rupture strength 1.5 - 2.0 kg/cm<sup>2</sup> and a humidity of 6 - 7%. Most of the parts were molded in the ground or in caissons. Round chills were placed in the joining spots between structural ribs and casting bodies which proved to be a good remedy against hot cracks in steel castings. Owing to the impossibility of ensuring the feed of the castings by shrinkage heads only, internal chills made of screens 6 - 8 mm in diameter and pieces of SL-2 steel were placed into the solid parts of the castings. The utilization of shrinkage heads and chills made it possible to increase the output of serviceable products to 78.5%. The gate system was so calculated as to allow the metal feed by a great number of feeders which ensured a relatively rapid filling of the molds with metal and excluded the possibility of warming up one of the metal parts. To ensure a directed solidification of the castings independently of the metal feed, the

Card 2/4

22967

6/13/69/000/011/004/007

4033/1133

Casting the stern post of the atomic icebreaker "Lenin"

feeders were positioned in two and even three rows, so that, at the beginning, the lower parts of the castings were filled. The castings were cooled in the molds for 35 - 90 h. After the shrinkage heads and pouring gates had been removed the castings were subjected to normalization at 940 - 960°C and 900 - 920°C with subsequent tempering at 600 - 620°C and cooling in the air. To prevent the formation of cracks, which were detected during the gas cutting of shrinkage heads on the first castings, the further cutting of shrinkage heads was effected after annealing at 950°C with subsequent slow cooling in the furnace. Welding was carried out with УОНИ -13/45А (УОНИ-13/45А) electrodes. There are 9 figures.

✓

Card 3/4

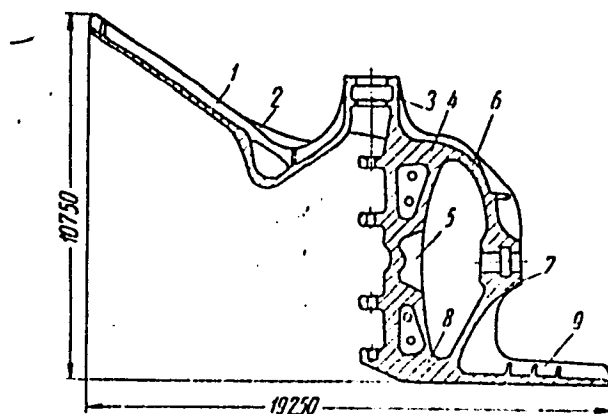
22967

S/123/00/000/011/004/007

A033/A133

Casting the stern post of the atomic icebreaker "Lenin"

Figure 1: Layout of breaking down the stern post of the icebreaker "Lenin" into separate cast blanks (1 - 9)



Фиг. 1. Схема разбиения вехерштейня ледокола «Ленин» на отдельные литые заготовки (1-9).

Card 4/4

GRACHEV, Viktor Anatol'yevich; STOYLIK, Mikhail Alekseyevich. Primal  
uchastiye EADEYEV, V.G.; FEDOROV, V.V., kand. tekhn. nauk, retsen-  
zent; MERKUSHEV, R.N., kand. tekhn. nauk, dotsent, red.; BORUNOV,  
N.I., tekhn. red.

[Railroad transportation in the peat industry] Zheleznodorozhnyi  
transport torfianoi promyshlennosti. Moskva, Gos. energ. izd-vo,  
1960. 291 p. (MIRA 14:10)  
(Railroads, Industrial) (Peat industry)

L 50974-65 EWT(1)/EPA(s)-2/EWT(m)/EWP(i)/T/EWP(t)/EEC(b)-2/EWP(b) Pt-7/Pi-4  
LJP(c) JD/GG

ACCESSION NR: AP6011450

UR/0048/65/029/004/0647/0649

AUTHOR: Kotel'nikov, N. V.; Sokolov, L. N.; Fadeyev, V. I.

46  
5

TITLE: Determination of optimum current density in electrolytic preparation of films  
/Report, Second All-Union Symposium on the Physics of Thin Ferromagnetic Films held in Irkutsk 10-16 July 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 4, 1965, 647-649

TOPIC TAGS: thin film, ferromagnetic thin film, electroplating

ABSTRACT: The magnetic and other properties of films prepared by electroplating depend to some degree on the current density, but determination of the best current density experimentally is a difficult problem. Hence in the present paper a procedure to facilitate determination of the optimum current density is proposed. The calculations may also be of help in preparing thin films on conducting substrates. Usually, in current density calculation, in view of the high resistance of the electrolyte as compared with the electrodes, it is assumed that the electrode potential is constant. However, one can realize conditions where the potential will vary appreciably, and with it the current density. By carrying out a test

Card 1/2



L 50974-65

ACCESSION NR: AP5011450

plating under these conditions and then examining the plated film over the length of the cathode one can find the optimum quality section and, accordingly, determine the optimum current density (potential) for the given temperature, bath, etc. The pertinent analytical calculations are adduced and the design of the experiment is described. Some variants are suggested. Orig. art. has: 8 formulas and 2 figures.

Association: None

SUBMITTED: 00 1, 1965

ENCL: 00

SUB CODE: EE, EC

NR REF SOV: 002

OTHER: 000

*sw*  
Card 2/2

FADEYEV, V. I.

FADEYEV, V. I. Centralized Control of a Pile-Driver Operation (Kompleksnoye leniye Mekhanizmami Koprovoy Ustanovki), pp. 14-15

Simplification of operation of a pile driver is briefly described. A change in wiring diagram assured safety of operation and reduction in personnel. (Drawings and diagram).

SO: PROMYSHLENNAYA ENERGETIKA, No. 10, Oct. 1952, Moscow (1502270)

FADYEV V. I.

Tree planting on saline soils. Put' i put. khoz. no. 7:40 JI '57.

(MLRA 10:8)

1. Nachal'nik Kartalinskoy distantsii zashchitnykh lesonasazhdeniy.  
(Windbreaks, shelter belts, etc.)

FADEYEV, V.I., inzh.

City passenger transportation in the summer of 1960. Gor.khoz.  
Mosk. 34 no.6:29-30 Je '60. (MIRA 13:7)  
(Moscow--Transit systems)

FADEYEV, Vasilii Ivanovich; PEROV, V.A., nauchnyy red.; SALITA, Ye.G., red.; NIKOL'SKIY, D.A., retsenzent; FUMKIN, P.S., tekhn.red.

[Modern equipment for the crushing and comminution of ores]  
Sovremennoe oborudovanie dlia drobleniia i izmel'cheniia rud.  
Leningrad, 1959. 241 p. (Leningrad. Nauchno-issledovatel'skii  
i proektnyi institut mekhanicheskoi obrabotki poleznykh isko-  
paemykh. Trudy, no.123). (MIRA 13:7)  
(Crushing machinery) (Ore dressing—Equipment and supplies)

ZEROSHEK, Vladimir Vatslavovich[deceased]: Primali uchastiye:  
SLUTSKIN, L.A., inzh.; FADEYEV, V.I., inzh.; SHIFRIN, M.Sh.,  
doktor tekhn. nauk, prof., retsenzent; ANTONOVICH, S.A., kand.  
tekhn. nauk, retsenzent; GARBER, Ye.D., nauchnyy red.; NIKITINA,  
R.D., red.; KRYAKOVA, D.M., tekhn. red.

[Automatic control of ship systems]Avtomatika sudovykh sistem.  
Leningrad, Sudpromgiz, 1962. 145 p. (MIRA 15:10)  
(Marine engineering) (Automatic control)

FADEYEV, V.I., inzh.; KUGAKOV, G.M., inzh.

Rational designs of the metal molds used in the production of  
wall industrial panels made from cellular concrete. Trudy  
BashNIISTroi no.1:242-248 '62. (MIRA 17:3)

*F.I.D. / V. / V.I.*

48-7-6/21

AUTHORS: Vorob'yev, V.D., Il'in, K.I., Kol'Chinskaya, T.I., Latyshev, G.D., Sergeev, A.G., Trofimov, Yu.N., Fadeyev, V.I.

TITLE: The Spectrum of The Electrons of the Internal Conversion of Active Radium-Containing Thorium Deposits  
III (Domain  $H\eta = 1380$  to 2700 and 3500 to 9000 Gs. cm.)  
(spektr elektronov vnutrenney konversii aktivnogo osadka radiotoriya' III (Oblast'  $H\eta = 1380$  to 2700 i 3500 do 9000 Gs. cm) toriya)

PERIODICAL: Izvestiya Akad. Nauk SSSR, Ser. Fiz., 1957, Vol. 21, Nr 7, pp. 954 - 961 (USSR)

ABSTRACT: 1.) The Intensities of the Conversion Lines. In the determination of the relative intensities of conversion lines the fact was taken into account that a portion of the atoms  $ThC''$  falls down from the source due to the  $\alpha$ -emission on the decay  $ThC'' \xrightarrow{\alpha} ThC''$ . This circumstance leads to the fact that the intensity of all conversion lines developing on the decay  $ThC'' \xrightarrow{\beta} ThD$  decrease by 30% in comparison with the Intensity of the lines of other nuclei. Therefore the intensities of all lines which develop in connection with the decay  $ThC'' \xrightarrow{\beta} ThD$  were determined with regard to the line L which develops in the same decay. The

Card 1/3



48-7-6-21

The Spectrum of the Electrons of the Internal Conversion of Active- Radium-Con-  
taining Thorium Deposits

III(Domain H<sub>g</sub> = 1380 to 2700 and 3500 to 9000 Gs. cm.)

intensities of the other lines were determined with regard to the I-line ThB → ThC. In order to connect all intensities with each other the relation of the L - and I - lines intensities to the source was determined, the latter being covered by a foil in order to prevent a falling down of the emission atoms. Detailed calculations and explanations are given. The authors estimate the accuracy of their measurements of the absolute intensities with 5 - 10 % for the intensive lines.

2.)The Conversion Spectrum in the Domain  $\rho = 1380$  to  $2600$  Gs. cm  
In the study of this portion of the spectrum 3 series of measurements were made. In every series the position and intensities of the lines were determined. The average values of H<sub>g</sub> and of the intensities are given in table 1, as well as the energy of the electrons and of the corresponding  $\gamma$ -transitions, the identification of the lines and comparative values of earlier works. It may be seen that the values obtained by the authors for H<sub>g</sub> and for the intensities differ markedly from earlier obtained values, where a photorecording of the electrons had been employed. Figures 1, 2, 3 and 4 represent some parts of the spectra of

Card 2/3

48-7-6/21

The Spectrum of the Electrons of the Internal Conversion of Active Radium-Containing Thorium Deposits

III(Domain  $H_0 = 1300$  to  $2700$  and  $3500$  to  $9000$  Gs. cm.)

conversion electrons in the domain:  $H_0 = 1300 - 2000$  Gs. cm.

3.)The conversion spectrum in the "rigid" domain. Certain lines discovered by the authors are recorded on figures 5, 6 and 7, their energies and intensities on table 2. There are 2 tables, 7 figures and 16 references, 8 of which are Slavic.

ASSOCIATION: Department of Physics, Leningrad Institute of Railroad Transportation Engineers  
(Kafedra fiziki Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta)

AVAILABLE: Library of Congress

Card 3/3

*FADEYEV, V.I.*

AUTHOR . ZHERNOVOY, A.I., KRISYUK, E.M., LA TYSHEV, G.D., REMENNYK, A.S., 56-4-7/52  
SERGEYEV, A.G. FADEYEV, V.I.

TITLE Spectra of the Internal Conversion Electrons of the Active Precipitation of Radiathorium II.  
(Spektr elektronov vnutrenney konversii aktivnogo osadka radiotoriya II - Russian)

PERIODICAL Zhurnal Eksperim.i Teoret.Fiziki, 1957, Vol 32, Nr 4 pp 682-689 (U.S.S.R.)  
Received 7/1957 .reviewed 8/1957

ABSTRACT Investigation of the active precipitation was carried out within the domain H 500-1300 cm magnetic spectrometer (width of lines 0,25%, angle of the spectrometer in the horizontal plane 40°, height of diaphragm 16 mm). The magnetic field was measured by the method of proton magnetic resonance. Registration of electrons was carried out by means of 2 self-extinguishing GM counters. The position and the intensities of K and L conversion electron energies of the electrons are computed according to the formula

$$E_{K L}^{L_p} = E_K^z - E_L^z - E_{Lq}^{z+\Delta z} \quad \text{where } E_K^z \text{ and } E_{Lp}^z \text{ denote the binding energies of}$$

K and Lp electrons in the normal atom, and  $E_{Lq}^{z+\Delta z}$  is the binding energy of Lq electrons in the atom in which no Lp electrons are present. The decrease of the quality of the shielding effect can be explained by the increase of the charge:  $\Delta Z = (E_{Lq}^{z+\Delta z} - E_{Lq}^z) / (E_{Lq}^{z+1} - E_{Lq}^z)$ . Theoretical computation of the quantity  $\Delta Z$  is complicated and at present not yet possible. The spectra of the internal conversion of the active precipitation of radia-

Card 1/2

AUTHORS: Fadeyev, V. I.  
Krisyuk, E. M., Sergejev, A. G., Latyshev, G. D., 56-5-10/46  
Il'in, K. I., Fadeyev, V. I.

TITLE: The Decay Scheme of  $Tl^{208}$  (Skhema raspada  $Tl^{208}$ )

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1957, Vol. 33  
Nr 5, pp. 1144-1146 (USSR)

ABSTRACT: The  $\beta$  conversion spectrum of  $Tl^{208}$  was plotted by means of a semi-circle spectrometer and the following  $\beta$  lines were found:

$E_{\beta}$ in KeV	Multipole order	Intensity in %
211,4	M1	0,32
233,4	M1	0,34
252,54	M1	1,1
277,35	M1	8,4
485,9	-	0,5
510,84	-	22,6
583,2	E2	83,2
763,2	M1	2
860,5	M1	12,3
2614,3	E3	100

Card 1/2