ACCESSION NR: AP4019497 S/0078/64/009/003/0705/0708

AUTHOR: Polishchuk, P. A.

TITLE: Oxide-fluoride systems of potassium, zirconium and boron

SOURCE: Zhurnal neorg. khimii, v. 9, no. 3, 1964, 705-708

TOPIC TAGS: phase diagram, potassium fluoride syste, potassium zirconium fluoride system, K_2ZrF_6, K_3ZrF_7, potassium borofluoride containing system, potassium oxyfluorozirconate, ternary eutectic

ABSTRACT: A part of the phase diagram of the system formed by KF, KBF_4, K_2ZrF_6 and B_2O_3 was studied. The phase diagram for the system

$$KF-KBF_4-\frac{3K_2ZrF_6}{2B_2O_3}$$

was constructed. The $KF-K_2ZrF_6$ system is characterised by the presence of the congruently melting thermally stable K_3ZrF_7 and a eutectic. The quasibinary system

$$KBF_4-\frac{3K_2ZrF_6}{2B_2O_3}$$

Card 1/2

POLISHCHUK, P.A.

Electrolytic decomposition of fluoride-oxide melts of zirconium and boron. Ukr.khim.zhur. 30 no.5:469-474 '64.

(MIRA 18:4)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

POLISHCHUK, P.A.

Electric conductivity of oxide-fluoride melts of potassium, zirconium, and boron. Zhur.neorg.khim. 9 no.4:921-924 Ap '64.
(MIRA 17:4)

POLISHCHUK, I.A.

Oxide-fluoride systems of potassium, zirconium, and boron.
Zhur. neorg. khim. 9 no.3:705-708 Mr '64. (MIRA 17:3)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

P'OLISHCHUK, P.A.

Behavior of zirconium dioxide in a molten potassium fluoborate. Zhur. neorg.khim. 9 no.1:147-151 Ja '64. (MIRA 17:2)

1. Dneprepetrovskiy khimiko-tekhnologicheskiy institut.

POLISHCHUK, P.A.

Feasibility of systems containing potassium fluozirconate and fluoborate. Ukr. khim. zhur. 30 no.6:553-557 '64. (MIRA 18:5)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

POLISHCHUK, R.S.

Determination of the hemolysis rate of preserved blood. Gemat. i perel. krovi 1:110-111 '65. (MIRA 18:10)

1. L'vovskiy institut perelivaniya krovi.

FOL'BORT; KHIL'CHENKO; BIRYUKOVICH; POLISHCHUK; RASIN; RUSHKEVICH; ZELINSKIY; NEDBAYLOVA; VASHETKO; CHUPYR'; GORODKOVA

Viktor Pavlovich Protopopov; an obituary. Zhur.vys.nerv.deiat. 8 no.1:157-159 Ja-F '58. (MIRA 11:3)
(PROTOPOPOV, VIKTOR PAVLOVICH, 1880-1957)

GOYMAN, N., insh.; POLISHCHUK, S., inzh.

Mechanized unloading of bricks with the help of power-driven cars.
Stroi. mat. 4 no. 7:28-29 Jl '58. (MIRA 11:7)
(Loading and unloading)
(Bricks--Transportation)

POLISHCHUK, S. A.

POLISHCHUK, S. A. --"Purification of Ozocerite with Preliminary Partial Deasphaltization of the Ozocerite in an Emulsion." Min Higher Education USSR, L'vov Polytechnic Inst, L'vov 1955. Dissertation for the Degree of Candidate in Technical Science)

SO: Knizhnaya Letopis', No. 35, 1955

RUDAKOVA, N.Ya., kand.tekhn.nauk; POLISHCHUK, S.A., kand.tekhn.nauk; SHEREMETA, B.K., kand.tekhn.nauk; GAMOLINA, L.N., inzh.; STANITSKAYA, Z.N., inzh.; GERMASH, E.A., inzh.; VASIL'YEVA, Z.N., inzh.

Possibility of production of transformer oils from the petroleum of the Okhinskiy and Katangli fields. Nauch.zap.Ukrniiproekta no.8:64-70 '62. (MIRA 16:1)
(Insulating oils) (Petroleum--Refining)

S/710/62/000/008/002/003
E075/E436

AUTHORS: Rudakova, N.Ya., Polishchuk, S.A., Sheremeta, B.K., Candidates of Technical Sciences, Gamolina, L.N., Stanitskaya, Z.N., Germash, E.A., Vasil'yeva, Z.N., Engineers

TITLE: The possibility of producing transformer oils from Okha and Katangli crudes

SOURCE: Kiyev. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut ugol'noy, neftyanoy i gazovoy promyshlennosti. Nauchnyye zapiski. no.8. 1962. Neftepererabotka. 64-70

TEXT: An attempt was made to produce transformer oils satisfying ГОСТ982-56 (GOST 982-56) specification from Okha and Katangli crudes subjected to acid or furfural treatment without dewaxing. The properties of the crudes are given in Table 1. These crudes contain about 50% of oil fractions and can fully satisfy the demand of the Siberian and the Far East regions for transformer oils. A distillate from a mixture of crudes was investigated (2 parts of Okha and 1 part of Katangli crudes) in view of differences in their composition, the Katangli crude containing

Card 1/3

RUDAKOVA, N.Ya.; POLISHCHUK, S.A.; LOBOV, V.A.; GAMOLINA, L.N.

Possibility of obtaining transformer and freon oils from Valeny petroleum (Moldavian S.S.R.). Nefteper. i neftekhim. no.1:14-15 '65. (MIRA 18:6)

1. L'vovskiy filial UkrNIIgipronefti.

L 1698-66
ACCESSION NR: AR5017515 UR/0299/65/000/013/M023/M023

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 13M128

AUTHOR: Polishchuk, S. A.

CITED SOURCE: Sb. Lecheniye travm i ikh posledstviy. Kiyev, Zdorov'ye, 1964, 85-88

TOPIC TAGS: tissue transplant, pH measurement, skin physiology

TRANSLATION: In 31 wounds in 20 patients, pH was measured by the method of Pedzhett and Zitkevich before transplantation. Czech universal indicator paper was used; this permitted measurements within pH limits of 0-12 with an accuracy of 0.1-0.2. At a pH of 7.3, 10% of the transplants accreted; at pH 7.4, 85%; at pH 7.6, 75.5%; at pH 7.8, 79.4%; at pH 7.9, 95%; at pH 8, 100%, at pH 8.2, 95%; at pH 8.3, 50%; and at pH 8.7, 90%. The correlation coefficient between the criteria investigated was negligible (r = 0.06) and was 3 times less than its error (0.18). The conclusion is drawn that one reading of a pH value is insufficient for predicting results in an autotransplant accretion. B. Kozhevinikov

SUB CODE: LS ENCL: 00

Card 1/1 DP

CHERKESTOV, P.I., prof., doktor biolog. nauk; VRAKIN, V.F., starshiy nauchnyy sotrudnik, kand. biol. nauk; POLISHCHUK, S.P., kand. biolog. nauk

Age-related characteristics of the participation of the digestive tract of calves in intermediate nitrogen metabolism. Izv. TSKHA no.2:173-185 '65. (MIRA 18:9)

1. Kafedra fiziologii i biokhimii sel'skokhozyaystvennykh zhivotnykh Moskovskoy akademii sel'skokhozyaystvennykh nauk imeni Timiryazeva.

POLISHCHUK, S.M.

Distribution of P^{32}-labeled Staphylococcus aureus in sepsis combined with irradiation and hemorrhage. Med.rad. 9 no.9:81-84 S '64. (MIRA 18:4)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. D.K.Grechishkin) Luganskogo meditsinskogo instituta.

SILAKOVA, A.I. [Sylakova, H.I.]; POLISHCHUK, S.N. [Polishchuk, S.M.]

Glutaminase activity in the cellular elements of the skeletal muscles under normal conditions and in E-avitaminosis. Ukr. biokhim. zhur. 36 no. 4:598-606 '64. (MIRA 18:12)

1. Institut biokhimii AN UkrSSR, Kiyev. Submitted March 31, 1964.

L 33563-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EPR/EWP(k)/EWA(h) Pf-4/Peb EM

ACCESSION NR: AP5007271 S/0198/65/001/002/0129/0134

30
31
B

AUTHORS: Grigorenko, Ya. M. (Kiev); Polishchuk, T. I. (Kiev)

TITLE: Solution of an antisymmetric problem in deformation for a conical shell with linearly varying thickness on the BESM-2M computer

26

SOURCE: Prikladnaya mekhanika, v. 1, no. 2, 1965, 129-134

TOPIC TAGS: shell theory, conical shell, hypergeometric function, shear stress

26

ABSTRACT: The deformation of a thin, variable thickness, conical shell under an antisymmetric boundary load was studied analytically. The shell thickness varies linearly (see Fig. 1 on the Enclosure), and the applied loads are both self-balancing and nonself-balancing. The shear stresses are represented as sums of real and imaginary parts of complex hypergeometric functions $N_i = \sum_{n=1}^{4} C_n N_i^{(n)} + N_i^{(R_0)} + N_i^{(M_0)}$.

The same holds for the displacements u and w, $u = \sum_{n=1}^{4} C_n u^{(n)} + C_5 + u^{(R_0)} + u^{(M_0)}$;

$$w = \sum_{n=1}^{4} C_n w^{(n)} + C_5 \operatorname{ctg} \alpha + C_6 l_0 x + w^{(R_0)} + w^{(M_0)}.$$

Card 1/3

L 33563-65
ACCESSION NR: AP5007271

The hypergeometric functions are then represented in terms of power series of the form $S=\sum_{n=0}^{\infty} B_n(x) \quad (0<x<1)$, where the B_n are determined from recurrence formulae. The error in the partial sum S_{n-1} is determined from the inequality $|B_n|<\varepsilon(1-x)|S_{n-1}|$. The solution was carried in three parts: a particular solution corresponding to a self-balancing load in the interval $0 < x < 1$; same solution as part one but for the points $x = 0$ and $x = 1$; particular solution corresponding to a nonself-balancing load in the interval $0 \leq x \leq 1$. Special solutions are obtained using the above method for $\varkappa = 0.5, 1, 2, 3, 4, 5$ where $\varkappa = \frac{l_0}{h_0}\operatorname{ctg}\alpha$. Orig. art. has: 27 equations, 4 figures, and 1 table.

ASSOCIATION: Institut mekhaniki, AN UkrSSR (Institute of Mechanics, AN UkrSSR)

SUBMITTED: 10Apr64 ENCL: 01 SUB CODE: NP,AS,DP,ME

NO REF SOV: 005 OTHER: 000

Card 2/3

L 33963-65

ACCESSION NR: AP5007271

0

ENCLOSURE: 01

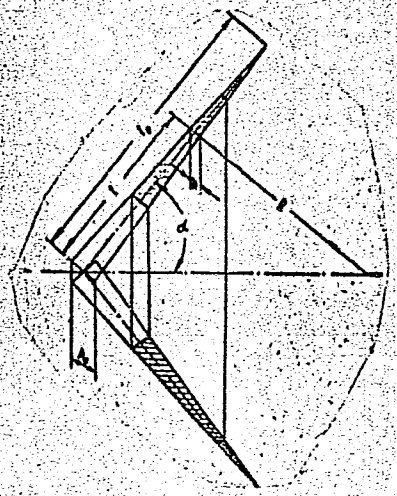


Fig. 1.

Card 3/3

UR/

ACC NR: AM7003446 Monograph

Kovalenko, Anatoliy Dmitriyevich; Grigorenko, Yaroslav Mikhaylovich; Il'in, Leonid Alekseyevich; Polishchuk, Tat'yana Ivanovna

Calculation of conical shells subjected to antisymmetric stresses (Raschet konicheskikh obolochek pri antisimmetrichnykh nagruzakh) Kiev, Naukova dumka, 66. 0494 p. tables. (At head of title: Akademiya nauk Ukrainskoy SSR. Institut mekhaniki) Errata slip inserted. 2,600 copies printed.

TOPIC TAGS: calculation, conic shell structure, conic shell, circular plate, nonlinear shell structure, turbine, elastic element, loading, antisymmetric loading

PURPOSE AND COVERAGE: The book presents a method of calculating antisymmetrically stressed conical shells and other elastic systems consisting of rings, circular plates, and cyclindrical and conical shells, used as structural parts in construction of turbines and other machinery. Formulas and tables for calculating the above elastic elements are given. The tables are based on analytical solutions obtained using a BESM-2M digital computer. The book is intended for engineers, technicians, and specialized scientific workers in research, construction, and strength calculations of thin-walled machine elements.

Card 1/3

The authors express their gratitude to N. A. Lobkova, scientific coworker of the Institute of Mechanics, AN SSSR, for helping in preparing the manuscript for publication, and to engineer G. P. Golub for assisting in the compilation of tables.

TABLE OF CONTENT [abridged]:

ACC NR: AM7003446

SUB CODE: 21/ SUBM DATE: 19Aug66

Card 3/3

L 40204-66 EWT(d)/EWP(c)/EWP(v)/T/EWP(k)/EWP(l) IJP(c) RH
ACC NR: AP6030053 SOURCE CODE: UR/0114/66/000/004/0002/0008

AUTHOR: Polishchuk, V. L. (Engineer); Orlov, M. D. (Engineer); Chernin, Ye. N. (Engineer); Reznichenko, V. Ya. (Engineer); Kotov, Yu. V. (Engineer); Bodrov, I. C. (Engineer); Yamalutdinov, I. T. (Engineer); Ol'khovskiy, G. G. (Candidate of technical sciences)

ORG: none

TITLE: Results of testing first model and series examples of gas turbines GTN-9-750 of Leningrad Metallurgical Plant im. XXII CPSU Congress

SOURCE: Energomashinostroyeniye, no. 4, 1966, 2-8

TOPIC TAGS: gas turbine, pipeline, centrifugal pump, electric power production, turbine design, turbine compressor/GTN-9-750 gas turbine, NG-280-9 centrifugal pump

ABSTRACT: A description of the testing of the 9000 kw GTN-9-750 gas turbine, designed to drive the NG-280-9 centrifugal pipeline pump, used on the Bukhara-Ural gas pipeline. The tests showed that the actual power produced in operating conditions is 8,750 kw, efficiency 25%. The maximal power produced without additional equipment and regenerators is 9600-10,000 kw. The characteristics of the main elements of the turbine were found to be near the design characteristics: the adiabatic efficiency of the compressor is 89%, the low and high pressure turbine sections operate at 85% and 89-90% efficiency. Long-term testing with repeated stops and starts showed that the unit as modified from the prorotype is suitable for operation in the gas pipeline system. Orig. art. has: 5 figures, 7 formulas and 3 tables. [JPRS: 36,501]

SUB CODE: 13, 10 / SUBM DATE: none / ORIG REF: 002

Card 1/1 fb

UDC: 621.438.001.41

L 26596-66 EWT(d)/EWT(m)/EWP(f)/T-2/EWP(h)/ETC(m)-6/EWP(v) WW/JT

ACC NR AP6013385 SOURCE CODE: UR/0096/66/000/005/0002/0007

AUTHOR: Polishchuk, V.L.(Engineer); Chernyshev, P.S.(Engineer)

ORG: Ministry of Heavy, Power, and Transport Machine Building-LMZ im. XXII Congress of the CPSU(Ministerstvo tyazhelogo, energeticheskogo i transportnogo mashinostroyeniya)

TITLE: Present status and future trends in the development of power gas turbine building

SOURCE: Teploenergetika, no. 5, 1966, 2-7

TOPIC TAGS: gas turbine, turbine compressor, turbine cooling, thermoelectric power plant, steam turbine, turbine blade

ABSTRACT: Extensive effort is being made to develop gas turbine units with combined steam-gas cycles to improve thermal power plant economy. The Central Boiler and Turbine Institute (TsKTI), together with several boiler and turbine plants, are engaged in developing steam-gas units with high pressure steam generators. Two of these units, with capacities of 40 and 14 Mw, have already been built and are being tested. Preliminary work is under way to build a similar 200,000 kw steam-gas unit.

Construction has been completed and operational tests are presently being conducted on several conventional gas turbine units: these include a 25 Mw unit, built by the Leningrad Metal Plant (LMP); a 50 Mw unit, by

Card 1/4

UDC: 621.438.(048)

the Kharkov Turbine Plant (KhTP); a 12 Mw unit, by the Nevsk Plant (NP); and also a 4 and a 1.5 Mw unit built by the Kaluga Turbine Plant and the Leningrad plant "Economizer". Despite the development of these gas turbine units, it is noted that the Soviet gas turbine building industry has not yet accumulated sufficient experience to produce highly efficient and operationally reliable power gas turbines demanded by the power engineering industry. Soviet industry is furthest advanced in gas turbine technology in the field of compressor drives for gas pipelines. The Soviets are presently mass producing 4--10,000 kw turbocompressors for pumping natural gas. Considerable operational experience has been accumulated with 4--5,000 kw units especially at the Nevsk machine building plant. The operational reliability of gas turbine drives is presently 98%. The intensive research and development work now being conducted is expected to yield new improved prototypes of high-power gas turbines and their subsequent mass production.

The Leningrad Metal Plant, the largest Soviet supplier of steam turbines, is doing most of the current research work. At the end of 1960, this plant completed a 25,000 kw gas turbine prototype. The principal design feature of this turbine is the effective cooling of the rotor and blades making it possible to use rotors made of perlite chrome-molybdenum steel at inlet temperatures up to 700°C. During the design and manufacture of the basic model of this turbine, a great deal of experimental research work was carried out jointly by the TsKTI, the Kiev Polytechnic Institute, the VTI, and others. Among the most

L 26505-66
ACC NR: AP6013385

important research problems were: 1) The development and aerodynamic testing of the air compressor flow-through sections, full scale testing of compressors at maximum rpm, and measuring the dynamic stresses in the compressor blades; 2) aerodynamic and vibrational testing of the turbine stages; 3) testing and refinement of the combustion chamber and its components, and 4) the testing of the turbine cooling system. At the time the first turbine prototype was completed, there were no facilities for running "hot" tests, and, therefore, a large portion of the experimental testing was conducted under actual operating conditions. As a result of these experimental operations, new types of flame tubes and burners were developed making it possible, at a 700°C gas temperature, to ensure that the variation in the temperature field before the turbine is less than 30°C and that the maximal flame tube temperature does not exceed 600°C. The major difficulty encountered during testing was the temperature monitoring of the rotor and blade roots. This problem was solved by designing a special multipoint switch which was mounted in the axial boring of the turbine rotor. The test results are being used to make necessary design modifications in the construction of a series of similar turbine units for the Yakutsk power station.

The Leningrad Metal Plant has recently completed the design and experimental testing and has started on the construction of a 100,000 kw gas turbine unit. The high compression ratio and interstage cooling will make it possible to achieve an efficiency of 27--28%.

Card 3/4

L 26596-66

ACC NR: AP6013385

To determine the dynamic stresses in turbine blades, the Leningrad Electrotechnical Institute has developed a contactless method of transmitting signals from strain-gage pickups. This method makes it possible to measure stresses at 58 different points on rotating parts.

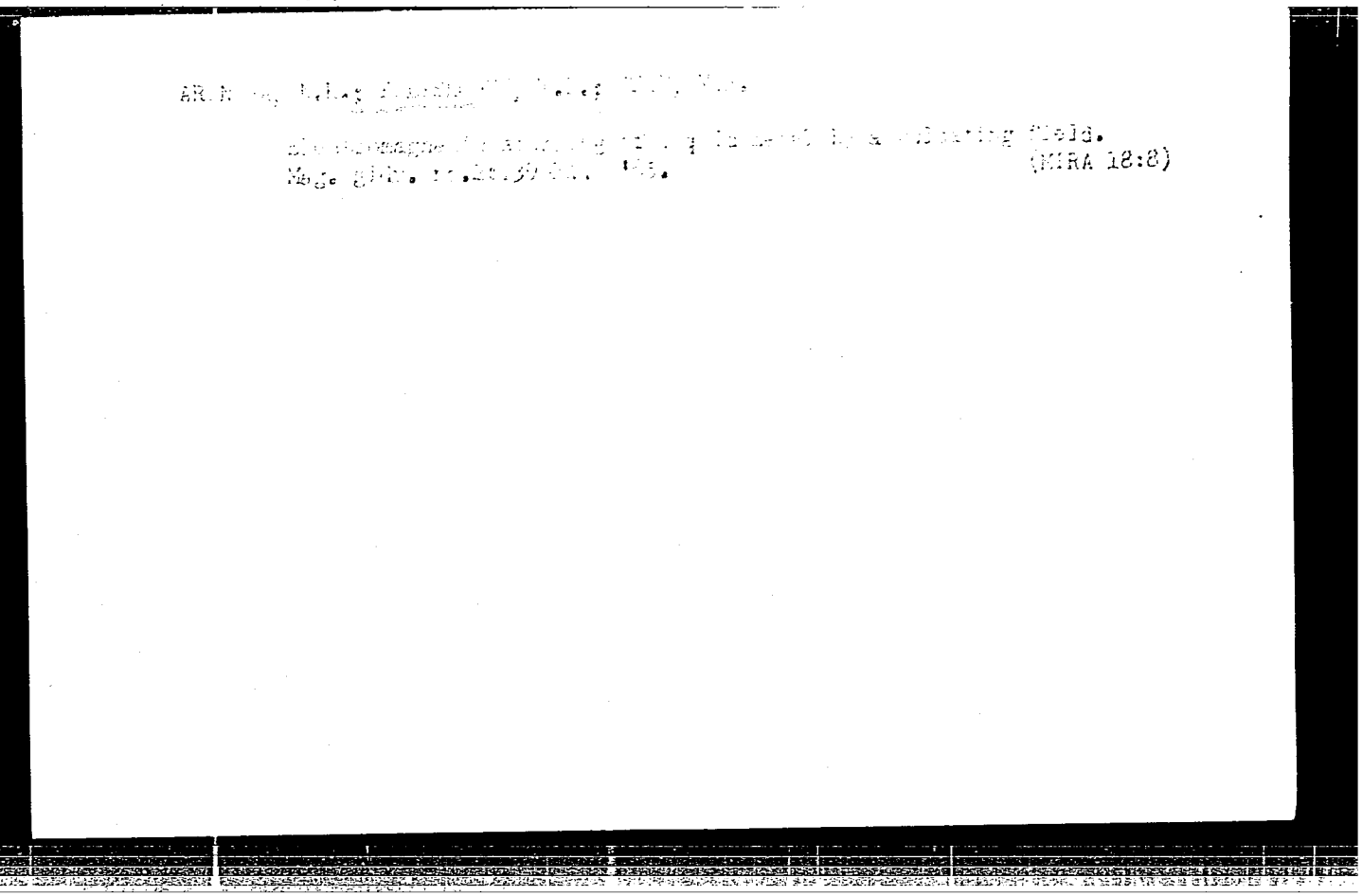
In recent years, work has been conducted on the introduction of electrohydraulic control systems for steam and gas turbines.

The intensive experimental research currently being conducted in the USSR to develop highly efficient systems for air and liquid cooling of rotor blades and other gas turbine components and to find new heat resistant materials will make it possible to develop gas turbines with much higher gas inlet temperatures. This would increase their efficiency and expand their field of application. Orig. art. has: 7 figures and 1 table.

[ATD PRESS: 4240-F]

SUB CODE: 10 / SUBM DATE: none

Card 4/4 BLG



(MIRA 18:8)

POLISHCHUK, V. P.; TSIN, M. R.

Electromagnetic pumping of nonmetallic melts. TSvet. met. 35 no.10:82-83 O '62. (MIRA 15:10)

(Fused salts) (Pumping machinery, Electric)

POLISHCHUK, V.P.

Nodular cast iron as material for magnetic circuits in single-phase electromagnetic pumps. Nauch. trudy Inst. lit. proizv. AN URSR 11:85-91 '62. (MIRA 15:9)
(Cast iron--Magnetic properties)
(Pumping machinery)

L 24587-66 EWT(d)/EWT(l)/EWT(m)/EWP(f)/EPF(n)-2/T/ETC(m)-6 WW/DJ

ACC NR: AP6009559 SOURCE CODE: UR/0413/66/000/005/0123/0123

AUTHORS: Tsin, M. R.; Polishchuk, V. P. 60 B

ORG: none

TITLE: Method for pumping nonconducting melts. Class 59, No. 179624

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 123

TOPIC TAGS: electromagnetic pump, liquid flow

ABSTRACT: This Author Certificate presents a method for pumping nonconducting melts according to Author Certificate No. 136176. To increase the pressure head, the metal-melt division boundary is withdrawn from the region of the pump electromagnetic field influence. After the withdrawal of the metal-melt division boundary from the region of electromagnetic field influence, increased voltage is fed to the pump winding.

SUB CODE: 13/ SUBM DATE: 21Feb62

Card 1/1 BK UDC: 621.689

S/118/62/000/012/002/002
D201/D308

AUTHORS: Gel'fand, P.I. and Polishchuk, V.P., Engineers

TITLE: An automatic electromagnetic-device for pouring metal in pressure casting machines

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 12, 1962, 37-38

TEXT: A short description of a pressure casting machine type 515, now undergoing development at the institut liteynogo proizvodstva AN USSR (Institute of Casting Production of the AS UkrSSR) and at the TsKB Gosplana USSR. The machine consists of a single phase induction pump (a transformer whose secondary winding is a short-circuited ring of the molten metal) and of a heated crucible storing the amount of molten metal at a given temperature, required for continuous operation of the pump. A spout connects the device to the pressure chamber of the machine. The advantage of this device is that the metal to be poured is taken from lower layers of the

Card 1/2

L 39616-66 EWT(m)/EWP(t)/ETI JD/GD-2
ACC NR: AP6002899 SOURCE CODE: UR/0286/65/000/024/0063/0063

AUTHOR: Tsin, M. R., Polishchuk, V. P.

ORG: none

TITLE: Method of preventing the formation of a columnar structure in casting thick-walled tubular products. Class 31, no. 177049

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 63

TOPIC TAGS: pipe, alloy, melting, electromagnetic field, rotation, grain structure, metal casting

ABSTRACT: The method of preventing the formation of columnar structures in casting thick-walled tubular products from alloy melts is characterized by the fact that pulses of short duration from an electromagnetic field are intermittently applied to the melt at a constant rate of mold rotation in order to change the fusion rate.

SUB CODE: 11,13/ SUBM DATE: 03Mar62

Card 1/1

L 11590-66 EWT(d)/EWT(l)/EWT(m)/EWP(w)/EPF(n)-2/EWP(v)/T-2/EWP(k)/
WW/EM SOURCE CODE: UR/0286/65/000/021/0087/0088

ACC NR: AP6000372

AUTHORS: Polishchuk, V. P.; Ch'ing, M. R.

ORG: none

TITLE: Electromagnetic induction pump. Class 59, No. 176184

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 87-88

TOPIC TAGS: electromagnetic pump, liquid metal pump

ABSTRACT: This Author Certificate presents an electromagnetic induction pump with a rectilinear duct for liquid metals. To increase the current density in the metal and to increase the efficiency of the pump by increasing the cross section of the duct, the pump has two independent electromagnet systems, one for inducing current in the moving metal and the other for creating a magnetic field interacting with the induced current (see Fig. 1). The pump duct has two semicircular channels connected to the duct so that the metal filling the channels forms two closed loops with the metal in the duct. The electromagnet system for inducing current is in the form of two closed magnetic circuits, whose primary windings are connected to a single-phase current supply and whose secondaries are the closed loops of metal mentioned above. The electromagnet system for creating a magnetic field is in the form of two open magnetic circuits with supply windings at the pole ends which touch the duct on two sides. The mode of operation of the pump can then be controlled by

UDC: 621.689:538.31:669—154

Card 1/2

L 11590-66

ACC NR: AP6000372

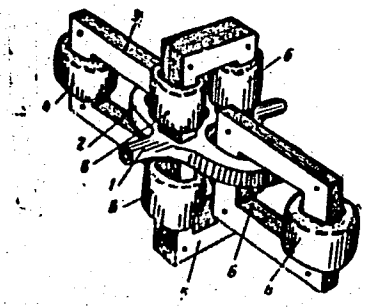


Fig. 1. 1 - Duct; 2 - semicircular channels; 3 - closed magnetic circuits; 4 - windings of closed magnetic circuits; 5 - open magnetic circuits; 6 - winding of open magnetic circuits.

varying the supply voltages or the phase shift angle between them. To prevent solidification of the metal when there are interruptions in operation, a device for reversing the current phase is connected in the primary winding circuit of one of the closed magnetic circuits. The pump will then operate as an induction furnace. Orig. art. has: 1 diagram.

SUB CODE: 13/ SUBM DATE: 21Jan63

Card 2/2

POLISHCHUK, S.

In response to the appeal of Novoanninskiy people. Muk.-elev. prom. 29 no.12:6-7 D '63. (MIRA 17:3)

1. Direktor Kishinevskogo kombinata khleboproduktov No.2.

POLISHCHUK, S.A. (Donetsk, pr. Gurova, d. 17, kv.15)

Experience with the use of the Zietkiewicz method of plastic surgery of the skin). Vest. khir. 91 no.7:52-56 Jl'63 (MIRA 16:12)

1. Iz 2-y kliniki obshchey khirurgii (zav. - zasluzhennyy vrach UkrSSR, dotsent Ya.D.Dmitruk)Donetskogo meditsinskogo instituta imeni A.M.Gor'kogo na baze 2-y gorodskoy bol'nitsy g. Donetska (glavnyy vrach - A.I.Solomakha)

L 18946-65 EWT(m)/EPF(c)/T Pr-4 DJ

ACCESSION NR: AP4049440 S/0318/64/000/007/0006/0008

AUTHOR: Rudakova, N. Ya.; Polishchuk, S. A.; Gomolina, L. N.; Orazova, M. R.; Sereda, Z. Ya.

TITLE: Conditions of production of stable transformer oil from Anastas'yevsk petroleum

SOURCE: Neftepererabotka i neftekhimiya, no. 7, 1964, 6-8

TOPIC TAGS: transformer oil, petroleum refining, Anastas'yevsk petroleum, aromatic hydrocarbon content, tar content, transformer oil stability

ABSTRACT: The transformer distillate of Anastas'yevsk petroleum processed by the L'vov Petroleum Refinery is characterized by a high content of heavy aromatic hydrocarbons and tars. The authors studied the dependence of the stability of the transformer oil on its content of aromatic compounds. Comparative data tabulated in the article show that the most stable transformer oil contains the lowest amount of tars and heavy hydrocarbons, and the lowest amount of aromatic hydrocarbons having refractive indices higher than 1.53. The authors conclude that the inadequate stability of the oils produced by the L'vov Refinery is due to their insufficient refining. In order to determine the influence of fractional composition on the formation of water-soluble acids at the beginning of aging of the oil, the distil-

Card 1/2

L 18946-65
ACCESSION NR: AP4049440

late was collected in fractions 10C apart, from which samples of transformer oil were obtained by refining. As the boiling range of the fractions rose, the stability of the transformer oil decreased. The transformer distillate should be collected up to 370C. The authors found that the best fraction for producing transformer oil from Anastas'yevsk petroleum processed by the L'vov Refinery is the one boiling between 270 and 370C. Orig. art. has: 3 tables.

ASSOCIATION: L'vovskiy filial, UkrNIIgiproneft' (L'vov Branch of UkrNIIgiproneft')

SUBMITTED: 00 ENCL: 00 SUB CODE: FP

NO REF SOV: 001 OTHER: 000

Card 2/2

L 43119-65 EWT(m)/EPF(c)/T Pr-4 DJ

ACCESSION NR: AP5005733 S/0318/65/000/001/0014/0015 19 17 B

AUTHOR: Rudakova, N. Ya.; Polishchuk, S. A.; Lobov, V. A.; Gamolina, L. N.

TITLE: Possibility of manufacturing transformer oil and freon from Valenskaya (Moldavian SSR) petroleum

SOURCE: Neftepererabotka i neftekhimiya, no. 1, 1965, 14-15

TOPIC TAGS: Valenskaya crude oil, transformer oil, freon, transformer oil yield, freon yield, paraoxydiphenylamine additive, chemical treatment, transformer oil production, freon production/ VTI-1 additive

ABSTRACT: The 300-400° lube cut obtained from Valenskaya petroleum is used as the distillate for the manufacture of transformer oil. The distillate whose highest freezing point is -45°C is chemically treated and yields stable transformer oil, with a consumption of 36% of acid of 94% concentration. The yield of transformer oil on the petroleum is 27% and is obtained without the use of antioxidant additives. The 370-410° fraction serves as the distillate for the manufacture of freon and is chemically treated. The freon, however, is unstable even when using up to 80% acid on the distillate. Only the use of antioxidants produces satisfactory stability and reduces the acid consumption to 50% on the distillate. The use

Card 1/2

L 43119-65
ACCESSION NR: AP5005733

2

of 0.02% VTI-1 additive (paraoxydiphenylamine) makes it possible to obtain KhF-12 freon with a stability corresponding to GOST specifications. The material balance of the chemical treatment for both distillates is given in Table 1 of the Enclosure. Orig. art. has: 3 tables.

ASSOCIATION: UkrNIIgiproneft', L'vovskiy filial (UkrNIIgiproneft', L'vov Branch)

SUBMITTED: 00 ENCL: 01 SUB CODE: FP

NO REF SOV: 000 OTHER: 000

Card 2/3

RUDAKOVA, N.Ya.; SEREDA, Ya.I.; LOBOV, V.A.; POLISHCHUK, S.A.; GONOPOL'SKIY, L.Ye.

Acid-alkali removal of acid sludge and alkali waste from transformer distillate using electric separation. Neft. i gaz. prom. no.1:49-52 Ja-Mr '64. (MIRA 18:2)

RUDAKOVA, N.Ya.; POLISHCHUK, S.A.; GOMOLINA, L.N.; ORAZOVA, M.R.; SEREDA, Z. Ya.

Conditions for obtaining stable transformer oil from Anastasiyevka oil. Nefteper. i neftekhim. no.7:6-8 '64. (MIRA 17:11)

1. UkrNIIgiproneft', L'vovskiy filial.

GOLYSHEV, A.B., kand. tekhn. nauk; [illegible], V.I., inzh.; [illegible], Yu.A., inzh.

Solving a relaxation problem during the calculation of continuous combined structures for the settling of supports. Stor. trud. Inzh.-stroi. fak. Chel. politekh. inst. no.3:31-41 '63. (MIRA 17:9)

1. Ural'skiy filial Akademii stroitel'stva i arkhitektury SSSR.

YAKOVLEV, V.S., inzh.; POLISHCHUK, V.P., inzh.

Electromagnetic pumps for transporting liquid metals. Energ. i elektrotekh. prom. no.3:44-46 Jl-S '64.
(MIRA 17:11)

DUBOVIK, T.V.; POLISHCHUK, [illegible]

Preparation of magnesium nitride. Zhur. prikl. khim. 37 no.8: 1828-1830 Ag '64. (MIRA 17:11)

POLISHCHUK, S.A.

Extrasaccular hernia with the presence of an ovary in the hernial contents. Khirurgiia no.12:68 D' 55. (MLRA 9:7)

1. Iz khirurgicheskogo otdeleniya (zaveduyushchiy I.F.Vortev) Shakhterskoy gorodskoy bol'nitsy No.1. Stalinskoy oblast.
(HERNIA)

Polishchuk, S. M.

5
45 2C

Two-layered grinding balls. A. M. Egorov, S. M. Polishchuk, and M. V. Alekseev. U.S.S.R. 107,137, Aug. 20, 1957. The inside of the ball is made of grog, and this is coated with a layer having a hardness of not less than 6 Mohs scale, such as pyrophyllite, corundum, mullite, basalt, or diabase. The inside part of the ball is coated with an adhesive slurry, rolled in the powd. material of the outside layer, and finally sintered. M. Hosch

SOV/81-59-7-24839

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 7, p 467 (USSR)

AUTHORS: Strom, D.A., Polishchuk, S.A.

TITLE: Deasphaltation of Ozocerite in Emulsion

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-ta, 1958, Nr 50, pp 139-142

ABSTRACT: A method was developed for the partial deresination (prior to sulfuric acid treatment) of ozocerite (O) to be purified by deasphaltation in emulsion (E). To obtain aqueous ozocerite E, a 2% aqueous solution of naphthenic soaps (alkali waste products of medium and heavy petroleum fractions) was taken, which supplement the action of solid emulsifiers contained in O and facilitate the process of formation of E and its separation. E was separated by settling or centrifuging; ceresin and oils contained in the precipitate can be regenerated by heating the latter with water. It was shown that deasphaltation in emulsion imparts to the various O an approximately equal residual resinousness, which simplifies the operation of the installation in case of processing heteregeneous

Card 1/2

POLISHCHUK, S.M. (Voroshilovgrad, Malaya Vergunka, ul. Radiusa, 38-a)

Penetration of fish bones from the intestines into the anterior abdominal wall. Vest. khir.80 no.2:114-115 F '58. (MIRA 11:3)

1. Iz Voroshilovgradskogo oblastnogo onkologicheskogo dispansera.
(ABDOMINAL WALL, for. bodies
fish bone, penetration from large intestine (Rus)
(INTESTINE, LARGE, for. bodies
fish bone, penetration to abdom wall (Rus)

POLISHCHUK, S.A., aspitant

Development of fruit culture and viticulture, based on the experiemce of collective farms of Oloneshty District in Moldavia. Izv. TSKhA no.5:211-222 '59 (MIRA 13:3)
(Oloneshty District--Fruit culture)

L 42705-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 WW/RM
S/0286/65/000/006/0059/0059

ACCESSION NR: AP5008542

AUTHOR: Kulakovskiy, V. A.; Polishchuk, S. M.; Volovich, Z. M.; Zektser, A. I.; Andreyevskaya, G. D.; Zelenskiy, E. S.; Senyanskiy, V. M.; Kosorygin, L. V.; Nikolaychik, V. I.

TITLE: A device for producing cylindrical shells made of transparent plastic. Class 39, No. 169238

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 59

TOPIC TAGS: transparent plastic, cylindrical shell, industrial equipment

ABSTRACT: This Author's Certificate introduces a device for producing cylindrical shells made of transparent plastic. The unit incorporates a melting pot and a vat with a roller for coating. The device is also equipped with a stretching and a compensating mechanism which are located over the shell forming mechanism. The shell forming mechanism includes units for longitudinal and transverse winding of filaments as well as a polymerizer. The shell forming unit is made in the form of chucks with a horizontal axis. Along the perimeter of these chucks are a number of arbors which interact with the transverse and longitudinal winding mechanisms. The

Card 1/2

L 41305-65

ACCESSION NR: AP5008542

longitudinal winding mechani$M is a belt driven or friction driver reciprocating carriage mounted on a guide parallel to the axis of the arbor.

ASSOCIATION: none

SUBMITTED: 21Jun61 ENCL: 00 SUB CODE: MT, IE

NO REF SOV: 000 OTHER: 000

Cord 2/2

S/653/61/000/000/045/051
I042/I242

AUTHOR: Polishchuk, S.H.

TITLE: New equipment for the manufacture of glass plastics

SOURCE: Plastmassy v mashinostroyenii i priborostroyenii. Pervaya resp. nauch.-tekh. konfer. po vopr. prim. plastmass v mashinostr. i priborostr., Kiev, 1959. Kiev, Gostekhizdat, 510-514

TEXT: The special construction office of the Gosstroy UkrSSR is designing new equipment for the manufacture of the high-strength glass plastic SVAM (SVAM) and the pressing stock AG-4 (AG-4). SVAM is a glass veneer formed of individual fibers held together by a mixture of artificial resins. The apparatus for the production of the glass veneer consists of a melting furnace and two take-up rolls in sequence. An apparatus for the manufacture of glass veneer, with

Card 1/2

S/653/61/000/000/045/051
I024/I242

New equipment for the manufacture of...

automatic loading of the fibers on the winding roll is being developed. The setup contains two rows of furnaces above the parallel take-up rolls. Special equipment for the production of rolled stock from glass veneer sheets and a semiautomatic device for making pipes are under development. The equipment for the production of АГ-4С (АГ-4S) pressing stock includes an impregnating and a drying unit. Heating is accomplished by a high-frequency electric field. The equipment for producing the АГ-4В (АГ-4V) pressing stock consists of several units. Fiber clusters are cut into 50 mm long sections which are then fluffed up and mixed with a binder. The impregnated material is loosened by a needle drum, deposited in layers, dried, and briquetted. There are 4 figures.

Card 2/2

AL'SHITS, M.Z., inzh.; POLISHCHUK, S.P.

Draglines with equipment for cleaning trenches. Stroi. truboprov. 5 no.8:29-31 Ag '60. (MIRA 13:9)
(Excavating machinery--Equipment and supplies)

25636

S/032/61/027/007/007/012
B110/B203

15.2610

AUTHORS: Drozdovskiy, B. A., Markochev, V. M., Polishchuk, T. V., and Fridman, Ya. B.

TITLE: Method of determining the rate of brittle destruction of non-conductors

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 7, 1961, 888-894

TEXT: In samples with previously applied notch, Ye. A. Kuz'min and V. P. Pukh (Ref. 5: Sb. "Nekotoryye problemy prochnosti tverdogo tela", Izd. AN SSSR, str. 367 (1959)) found a decrease in the rate of destruction with decreasing mean stresses (at an industrial glass strength of < 0.1). The present paper describes a method of estimating the rate of destruction, and gives test results of concentrated bending of organic glass samples with differently sharp notches and large bottom radius of the latter. Thus, a large reserve in elastic energy was obtained before destruction. 0.8 mm wide and 2-3 μ thick silver strips sprayed on in vacuo with the aid of a template were used for measuring the rate. Current was applied by way of two textolite contacts with spring laminae. Tests were made with 50 mm distance

Card 1/6

25635
S/032/6·/027/007/007/012
B110/B203

Method of determining the rate of ...

between points of support on an ИМ-4А (IM-4A) machine with 0.48 mm/t yielding The first Ag strip, situated directly below the notch, is shunted with the resistor R_c (Fig. 2). R_c and R constitute the voltage divider connected with a 180-v battery. Before breaking, the voltage in A is zero, then R_c is switched on, and the voltage rises suddenly to 150 v ($R_c \gg R$). It blocks the oscillator tube with shock excitation, and excites the generator. Hence the voltage passes over the other delay lines ЛЗ (LZ) to the first plate pair of the double-trace cathode oscilloscope ОК-17М (OK-17M). Blocking of the tube produces, on its anode, a positive pulse which passes over the delay line to the oscilloscope. With alternating current (1 Mc) from the shock excitation generator ГУВ (GUV) the oscilloscope shows a sinusoid. When the second Ag strip breaks, R_c is switched on, which, like every further strip rupture, reduces the sinusoid amplitude. When the last strip breaks, no sinusoidal voltage arrives at the oscilloscope. The photographs were shot by a Зоркий С(Zorkiy S) apparatus with Юпитер 3(Yupiter 3) object lens (light intensity 1 : 1.5) with diaphragm 1 : 2.8 and plates with 250 or 350 ГОСТ(GOST) units. The course of cracking was determined according to Fig. 3. Its mean recording velocity between two strips was the distance l divided by the time between the fracture of two adjacent strips obtained by

Card 2/6

Method of determining the rate of ...

counting the sinusoid peaks of the individual oscillogram steps. The authors examined polymethyl methacrylate samples of the types "C" ("S"), "X" ("Kh") (dimensions: 10•40•70 mm) and "T" ("T"). The 4-5 samples of each type hardened at first at 110-150°C were split by varying load on a resonance vibrator (1500 cps), and hardened at 70-105°C for 30-60 min. On 10•10•38 mm "S" samples with 2 mm deep notches, the authors studied the effect of notch sharpness and size of samples on the rate of destruction. The destruction stress and the maximum destruction rate decrease with increasing notch sharpness. The maximum destruction rate becomes more constant. Also the velocities obtained by graphical differentiation of the distance-versus-time curves become more uniform. For split samples, they are almost constant, for unsplit samples, they drop from 700 to 300 m/sec. Samples without a notch show the greatest roughness of fracture, those with a notch of 2 mm radius show lower roughness, those with a notch of 1 mm radius, the lowest one. The zone adjacent to the fatigue split has nearly fibrous structure with numerous crack traces propagating in parallel to each other from many centers. The principal zone is completely smooth. Since the velocity of this fracture is much lower than the final velocity, the measurement should be made with a film (32 frames per second). The

following process is observed: (I) sudden destruction; (II) increasing velocity (incubation period: 3-4.5 mm in 0.36-2 sec); (III) linear increase (30-50 mm/sec). The fibrous-structure fracture changes to smooth fracture. After 10,000-fold, sudden increase, v_{max} = 250-270 m/sec is attained with subsequent decrease. Thus, the maximum destruction rate, v_{max}, depends on the notch sharpness determining the destruction stress. A stress increase from 2.14 to 11.3 kg/mm^2 raises v_{max} from 245 to 684 m/sec. The propagation rate of longitudinal elastic vibrations in polymethyl methacrylate is 1640 m/sec. v_{max} for samples without a notch is 0.416 of this value, in tension tests, it is 0.55, for samples with a notch, 0.132. Thus, a destruction rate of 0.55 of the sonic velocity was obtained whereas former measurements established 0.33 for silicate glass. In elongation, the whole deformable length contributes to acceleration, in bending, the volume adjacent to the notch. An increase of the reserve in elastic energy showed little effect on the rate of destruction. An increase in dimensions under equal conditions (also of the notch) showed a high effect. An increase in the moment of resistance ($bh^2/6$) from 187 to 3,000 mm^3 effected

Method of determining the rate of ...

an increase of v_{max} from 231 to 513 m/sec. The authors thank Yu. A. Bulanov for assisting in the development of apparatus. There are 12 figures, 1 table and 8 references: 3 Soviet-bloc and 5 non-Soviet-bloc. The most important reference to English-language publications reads as follows: Ref. 4: H. Schardin. Fracture, Proc. of an Intern. conference on the Atomic Mechanisms of Fracture, Swampscott, Mass., Apr., John Wiley and Sons, p. 297 (1959).

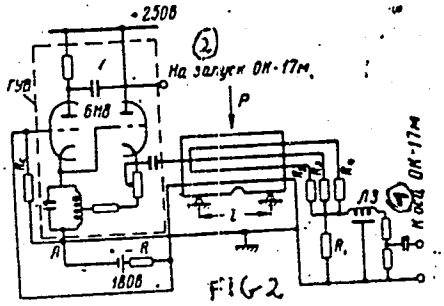


FIG 2

Fig. 2. Circuit diagram of the apparatus for determining the rate of destruction of non-conductors.
Legend: (1) to the OK-17M,
(2) to the input of the OK-17M.

Card 5/6

POLISHCHUK, V., red.; LUCHKIV, M., tekhred.

[We study the applied economics; from practice of propaganda work of Transcarpathian party organisations] Vyvchaiemo konkretnu ekonomiku; z dosvidu propahandysts'koi roboty partiinykh organizatsii Zakarpats'koi oblasti. Uzhhorod, Zakarpats'ke obl.vyd-vo, 1956. 83 p. (MIRA 13:1)
(Transcarpathia--Economics--Study and teaching)

POLISHCHUK, V.

Using explosives in construction. Nauka i zhyttia no.11:35 N '61. (MIRA 14:12)

1. Nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii stroitel'nogo proizvodstva Akademii stroitel'stva i arkhitektury USSR.
(Foundations)

LIS, S.F., slesar'; SAFRONOV, N.I.; YAKOVCHUK, V.V.; POLISHCHUK, V.A., brigadir; VYSOTIN, V.Ye.

Innovations. Transp. stroi. 15 no.3:51 Mr '65. (MIRA 18:11)

1. Instruktor Novosibirskoy normativno-issledovatel'skoy stantsii (for Safronov). 2. Trest Novorossiyskmorstroy (for Yakovchuk, Polishchuk). 3. Solginskiy domostroitel'nyy kombinat tresta Transstroypromkonstruktsiya (for Vysotin).

POLISHCHUK, V.A.; RAVINSKIY, L.M.

Industrial buildings on piles with an enlarged base. Prom. stroi. 42 no.8:36-39 '65. (MIRA 18:9)

POLISHCHUK, V.A.

Experiment in the installation of cast-in-place concrete piles in soft, water saturated soils. Prom.stroi. 41 no.9:6-8 S '63. (MIRA 16:11)

OSAICHIY, A.T.; POLISHCHUK, V.A.

The use of short concrete piles with a pedestal formed by blasting. Prom. stroi. 40 no.9:38-40 '62. (MIRA 15:11)
(Piling (Civil engineering))
(Foundations)

GUPALO, P.I.[Hupalo, P.I.]; POLISHCHUK, V.D.; SHLOSS, Ye.S.[Shloss, E.S.]

Prolonged heating of tubers at high temperature as a factor of the degeneration of potatoes. Ukr. bot. zhur. 20 no.2:28-34 '63. (MIRA 16:6)

1. Zhitomirskiy sel'skokhozyaystvennyy institut.
(Plants, Effect of temperature on)
(Potatoes--Diseases and pests)

DOBROKHOTOV, M.N.; POLISHCHUK, V.D.; ZAYTSEV, Yu.S.

Stratigraphy of the Kursk metamorphic series. Mat. po geol. i pol. iskop. tsentr. raion. evrop. chasti SSSR no.2:17-27 '59. (MIRA 13:9)

1. Belgorodskaya zhelezorudnaya ekspeditsiya.
(Kursk Magnetic Anomaly--Geology, Stratigraphy)

POLISHCHUK, V.F.

Controlling the incidence of pyoderma among Kopeysk miners. Vest. derm.i ven. 34 no.10:74-76 '60. (MIRA 13:11)

1. Iz mediko-sanitarnoy chasti No.3 (nach. A.S. Bukharin) tresta "Kopeyskugol'."
(SKIN--DISEASES) (KOPEYSK--MINERS--DISEASES AND HYGIENE)

SEMENOV, M.S. (L'vov); POLISHCHUK, V.I. (L'vov)

Automatic brakes for the track motor car. Put' i put.khoz. 6 no.3:41-42 Mr '62. (MIRA 15:3)
(Railroads--Brakes)

ACC NR: AP6029999 (A) SOURCE CODE: UR/0413/66/000/015/0200/0200

INVENTOR: Polishchuk, V. I.; Solovey, Ye. I.

ORG: none

TITLE: Device for connecting an electric igniter to a capsule detonator and for clamping the electric detonator along the muzzle case. Class 78, No. 184185

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 200

TOPIC TAGS: electric igniter, capsule detonator, ignition, electric detonator

ABSTRACT: An Author Certificate was issued for a device which permits the connection of an electric igniter to a capsule-detonator and the clamping of the detonator along the muzzle case according to Author Certificate No. 153422. In order to automate the process, the rotating table with stationary tongs is equipped with a device for

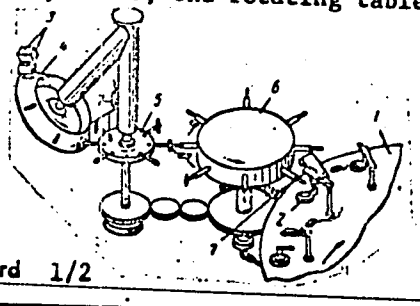


Fig. 1. Connecting and clamping device

1 - Rotating table; 2 - clamping tongs; 3 - feeder; 4 - directional rotary mechanism; 5 - transport rotary mechanism; 6 - loading rotary mechanism; 7 - electromagnet.

Card 1/2

UDC: 622.43

ACC NR: AP6029999

fitting the capsule-detonator into the clamping tongs. The device is mounted on a separate stand and consists of a feeder with holders, and directional, transporting, and loading rotary mechanisms with electromagnetic and electronic cutoffs as shown in Fig. 1. Orig. art. has: 1 figure.

SUB CODE: 19/ SUBM DATE: 17May65/

Card 2/2

PULISHCHUK, V.K.

New data on methods for artificial infection of winter wheat with smut. Dop.AN URSR no.6:606-607 '56. (MLRA 10:2)

1. Institut entomologii ta fitopatologii AN URSR. Predstaviv akademik AN URSR P.A.Vlasyuk.
(Wheat--Diseases and pests) (Smuts)

POLISHCHUK, V. K., Cand Agr Sci -- (diss) "~~Increasing of~~ Raising the resistance of winter wheat ~~resistance~~ to diseases by ~~way~~ means of intra-~~specific~~ strain and inter-~~specific~~ strain crossings and conditions of ~~growing~~ raising." Kiev, 1957. 20 pp (Min of Agriculture USSR, Odessa Agr Inst), 100 copies. List of author's works pp 19-20 (10 titles) (KL, 2-58, 114)

Country : USSR
CATEGORY : Cultivated Plants. Grains. M

ABS. JOUR. : RZBiol., No. 21, 1958, No. 95915

AUTHOR : Polishchuk, V.K.
INST. : AS Ukrainian SSR
TITLE : Increasing the Resistance of Winter Wheat to Various Diseases through Intervarietal and Intravarietal Crossing
ORIG. PUB. : Visnik AN URSR, 1957, No.2, 39-46

ABSTRACT : No abstract

CARD: 1/1

GRINBERG, M.I., laureat Stalinskoy premii, doktor tekhnicheskikh nauk, professor; LEVIN, B.M., inzhener; FRENKEL', L.D., inzhener; POLISHCHUK, V.L., inzhener; BEREZYUK, B.F., inzhener.

SVK-150-1 steam turbine made by the Leningrad (Stalin) Metallurgical Plant. Energomashinostroenie no.1:5-16 O '55. (MLRA 9:5)
(Steam turbines)

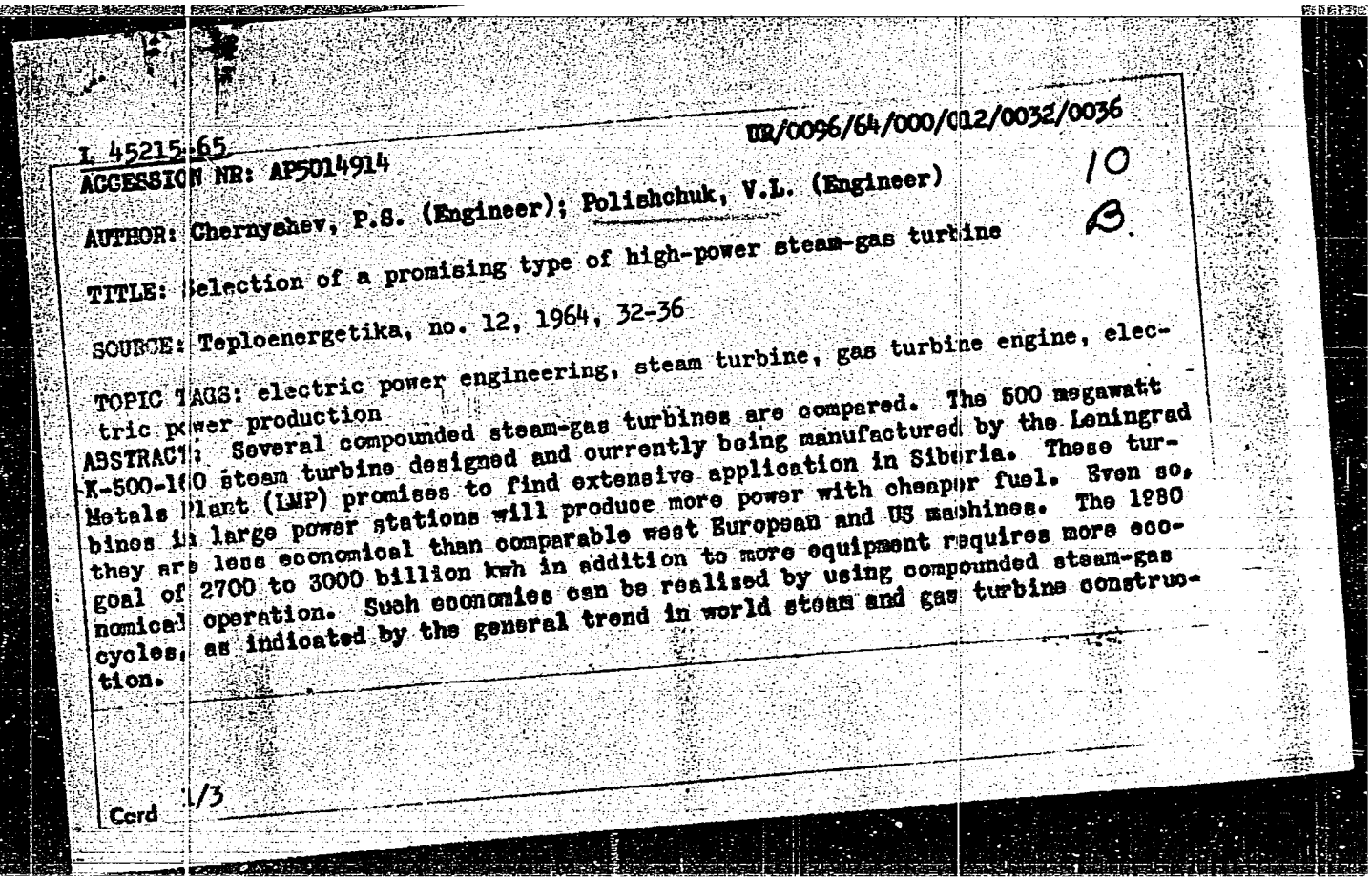
Polishchuk, V.L.

MOZZHUKHIN, M.G., inzh.; POLISHCHUK, V.L., inzh.

Double shaft Brown-Bovery gas turbine with a 10,000 kvt capacity. Energomashinostroenie 3 no.12:44-48 D '57. (MIRA 11:1)
(Gas turbines)

POLISHCHUK, V.L., inzh.

New VK-100-6 steam turbine. Energomashinostroenie 5 no.1:36 Ja '59. (MIRA 12:2)
(Steam turbines)



L 45215-65 UR/0096/64/000/012/0032/0036

ACCESSION NR: AP5014914

AUTHOR: Chernyshev, P.S. (Engineer); Polishchuk, V.L. (Engineer) 10 B

TITLE: Selection of a promising type of high-power steam-gas turbine

SOURCE: Teploenergetika, no. 12, 1964, 32-36

TOPIC TAGS: electric power engineering, steam turbine, gas turbine engine, electric power production

ABSTRACT: Several compounded steam-gas turbines are compared. The 500 megawatt K-500-1[illegible]0 steam turbine designed and currently being manufactured by the Leningrad Metals Plant (LMP) promises to find extensive application in Siberia. These turbines in large power stations will produce more power with cheaper fuel. Even so, they are less economical than comparable west European and US machines. The 1980 goal of 2700 to 3000 billion kwh in addition to more equipment requires more economical operation. Such economies can be realized by using compounded steam-gas cycles, as indicated by the general trend in world steam and gas turbine construction.

Card 1/3

L 45215-65

ACCESSION NR: AP5014914

The LMP is presently building highly efficient 100 megawatt GT-100-750, the largest gas turbine in the world. Without a regenerator, its efficiency is 27-28%. The fuel utilization coefficient, using heat-supplying power boilers, is about 65%. The specific weight of the turbine, including air coolers, mounting frames, and auxiliary equipment, is 4 kg/kw.

Owing to the efficiency of the cooling system, much less austenitic steel is required. Because of its exceptional structural features, the GT-100-750 is highly suited for peak load and long-term load duty. Exploitation of exhaust gas for heating raises the coefficient of fuel economy.

The machine is fully automated and has a computerized control unit. Characteristics of the 30 and 60 megawatt models of the 750 series are compared. Many of the components of the 60 and 100 megawatt models are interchangeable. Components of the high-pressure unit of the 30 megawatt model are also interchangeable with the GT-100-750.

The steam-gas cycle appears as one of the most promising means of saving fuel. Tests of a low-power steam-gas turbine have been made at the Leningrad Hydroelectric Power Station. The Siberian Branch of the Academy of Sciences had designed a 200 megawatt steam-gas turbine PGU-200-750/30; indications are however that it will be 14% less efficient than the K-300-240 steam turbine. In view of its complexity and numerous control and regulation problems and restrictions imposed (e.g., it can not use solid

Card 2/3

L 4521[illegible]-65

ACCESSION NR: AP5014914

fuel), it will not be put into use in the near future. Lacking adequate experience with this type of turbine, immediate attention should be turned to a design in which the gas turbine exhaust gases are dumped into the boiler furnace. Advantages are enumerated and characteristics of this type of steam-gas turbine are analyzed. The economics of various turbine combinations is discussed. Orig. art. has 1 figure and 1 table.

ASSOCIATION: Leningradskiy metallicheskiy zavod (Leningrad Metals Plant)

SUBMITTED: 00 ENCL: 00 SUB CODE: KE

NO REF SOV: 000 OTHER: 000 JPRS

Card 3/3

POLISHCHUK, V.L., inzh.

GTN-9-750 gas turbine supercharger. Energomashinostroenie 10 no.7:47 Jl '64. (MIRA 17:9)

L 29878-66

ACC NR: AP6005385 (A) SOURCE CODE: UR/0413/66/000/001/0131/0131

INVENTOR: Piskorskiy, G. A.; Polishchuk, V. N.; Solntsev, A. M.

ORG: none

TITLE: Vibratory vacuum type conveyor for air-tight flat parts. Class 49, No. 177751

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 131

TOPIC TAGS: conveyor, vacuum type conveyor, vibratory conveyor

ABSTRACT: An Author Certificate has been issued for a vibratory vacuum-type conveyor for airtight parts. To ensure piece-by-piece delivery of flat airtight parts, the middle part of the vibratory chute is made with holes, and under it there is a receptable connected with all the holes by hoses, a dust collector and a pulsatory vibrating contactor with a vacuum pump to provide the pulsatory action of the suckers (see Fig. 1). Orig. art. has: 1 figure. [LD]

UDC: 621.867-26

Card 1/2

L 29878-66

ACC NR: AP6005385

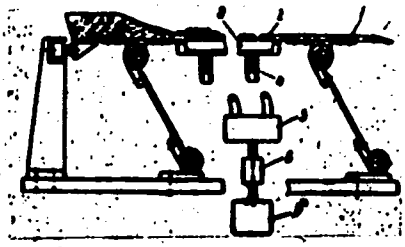


Fig. 1. Vibratory vacuum conveyor for flat air-tight parts

1 - vibratory chute; 2 - holes; 3 - receptacle; 4 - hoses; 5 - dust collector; 6 - pulsatory vibratory contactor; 7 - vacuum pump.

SUB CODE: 13/ . SUBM DATE: 07May63

Card 2/2

POLISHCHUK, V.P.

Magnetodynamic pump feeder for molten metals. Lit. proizv. no.9:15-16 S '65. (MIRA 18:10)

BOHDARENKO, D.C., red.; BUGAYENKO, P.I. [Buhaienko, P.I.], red.; VASH, O.V., red.; KLIMPOTYUK, M.V., red.; PASTUSHENKO, M.S., red.; POVKH, V.O., vidp. red.; POLISHCHUK, V.P., red.; RUSIN, V.P., red.; FESEN'KO, V.V., red.; LUCHKIV, M., tekhn. red.

[Soviet Transcarpathia; a handbook] Radians'ke Zakarpattia; dovidnyk. Uzhhorod, Zakarpats'ke obl. vyd-vo, 1957. 239 p. (MIRA 11:7)
(Transcarpathia)

POLISHCHUK, V.P., inzh.; GOLYSHEV, A.B., kand. tekh.. nauk

Calculation of precast monolithic structures of the first and second categories of crack resistance for continuous action of an external load. Sbor. trud. Inzh.-stroi. fak. Chel. politekh. inst. no.3:42-52 '63. (MIRA 17:9)

1. Ural'skiy filial Akademii stroitel'stva i arkhitektury SSSR.

CHEBOTAREV, R.S.; POLISHCHUK, V.P.

Recent discoveries of Gongylonema pulchrum Molin, 1857, producer of gongylonemiasis. Zool.zhur. 40 no.7:976-982 Jl '61. (MIRA 14:7)

1. Department of Parasitology, Institute of Zoology, Academy of Sciences of the Ukrainian S.S.R., Kiyev.
(Nematoda) (Beetles as carriers of disease)

GORSHKOV, A.A.; POLISHCHUK, V.P.; TSIN, M.R.

Use of single-phase electromagnetic pumps in foundries. Lit.
proizv. no.8:9 Ag '62. (MIRA 15:11)
(Foundries--Equipment and supplies)

POLISHCHUK, V.P., inzh.

Single-phase induction batcher-pump for pouring molten metal.
Elektrichestvo no.5:50-52 My '63. (MIRA 16:7)

1. Institut liteynogo proizvodstva AN UkrSSR.
(Liquid metals) (Pumping machinery, Electric)

POLISHCHUK, V.P.; TSIN, M.R.

New trends in the utilization of applied magnetohydrodynamics in industry. Mashinostroenie no.6:109-110 N-D '62.
(MIRA 16:2)
(Magnetohydrodynamics)

POLISHCHUK, V.P.; YAKOVLEV, V.S.

Ductless submersible magnetodynamic pump for liquid metal. Lit. proizv. no.12:22 D '64. (MIRA 18:3)

EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD
L 11211-63
ACCESSION NR: AP3001626 S/0105/63/000/005/0050/0052 53 52

AUTHOR: Polishchuk, V. P. (Engineer)

TITLE: Single-phase induction batching pump for pouring liquid metal

SOURCE: Elektrichestvo, no. 5, 1963, 50-52

TOPIC TAGS: molten-metal batching pump, pressure casting, nonferrous metal casting

ABSTRACT: Full automation of nonferrous-metal pressure casting requires a mechanism for pouring the molten metal into the machine. In the induction batching pump, the principle of axial electrodynamic force set up in a short-circuited transformer secondary is used. A toroidal crucible with molten metal placed around the central magnetic core of a shell-type transformer acts as a short-circuited secondary turn. When the primary is energized, the metal rises and overflows into the casting machine; the metal is fed to the toroid from another, larger crucible. Various shapes of toroid cross-section and primary-secondary distances were tested, the latter factor being important for higher-melting (up to 750C) metals. Electrodynamic forces were measured and compared with theoretical values. Orig. art. has: 6 figures and 1 formula.

Inst. of Metal-Casting Industry, AN UkrSSR

Card 1/2

GEL'FAND, P.I., inzh.; POLISHCHUK, V.P., inzh.

Automatic electromagnetic unit for metal pouring on die-casting machines. Mekh.i avtom.proizv. 16 no.12:37-38 D '62.
(MIRA 16:1)
(Die casting--Equipment and supplies)

34977
S/128/62/000/003/002/007
A004/A127

11.3900
1.2.7540

AUTHOR: Polishchuk, V. P.

TITLE: Induction dosing pumps

PERIODICAL: Liteynoye proizvodstvo, no. 2, 1962, 15 - 16

TEXT: The author presents some introductory remarks on electromagnetic pumps which are used in pressure casting machines for automatic metal pouring, the molten metal serving as current-carrying conductor. He refers to conduction pumps in which the current is led directly to the metal and induction pumps where the current is excited in the metal, and comments, in particular, on the latter type. He reports on investigations which were carried out at the Institut liteynogo proizvodstva AN UkrSSR (Institute of Foundry Practice AS UkrSSR) to study the operation of single-phase induction pumps on various metals - lead, zinc, aluminum. Tests revealed that such pumps are fully suitable as dosing pumps of liquid metal, and data were obtained to carry out electromagnetic calculations of single-phase induction dosing pumps which make it possible to determine the optimum design dimensions of such pumps for any metal used in foundry practice [Abstracter's note: Neither the calculation results nor any basic parameters

Card 1/2

POLISHCHUK, V.P.

Induction batch measuring pump. Lit.proizv. no.3:15-16 Mr '62.
(MIRA 15:3)
(Foundries--Equipment and supplies)

POLISHCHUK, V.P., inzh.

Automatic pouring of liquid metal in die-casting machines. Mashinostroenie no.3:51-55 My-Je '62. (MIRA 15:7)

1. Institut liteynogo proizvodstva AN USSR.
(Die casting)

S/128/62/000/008/001/003
A004/A127

AUTHORS: Gorshkov, A.A., Polishchuk, V.P., Tsin, M.R.

TITLE: Use of single-phase electromagnetic pumps in foundry practice

PERIODICAL: Liteynoye proizvodstvo, no. 8, 1962, 9

TEXT: In foundry practice, two types of induction pumps show the greatest prospects - three-phase and single-phase pumps. Three-phase pumps are more expediently employed in the continuous pumping of considerable metal quantities over a long distance, while single-phase pumps are more suitable for the intermittent pumping of smaller amounts of metal at low pressure. The metal filling a ring-shaped crucible constitutes the second winding of a single-phase transformer with the primary winding under the crucible. When the primary winding is switched on, currents are induced in the liquid metal that are interacting with the magnetic field of the transformer, while forces are originating in the metal striving for moving it upwards relative to the coil. During long-time standstills the pump can operate on a reduced voltage which keeps the metal in a liquid state. Single-phase pumps are applicable for proportioning and feeding the metal into pressure casting,

Card 1/2