"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 23089-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(b) IJP(c) WW/JD
ACCESSION NR: AP4048318 Z/0065/64/000/005/0445/0458

AUTHOR: Sedlacek, V. (Sedlachek, V.); Pirner, M.

TITLE: Analysis of the annealing conditions for certain alloys of the Ti - Al - Cr - Fe system

SOURCE: Kovove materialy, no. 5, 1964, 445-458

TOPIC TAGS: alloy, annealing condition, hot working, titanium sponge, prealloy, chromium, aluminum, iron, titanium, alloying element, transformation temperature, recrystallization

ABSTRACT: Experiments were made to determine the effect of alloying elements on the properties of alloys in various states of temper, and optimum annealing conditions were investigated. The alloys chosen for investigation contained Al 4 and 6%, Cr 2 and 3.5%, and Fe 0.75 and 1.75% and were made by the two-stage smelting process in an argon atmosphere in a laboratory furnace with a consumable electrode. Quality TG 0 Soviet titanium sponge and the prealloys Cr-Ti-Al and Al-Fe-Cr made by aluminothermy were used in the fabrication of the electrode. In the second smelting the ingot diameter measured 50 mm (weight 500—600 g), and

Card 1/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 23089-65

ACCESSION NR: AP4048318

was forged and hot-rolled into 5-mm-thick strips. In all, twelve alloys were prepared, and the effect of the alloying elements was evaluated on the basis of the HV and HB hardness values through dispersion analysis. On the basis of the analysis of the effect of the individual elements four combinations of the alloying elements mentioned were chosen for further experiment. It was found that chromium had a marked effect on the hardness of the Ti-Al-Cr-Fe alloys, especially in the hardened condition and in the case of lower aluminum content. At the same time, quenching temperature proved to be statistically very important, whereas the effect of hardening time must be taken into consideration only in the case of high-chromium alloys. If hot-worked semifinished products are annealed at temperatures lower than the transformation temperature, recrystallization does not take place even after six hours of annealing. To obtain the "equilibrium" structure, the alloy must be heated above the transformation temperature and then slowly cooled to 800—600C. Evaluation of results with the aid of mathematical statistics is in good agreement with published results. Orig. art. has: 7 figures and 11 tables.

ASSOCIATION: Vyzkumny ustav kovu, Panenske Brezany (Research Institute for Metals).

Card 2/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 23089-65
ACCESSION NR: AP4048318

SUBMITTED: 25Apr64 ENCL: 00 SUB CODE: MM

NO REF SOV: 004 OTHER: 014

Card 3/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miroslav, inz.

Pressure welding of nonferrous metals and alloys. Stroj vyr 12 no.4:256-260 Ap'64.

1. Research Institute of Metals, Panenske Brezany.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miros, doc., inz., CSc.

Natural vibrations of prestressed nets in the form of translation surfaces. Stav cas 11 no.10:614-623'63.

1. Vysoka skola dopravni, Zilina.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miros, doc., inz.

Model measurement of deformations of prestressed suspended roofs subject to static and dynamic load. Inz stavby 11 no.9:345-348 S '63.

1. Vysoka skola dopravna, Zilina.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

CZECHOSLOVAKIA/Optics - Optical Methods of Analysis K-8

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 4781

Author : Pirner Miroslav, Spalenka Milos
Inst : Not Given
Title : Preparation of Standard Electrodes for Spectrographic Analysis

Orig Pub : Hutnicke listy, 1957, 12, No 6, 573-576

Abstract : Description of a technology for the manufacture of rolled standards for spectral analysis of alloys Al-Mg8 and Al-Zn6-Mg-Cu. A study of the uniformity of the standards is made.

Card : 1/1

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miros, inz.

Static solution of prestressed suspended cable roofs. Inz stavby 10 no.11:431-436 N '62.

1. Vysoka skola dopravni, Zilina.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PUMCOCHAR, Z., inz.; BECVAR, J.; KALIVODA, A., inz.; BAUER, Jiri, inz., dr.; PIRNER, M., inz.; DEDEK, Vlad., inz.

Information on metallurgy. Hut listy 17 no.9:676-684 S '62.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miroslav, inz.

"Welding of copper and copper alloys" by [inz., CSc.] V. Orszagh. Reviewed by Miroslav Pirner. Stroj vyr 11 no. 12: 638 '63.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miroslav, inz.; SPALENKA, Milos, dr.

Production of spectrographic standard electrodes. Hut listy 12 no.6:573-576 Je '57.

1. Vyzkumny ustav kovu Ministerstva hutniho prumyslu a rudnych dolu, Panonske Brezany.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miros, doc., ing.

Exhibition hall with a suspended roof in Poznan.
Inz stavby 11 no.1:35-36 Ja '63.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIRNER, Miros, inz.

A steel foot-bridge in Stuttgart. Inz stavby 10 no.10:397-398 O '62.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

Pirner, M.

Wrought magnesium alloys. p. 85.

Vol. 10, no. 2, Feb. 1955.
HUTNICKE LISTY

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

Category : RUMANIA, Electronics - Electron Tubes

H-5

Abs Jour : Ref Zhur - Fizika, No 1, 1959, No 1002

Author : Piringer, R.

Title : Method for Improving Static Characteristics of Electron Tubes

Orig Pub : Electrotehnica, 1956, 4, No 4, 172-176

Abstract : No abstract

Card : 1/1

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

DURA,J.; PIROCH,V.

Nonacidotic hyperosmolar coma in diabetics. Cas.lek. cesk. 103 no.13:337-339 27 Mr'64

1. Sikluv patologiskoanatomicky ustav lekarske fakulty KU v Plzni (prednosta: prof.dr.J.Vanek, DrSc) a Interni klinika lekarske fakulty KU v Plzni (prednosta: prof.dr. K.Bobek).

*

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SAUER, J.; PIROCH, V.

Disorders in glycide metabolism in mothers of infants with above-average birth weight. Cesk. gynek. 29 no.1:116-119 F'64.

1. Gyn.-por.klin. lek.fak. KU v Plzni (prednosta: prof.dr. Vl.Mikolas) a Int.klin.lek.fak. KU v Plzni (prednosta:prof. dr. K.Bobek).

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROCH, V.; SAUER, J.

Contribution to the problem of managing pregnant diabetic women. Cesk. gynek. 30 no.[illegible]692-694 N '65.

1. Interni klinika (prednosta prof. dr. E. Bobek [deceased]) a gyn.-por. klin. (prednosta prof. dr. V. Mikolas), lekarske fakulty Karlovy University v Plzni.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 34698-65 EWT(m)/T IJP(c)

ACCESSION NR: AP4046065 P/0045/64/026/001/0003/0010

AUTHOR: Pirog, Mieczyslaw; Stepniowski, Ignacy; Sujak, Bogdan

TITLE: Point counter with quenching vapor above the free surface of the liquid (exoelectron detector)

SOURCE: Acta physica polonica, v. 26, no. 1, 1964, 3-10

TOPIC TAGS: open point counter, exoelectron emission counter, exoelectron detector, ionizing radiation determination, ionizing radiation, dosimetric determination

ABSTRACT: A special type of open-point counter with quenching vapor above the free liquid surface and a pulse amplitude of approximately 2 v was constructed. It is in many respects superior to the commonly used air point counter and, in particular, to the flow counter. When filled with ethyl alcohol, this counter has the following properties if operated under appropriate conditions: 1) it has a characteristic with a relative steepness of about 0.3% per volt whereas a flow counter

Card 1/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 34698-65

ACCESSION NR: AP4046065

operated under the same conditions has over 1% per volt; 2) its sensitivity to atmospheric humidity can be made exceedingly low while flow counters require drying the air current; 3) it has greater operational stability, owing to the elimination of all variable parameters related to the flow of air; 4) it allows exoelectron counting with frequencies up to 2.5×10^3 pulses per second (the limit for a flow counter is about 5×10^2 pulses per second). Such properties will be very valuable in investigating exoelectron emission from samples that simultaneously give off water of crystallization. Moreover, due to its simplicity, this counter may play a decisive role in the wider application of exoelectron emission in dosimetric determinations of ionizing radiation. Orig. art. has: 10 figures.

ASSOCIATION: Department of Physics, Pedagogical College, Opole; Laboratory for Induced Electron Emission, Institute of Experimental Physics, Wroclaw University, Wroclaw.

SUBMITTED: 5Dec63 ENCL: 00

SUB CODE: NP NO REF SOV: 000 OTHER: 007

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 54887-65

ACCESSION NR: AP5014679 PO/0045/65/027/004/0573/0579

AUTHOR: Kania, T.; Pirog, M.; Sujak, B.

12
B

TITLE: Photostimulated exoelectron emission during freezing of aqueous NH_4OH solutions of low concentration

SOURCE: Acta physica polonica, v. 27, no. 4, 1965, 573-579

TOPIC TAGS: exoelectronic emission, photostimulated emission, ammonia solution, ice liquid potential difference

ABSTRACT: The relative potentials of liquid and ice during the course of freezing of a low concentration aqueous solution of NH_4OH were measured at different concentrations and rates of freezing. The apparatus employed is illustrated in Fig. 1 of the Enclosure. The potential difference was measured with a heterostatically connected Wulf filament electrometer. The circuit used to measure the exoelectronic emission from the ice is shown in Fig. 2 of the Enclosure. The observations confirm the existence of a potential difference between the solid phase (ice) and liquid phase of dilute NH_4OH as obtained by Workman and Reynolds (Phys. Rev. 78, 254, 1950). A time dependence was observed for the potential difference.

Card 1/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 54887-65

ACCESSION NR: AP5014679

reaching a maximum at ~ 4 minutes after the start of the freezing and gradually slowing down thereafter. The potential distribution on the ice surface was determined when the potential of the liquid was at a maximum. Photostimulated exoelectronic emission from the ice was found to accompany crystallization, and was tentatively correlated to defects in the ice crystal lattice. The intensity of the photostimulated exoelectronic emission increases with increasing potential of the ice. Orig. art. has: 6 figures. [02]

ASSOCIATION: Surface Physics Laboratory, Department of Physics, Pedagogical College of Opole, Poland; Laboratory for Induced Electron Emission, Institute of Experimental Physics, Wroclaw University, Wroclaw, Poland; Department of Physics, Pedagogical College of Opole, Poland

SUBMITTED: 07Jul64 ENCL: 02 SUB CODE: EM, SS

NO REF SOV: 000 OTHER: 004 ATD PRESS: 4030

Card 2/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 54887-65

ACCESSION NR: AP5014679

ENCLOSURE: 01

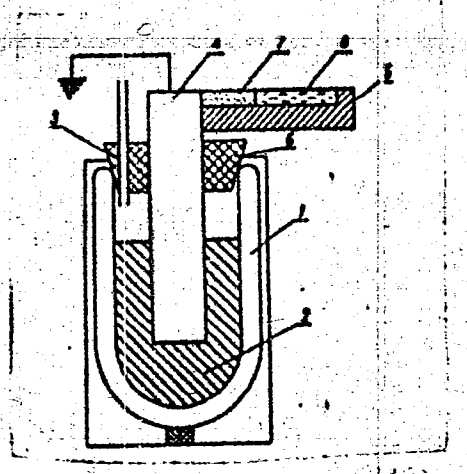

Fig. 1. Diagram of the apparatus for freezing aqueous solutions

1 - Dewar; 2 - mixture of solid CO_2 and ethyl alcohol; 3 - plug; 4 - copper cylinder; 5 - Plexiglas trough; 6 - glass tube; 7 - ice; 8 - aqueous solution of NH_4OH.

Card 3/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 54887-65

ACCESSION NR: AP5014679 ENCLOSURE: 02

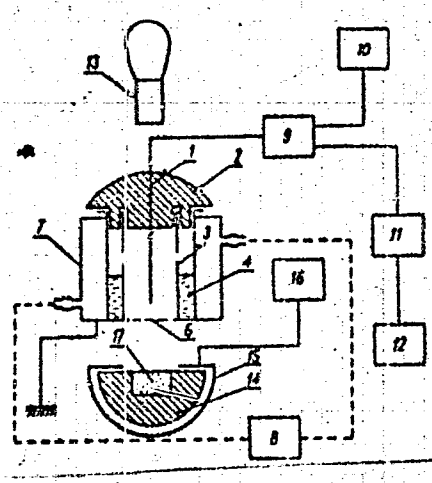

Fig. 2. Block diagram of circuit for the measurement of exoelectronic emission

1 - Steel point of counter; 2 - Plexiglas insulator; 3 - double-walled copper cylinder; 4 - ethyl alcohol; 5 - holes in inner wall of counter; 6 - copper grid; 7 - water jacket; 8 - Hoppler thermostat; 9 - preamplifier; 10 - scaler; 11 - voltage divider; 12 - high voltage supply; 13 - microscope bulb; 14 - Plexiglas trough; 15 - copper sheet; 16 - supply; 17 - ice.

Card 4/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

21 6

The photostimulation of electron emission from abraded aluminum surfaces. I. Bożko, M. Piróg, and B. Sujak (Wysza Szkoła Pedagogiczna, Opole, Poland). Z. Naturforsch. 13a, 799-800(1958). Freshly abraded Al surfaces were activated with visible light and the resultant emitted electrons counted in a graphite counter filled with Ar and EtOH vapor at low pressure. The incident light was analyzed by means of an absorption filter; a curve of electron emission as a function of incident wave length is presented. Emission was observed only at wave lengths shorter than 5000 A. The Al surfaces were shielded from the active counting vol. by a charged grid and the effects of varied grid voltage and mesh size are discussed. N. A. Frigerio

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 21457-66 IJP(c) AT

ACC NR: AP6001449 SOURCE CODE: PO/0045/65/028/005/0681/0687

AUTHOR: Kowalczyk, R.; Pirog, H.; Sujak, B.

ORG: [Kowalczyk; Pirog] Solid Surface Physics Laboratory, Department of Experimental Physics, Pedagogical College of Opole, Poland (Zaklad Fizyki Powierzchni Ciala Stalego, Katedra Fizyki Doswiaddczalnej Wyszej Szkoly Pedagogicznej w Opolu); [Sujak] Laboratory for Induced Electron Emission, Institute of Experimental Physics, Wroclaw University, Poland Department of Experimental Physics, Pedagogical College of Opole, Poland (Zaklad Wzbudzonej Emisji Elektronow, Katedra Fizyki Doswiadczalnej Uniwersytetu Wroclawskiego)

TITLE: Thermostimulated exoelectron emission from hydrates, as detected in atmospheric air

SOURCE: Acta physica polonica, v. 28, no. 5, 1965, 681-687

TOPIC TAGS: exoelectron emission, atmospheric air, crystalline hydrates, quinine sulfate

ABSTRACT: An open point counter with quenching vapor over a free liquid surface was used in investigations of exoelectron emission from the following crystalline hydrates in the process of bonding and losing water molecules: $C_{20}H_{24}O_2H_2\ H_2SO_4 \cdot 8H_2O$, $Na_2CO_3 \cdot 10H_2O$, $NiSO_4 \cdot 7H_2O$,

Card 1/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 21457-66

ACC NR: AP6001449

0

$CuSO_4 \cdot 5H_2O$, $MgSO_4 \cdot 7H_2O$, $FeSO_4 \cdot 7H_2O$. Emission of exoelectrons into an atmosphere of air was observed to occur only from quinine sulfate. Irradiation of previously dehydrated hydrates with UV radiation as well as with α and β particles failed to excite the samples to emit exoelectrons when heated in an atmosphere of air. Orig. art. has: 7 figures. [Author's abstract.] [KS]

SUB CODE: 20,08 SUBM DATE: 31Mar65/ ORIG REF: 006/ OTH REF: 003

Card 2/2 dda

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, Mieczyslaw; STEPNIOWSKI, Ignacy; SUJAK, Bogdan

Point counter with quenching vapor above the free surface of the liquid (exoelectron detector). Acta physica Pol 26 no.1: 3-10 Jl '64.

1. Department of Physics, Teachers College, Opole (for Pirog and Stepniowski). 2. Laboratory of Induced Electron Emission, Institute of Experimental Physics, University, Wroclaw, and Department of Physics, Teachers College, Opole (for Sujak).

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.

Reinforced frothed-glass concrete. N. TRACHEV AND P. [illegible] [illegible] Tekh., 30 [illegible] (1961). Applications [illegible] frothed glass concrete [illegible] [illegible] After [illegible] [illegible] crushing strength dropped [illegible]%, water absorption did not exceed [illegible] to 27% by weight, bulk weight was [illegible] [illegible] and thermal conductivity was 0.[illegible] cal/[illegible]

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P., inzhener.

Coefficients for determining the thermal conductivity of materials used as insulators in refrigerating machinery. Mias.ind. SSSR 26 no.5:28-30 '55. (MLRA 9:2)
(Cold storage--Insulation)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P

Reinforced frothed-glass concrete. N. Tkachev and P. Pirog. *Kholodil'naya Tekh.* 30, No. 2, 46-52(1953).—Applications of reinforced frothed-glass concrete (prepd. from cement, water, frothed-glass chips, and sand). Material is frost-resistant (after 20 heat-shock cycles, crushing strength dropped 11%); water absorption did not exceed 23-27% by wt.; bulk wt. 100 kg./cu. m.; heat cond. 0.273 cal./m. hr. °C. B. Z. Kamich

1

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.

19277 PIROG, P. Termoizolyatsiya khodil'nikov Myas. Industriya SSSR, 194?, No. 3, s. 35-39

SO: LETOPIS ZHURNAL STATEY, Vol. 27, OSKVA, 1949.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

TKACHEV, N., inzhener; PIROG, P., inzhener.

Porous-glass reinforced concrete. Khol.tekh. 30 no.2:46-52 Ap-Je '53. (MLRA 6:7)

(Reinforced concrete)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, F.

USSR/Engineering
Insulation, Thermal
Cement

Apr/May/Jun 48

"Foam Cement as a Heat Insulation Material," F. Pirog, Chief Engr, MyasoKhladoPromStroy, 7 pp

"Kholodil Tekh" No 2

Describes use of cement which has been treated with air in order to contain a mass of airholes as an insulating material, which is important since it accounts for 20 to 35% of total cost of constructing a cold storage plant.

1/49T10

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

CA

20

Technology of the production of insulating foam concrete P. Pirog *Khlodil'naya Tekh* 20, No. 4, 29-32 (1949). The concrete is kept 15-18 hrs. at not below 15 then steamed with a slow rise of the temp. to 70° (4 hrs. and 30 hrs. at 70°). N. Thon

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P., insh.

Improving concrete foam insulation of cold storage warehouses [with summary in English]. Khol.tekh. 35 no.6:36-37 N-D '58. (MIRA 12:1)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy kholodil'noy, molochnoy, maslyanoy i syrodel'noy promyshlennosti.
(Cold storage--Insulation) (Lightweight concrete)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, Petr Ivanovich; CHICHKOV, N.V., red.; BRODSKIY, M.P., tekhn. red.

[Thermal insulation of cold storage warehouses] Teploizoliatsiia kholodil'nikov. Moskva, Gos. izd-vo trog. lit-ry, 1961. 203 p. (MIRA 14:7)

(Cold storage warehouses) (Insulation (Heat))

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.

Life of insulated elements of cold-storage units for storing sausages in meat combines. Mias.ind.SSSR 27 no.3:27-32 '56. (MIRA 9:9)

1.Ministerstvo promyshlennosti myasnykh i molochnykh produktov SSSR.
(Cold storage--Insulation)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P., inshener.

Technical and economical factors in rating heat insulation materials. Khol. tekh. 13 no.3:26-33 Jl-S '53. (MLRA 6:11)
(Cold storage--Insulation)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.

Packing Houses

Industrial methods in the construction of meat combines. Mies. [illegible], [illegible].

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

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.

Cold Storage

Designs for refrigerating plants insulated with porous concrete. Khol. [illegible], N. 1, 1953.

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

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

DUSHIN, Ivan Fedorovich, kand. tekhn. nauk.; PIROG, P.I., nauchnyy red.; CHICHKOV, N.V., red.; BABICHEVA, V.V., tekhn. red.

[Insulation of cold storage plants; scientific report] Isoliatsionnye konstruktsii kholodil'nikov; nauchnoe soobshchenie. Moskva, Gos. izd-vo torg. lit-ry, 1958. 46 p. (MIRA 11:11)
(Cold storage--Insulation)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, Petr Ivanovich; DYKLOP, E.P., retsenzent; IGNATENKO, P.L., retsenzent; TSYPERSON, A.L., red.; VOLKOVA, V.G., tekhn. red.

[Principles of construction] Osnovy stroitel'nogo dela. Moskva, Gostorgizdat, 1963. 199 p. (MIRA 16:8)
(Building)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.I.; MARKOV, V.A., inzh., retsenzent.

[Using reed panels in the construction of meat processing plants] Primenenie kamyshita v stroitel'stve miasopererabatyvaiushchikh predpriiatii. Moskva, Vses. nauchno-issledovatel'skii in-t miasnoi promyshl., 1957. 23 p. (MIRA 11:8)
(Packing houses) (Wallboard) (Reed (Botany))

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P I.

240 Opnoetazhnyye Kholodilniki Maloy Temkosti. M., Gostorgizdat, 1954. k180S.
S Ill. I Kart.; 1 L. Plan. 22 SM. 4.000 EKZ. 6r.- (54-54781) P.
621.565:69

SO: Knizhnaya, Letopis, Vol. 1, 1955

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P. [1.]

Reinforced frothed-glass concrete. N. TEACHEV AND P. PIROG. *Kholedil'naya Tekh.*, 30 [2] 46-53 (1953).—Applications of reinforced frothed-glass concrete (material made from cement, water, sand, and chips of frothed glass) are discussed. After 20 heat-shock cycles, crushing strength dropped 11%, water absorption did not exceed 23 to 27% by weight, bulk weight was 100 kg./m.³, and thermal conductivity was 0.273 cal./m.hr.°C.
B.Z.K.

1

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.I., inzh.; KARPOV, A.V., inzh.

Heating floors of refrigeration plants laid directly on the ground. Prom.stroi. 37 no.10:24-28 O '59. (MIRA 13:2)

1. Gosudarstvennyy institut po proyektirovaniyu kholodil'noy, molochnoy, maslyanoy i syrodel'noy promyshlennosti (for Karpov).
(Refrigeration and refrigerating)
(Foundations)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

[illegible], [illegible]

Production and preparation of heat insulation [illegible] for [illegible] [illegible], [illegible] [illegible]-ve
torgovoi lit-ry, [illegible] [illegible] p. [illegible]

TH1715.P[illegible]

1. Insulation (Heat) [illegible]

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PI [illegible], [illegible] I.

Small capacity one story refrigeration plants. Moskva, Gos. izd. vo[illegible] [illegible], [illegible]. 178 p. [illegible]

1. Cold-storage lockers.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.I.; TRUDOVA, O.T., redaktor; SUDAK, D.M., tekhn.redaktor.

[Production and preparation of heat insulation work using foam concrete] Proizvodstvo termoizoliatsionnykh rabot penobetonom i ego izgotovlenie. Moskva, Gos. izd-vo torgovoi lit-ry, 1954. 85 p. (MLRA 7:12)

(Insulation(Heat)) (Concrete)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, Petr Ivanovich; ISHKOVA, A.K., redaktor; SUDAK, D.M., tekhnicheskiy redaktor.

[Small capacity one-story refrigeration plants] Odnoetazhnye kholodil'niki maloi emkosti. Moskva, Gos. izd-vo torgovoi lit-ry, 1954. 178 p. (MLRA 8:2)

(Cold storage warehouses)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P. P.

"Dynamics of Pathologicomorphological Modifications in the Case of [illegible] in Horses." Thesis for degree of Dr. Veterinary Sci., Sub 12 Apr 4[illegible], All-Union Inst of Experimental Veterinary Medicine.

Summary [illegible], 1[illegible] Dec [illegible], Dissertations Presented for degrees in Science and Engineering in Moscow in 1942. From Vechernyaya Moskva, Jan-Dec 1[illegible].

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, P.P., doktor vet. nauk, prof.; FOMIN, N.D., aspirant

Pathoanatomy and pathohistology of enterotoxemia in pigs.
Veterinariia 35 no. 7:28-29 Jl '58. (MIRA 11:7)

1. Leningradskiy nauchno-issledovatel'skiy veterinarnyy institut.
(Swine--Diseases and pests)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

GUSEV, V.F., dots.; PIROG, P.P., prof.; DRYAGIN, S.V., starshiy nauchnyy sotrudnik.

Sixtieth anniversary of the first veterinary research institution in Russia. Veterinariia 35 no.8:11-13 Ag '58. (MIRA 11:9)

1. Direktor Leningradskogo nauchno-issledovatel'skogo veterinarnogo instituta (for Gusev). 2. Zamestitel' direktora po nauchnoy chasti Leningradskogo nauchno-issledovatel'skogo veterinarnogo instituta (for Pirog). 3. Uchenyy sekretar' Leningradskogo nauchno-issledovatel'skogo veterinarnogo instituta (for Dryagin).
(Leningrad--Veterinary colleges)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

USSR/Diseases of Farm Animals. Diseases Caused by Bacteria and Fungi R-2

Abs Jour: Ref Zhur - Biol., No 1, 1959, 2825

Author : Khanduyev, Ts., Pirog, P. P.
Inst : Leningrad Scientific Research Institute of Veterinary Medicine
Title : Tuberculosis in Swine and some Problems Regarding the Sanitary Evaluation of Meat

Orig Pub: Sb. tr. Leningr. n.-i. vet. in-t, 1957, vyp. 7, 80-85

Abstract: No abstract

Card 1/1

14

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

LIKHACHEV, N.V.; SYURIN, V.N.; TSION, R.A.; SHCHERBATYKH, P.Ya.; ZOTOV, A.P.; SKOMOROKHOV, A.L.; PIROG, P.P.; PINUS, A.A.; BAZYLEV, P.M.; NAZAROV, V.P.; ORLOV, F.M., dots.; USACHEVA, I.G., red.; YARNYKH, A.M., red.; BALLOD, A.I., tekhn. red.; PROKOF'YEVA, L.N., tekhn. red.

[Virus diseases of animals] Virusnye bolezni zhivotnykh. Moskva, Sel'khozizdat, 1963. 564 p. (MIRA 17:1)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, Wojciech

Main trends of activities of the information centers of the administrative branches in 1963. Akt probl inf dok 8 no.1:1-7 Ja-F '63.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROG, WOJCIECH

DECEASED

1964

Scientific-Technical Information

C. '63

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

29455

S 08[illegible], 61,000,0[illegible],160 [illegible]

[illegible], B[illegible]C

158360 1407

AUTHOR Pirogov, A.

TITLE Use of epoxide resins instead of babbit metal in the construction of flood gates

PERIODICAL: Referativnyy zhurnal. Khimiya, no [illegible] Rechn. transport, no [illegible]

TEXT The authors describe the positive properties of epoxide resins regarding their use as filling materials for bearings of flood gate constructions instead of babbit metal. The model of a journal bearing was filled with an epoxide-resin mixture of the following composition in parts by weight: epoxide resin of the type [illegible] ED-[illegible] [illegible]CC, [illegible] phthalate [illegible] quartz powder [illegible]C, polyethylene polyamine [illegible] Filling was made as follows: heating of the epoxide resin to [illegible]C, mixing with a plasticizer, filler and hardening constituent; preparation of the [illegible] filling of the ready mixture into the space between bearing box and bearing. It was found that by using epoxide resins instead of babbit metal material costs and assembly time could be reduced. This is explain

Card 1/2

OVED FOR RELE

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

29455
[illegible]
B[illegible], B[illegible]

Use of epoxide resins instead of [illegible]

[illegible] fact that the epoxide resin [illegible] and more easily than the [illegible] metal. [Abstracter's [illegible] Complete translation.]

Card

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, A.

Present-day foreign exchange balance in Japan. Vnesh. torg. 30 no. 11:36-40 '60. (MIRA 13:11)
(Japan—Foreign exchange problem)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, A., inzh.

Review of "Steelworkers promoting technical development." NTO 2 no.1:60-61 Ja '60. (MIRA 13:5)
(Dneprodzerzhinsk--Steelworks--Technological innovations)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, A.A.

364

R

1908 621.316.722 : 621.318.57

Sensitive valve voltmeter relay. Orlov, S. S., and Pirogov, A. A. *Wireless Engr.*, 19, pp. 347-350, Aug., 1942. *Abstr. from the Russian.*—Two valve rectifiers, having widely different slopes of the rectified voltage, are connected in opposition and the voltage difference so obtained controls the regulating mechanism (servo-motor). The different slopes are achieved by using a tungsten filament valve for one rectifier and a valve with activated filament for the other. The complete circuit diagram is given and described, with practical details of components and of the method of adjustment and operation for stabilizing either a.c. or d.c. voltages. A correctly adjusted relay of this type will control to within 0.3 to 0.35%, and should require no attention for several months. A. W.

METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, A. A.

THE USE OF EXACT FREQUENCIES IN MODERN COMMUNICATIONS ENGINEERING

Vestnik Svyazi, No 12, Moscow, 1955, pp 3-5

Translation M-1247, 27 Sept 56.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/112-57-6-13362

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 6, p 246 (USSR)

AUTHOR: Pirogov, A. A.

TITLE: A New Circuit for Detecting Periodic Signals Lying Beneath the Noise Level (Novaya skhema dlya obnaruzheniya periodicheskikh signalov, lezhashchikh nizhe urovnya pomekh)

PERIODICAL: Sb. nauchn. rabot. Vses. zaoch. elektrotekhn. in-ta svyazi, 1956, Nr 1, pp 44-57

ABSTRACT: A variety of mutual correlation circuits are described which are suitable for the separation of periodic signals masked by noise. An n-phase local oscillator produces a reference voltage which is applied to the midpoint of an input transformer and, via two arms of the transformer, is applied to 2 n-diodes (the local oscillator frequency is equal to the received signal frequency). After "phase" discrimination, the rectified voltage is filtered and, via output limiting diodes, is fed to a common bus. It is stated that the above circuit provides a gain in the signal-to-noise ratio equal to $N = 10 \lg \sigma / 2F_M$ db

Card 1/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

USSR / Radiophysics I

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 10105

Author : Pirogov, A.A.
Inst : Not given
Title : Interference-Rejecting Radio-Telegraph Communication Lines

Orig Pub : Elektrosvyaz', 1956, No 5, 45-55

Abstract : The author considers the increased interference-rejection (IR) of communication radio lines, obtained by storage of the transmitted message. A distinction is made between simplex correction (SC), when the same message is transmitted on the receiving side n times, and duplex correction (DC), when the receiver returns to the sender the received message, and the latter sends to the receiver again the erroneous portion of the message. It is indicated that SC and DC increase the IR either because of the expansion of the spectrum of the useable frequencies, or else because of the increase in the transmission

Card : 1/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

USSR/ Radiophysics I

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 10105

Abstract : time of the message. Quantitative relationships were obtained also for SC. The probabilities of obtaining correct and erroneous signals at the output of the summing device are determined under the condition that analogous probabilities are equal for each elementary channel. An approximate formula is obtained for the connection between the number of repetitions and the probability of erroneous reception. The relations obtained make it possible to calculate the IR of any telegraph system with repetition. Examples are given of calculations applicable to am and fm telegraphy. The gain in fm telegraphy, which is determined by the statistical mechanism, that is inherent in this telegraphy as a system with two repetitions (positive at the on frequency and negative at the off frequency), is pointed out.

Card : 2/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

USSR /Radiophysics I

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 10105

Abstract : General considerations are listed concerning the increase of the IR of shortwave communications by using SC, detection, etc. It is indicated that the general communication theory uncovers large reserved capacities for increasing the IR and effective utilization of the power of telegraph lines.

Card : 3/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

AUTHOR : Pirogov, A..A.

"Ballistic Antennas,"
A-U Sci Conf dedicated to "Radio Day," Moscow, 20-25 May 1957.

PERIDOCIL : Radiotekhnika i Elektronika, Vol. 2, No. 9, pp. 1221-1224, 1957, (USSR)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, A.A.

Balanced anode modulator. Elektrosviaz' 11 no.10:14-20 O '57.
(MIRA 10:10)

(Radio, Shortwave)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, A. A.

A. A. PIROGOV, "Development of the theory of coding apparatus and speech synthesis." Scientific Session Devoted to "Radio Day", May, [illegible], Trudrezervizdat, Moscow, 9 Sep. 58

Certain theoretical considerations on coding and the synthesis of oral information in systems using a new method of compressing telephone spectra based on using harmonic functions for coding and speech synthesis are analyzed.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, A. A.

A. A. PIROGOV, "Results of an experimental testing of a ballistic antenna (with a demonstration of an antenna model)." Scientific Session Devoted to "Radio Day", May 1958, Trudreservizdat, Moscow, 9 Sep. 58

Results are presented of experiments with models of a ballistic antenna which is a rotating lobe of flexible filament maintained in dynamic equilibrium in the vertical plane without using supports because of the effect of inertial, centrifugal forces and of the stabilizing effect of the filament air drag. The report is accompanied by a demonstration antenna model.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

KUDRYAVTSEVA, T.D.; PIROGOV, A.A.

Limits of reasonable increase of directional antenna dimensions. Nauch.dokl.vys.shkoly; radiotekh.i elektron. no.4:54-59 '58. (MIRA 12:6)

1. Moskovskiy gosudarstvennyy universitet i Vsesoyuznyy zaochnyy elektrotekhnicheskiy institut svyazi.
(Radio--Antennas)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/10[illegible]

AUTHOR. [illegible], A.A.

TITLE: Neutralising Conditions in a Common-Grid Triode Amplifier and in a Common-Cathode Tetrode Amplifier (Uslovya neytralizatsii triodnogo silitelya s obshchey setkoy i tetrodnogo s obshchim katodom)

PERIODICAL: Elektrosvyaz', 1958, [illegible], [illegible] 68 - [illegible] (USSR)

APSTRACT: Figure 4 shows the circuit of a grounded-grid amplifier including an inductance which represents that of the grid lead. Eq.([illegible]) gives the value of the grid lead impedance in terms of the [illegible] elements in the circuit for the [illegible] that voltage at the anode is zero when the valve [illegible] of a collection of passive elements. "Neutrodyne" condensers are not required in the [illegible] form (push-pull) of the circuit shown in Figure [illegible] at frequencies greater than the "self-neutralising" frequency, a compensating capacitor must be connected in the grid lead. The value of this condenser may be calculated from Formula ([illegible]). Owing to the effect of the inductance of the screen lead of the grounded cathode tetrode amplifier of Figure 3, a neutralising condenser may be needed between anode and control grid. The value of this condenser is

Card 1/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/10[illegible]-[illegible]-[illegible]-11/1[illegible]

Neutralising Conditions in a Common-grid Triode Amplifier and in a Common-cathode Tetrode

given by Eq.([illegible]).
There are [illegible] figures and [illegible] references, [illegible] of which is Soviet and [illegible] English.

SUBMITTED: April [illegible]

1. Differential amplifiers--Circuits 2. Differential amplifiers --Analysis 3. Amplifiers--Neutralization

Card [illegible]/[illegible]

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/106-59-3-2/12

AUTHOR: Pirogov, A.A.

TITLE: A Harmonic System of Compressing Speech Spectra (Garmonicheskaya sistema szhatiya spektrov rechi)

PERIODICAL: Elektrosvyaz', 1959, Nr 3, pp 8-17 (USSR)

ABSTRACT: All existing methods for compressing speech spectra are based on time functions which are subjected to statistical analysis and subsequent synthesis. Examples of these systems are the vocoder, the formant vocoder the vobanc etc. These methods attempt to convey to the correspondent the best possible approximation to the energy spectrum of speech. Fig 1 shows a three-dimensional representation of a speech signal in which spectral density, frequency and time are plotted orthogonally. The maxima in the spectral envelopes are indicated by F_1, F_2, F_3 and these are called formants. Since the signal is a surface distribution and the channel is a one-dimensional system some form of "discretisation" is necessary. The upper left diagram in Fig 1 shows the method used in the vocoder in which frequency discretisation is used by employing between 10 and

Card 1/5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/106-59-3-2/12

A Harmonic System of Compressing Speech Spectra

15 bandpass filters. The filters should have the response shown in Fig 2 but these are not realisable in practice and distortion results. Some relief from this difficulty has been suggested by Vilbig and Haase (Ref 8) but it does not solve the problem. Time discretisation is also possible, as in the lower right-hand part of Fig 1 and here it is more convenient to use not pulses but harmonic functions as coordinates. A block diagram of this system is shown in Fig 3 while Fig 4 is an arrangement of quadripoles with variable frequency characteristics. The basic advantage of this system is the simplicity of the means whereby the synthetic discontinuous frequency characteristics may be added. The transmitting side of the device, known as a harmiphone, has an instantaneous spectrum analyser of conventional type, the sweep rate of the analyser is between 25 and 50 c/s. It is well known (see Ref 10) that for satisfactory reproduction, between six and ten samples are required of the speech envelope although for good reproduction of vowels between three and five only are strictly necessary. From Kotel'nikov's theorem

Card 2/5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/106-59-3-2/12

A Harmonic System of Compressing Speech Spectra

it follows that the bandwidth required to transmit the changes in information is between 75 and 250 c/s. In addition the fine structure, that is the basic carrier frequency, of the speech itself must be transmitted and this requires between 25 and 50 c/s, therefore in all for the transmission of effective natural speech a bandwidth of between 100 and 300 c/s is required. It should be noted that the calculations do not take into account the possibility of further supplementary compression of the dynamic range and operation at higher entropy. In the block diagram of Fig 3 on the receiving side the signal is applied to a number of synchronous detectors which are arranged in quadrature pairs and switched from a number of suitably phased oscillators, representing harmonics up to third order. The outputs of synchronous detectors are summed in a quadripole whose frequency characteristic is variable. This latter device is shown in more detail in Fig 4. The block diagram thus describes a system which synthesises the instantaneous speech spectrum by means of fundamental and the first two

Card 3/5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/106-59-3-2/12

A Harmonic System of Compressing Speech Spectra

harmonics of the scan rate. If greater naturalness is required four harmonics may be required. The operation of the system is best seen by taking the particular example of the frequency characteristic in Fig 5. If it is assumed that this can be represented by a fundamental component only, then three numbers describe this characteristic; these are in effect the constant component, the amplitude and the phase of the variable component. These numbers then define the operation of modulators MOa, Mla, Mlb in Fig 4. The method which is shown in Fig 3 of obtaining voltages in proportion to harmonic coefficients is not a unique one and another method due to A.M.Polyukovskiy is illustrated in Fig 6; this is known as a matrix convertor (the experimental work on coding and synthesis of a speech was carried out by two engineers V.Ye.Murav'yev and A.M.Polyukovskiy). Fig 7 shows a spectrogram obtained by applying a 100 c/s uniform harmonic spectrum to the delay line and putting a negative bias on the b_3 lead. Fig 8 shows a similar sort of result obtained when the signal applied to the

Card 4/5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

SOV/106-59-3-2/12

A Harmonic System of Compressing Speech Spectra

delay line is white noise and a control signal is applied to one of the band filters at the input to the matrix. The result is seen to have the expected (sinx/x) form. Experiments have shown that by using four harmonics in addition to the fundamental scan frequency, the naturalness is that of ordinary telephone communications. A further improvement is to be expected by using the deformed frequency scale proposed by Koenig (Ref 12). In addition to those already mentioned gratitude is expressed towards N.K.Ignat'yev N.I.Chistyakov, A.A.Kharkevich, M.A.Sapozhkov and N.N.Akinfiyev. There are 8 figures and 12 references, 4 of which are Soviet and 8 English.

SUBMITTED: 27th December 1958

Card 5/5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

IGNAT'YEV, N.K.; PIROGOV, A.A.

Theory of the integral reception of telegraph signals. Elektrosviaz' 14 no.9:72-73 S '60. (MIRA 13:9)
(Telegraphy, Wireless)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

[illegible], M.A.

"Speech signal in cybernetics and communication" (speech conversion as applied to problems of communication engineering and cybernetics) by M.A.Sapozhkov. Reviewed by A.A.Pirogov. Elektrosviaz' 17 (MIRA 16:8) 8:75 Ag '63.

(Telecommunication) (Cyberenetics) (Sapozhkov, M.A.)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PIROGOV, Andrey Andreyevich; NAZAROV, M.V., retsenzent; LEV, A.Yu., retsenzent; OBRAZTSOVA, Ye.A., red.; TRISHINA, L.A., tekhn. red.

[Synthetic telephony] Sinteticheskaia telefoniia. Moskva, Svi[illegible]'izdat, 1963. 118 p. (MIRA 16:7)
(Telephone) (Speech)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

MIKHEYEV, N.S., PIROGOV, A.I.

Method of suppressing spurious phase modulation. Elektrosvyaz' 8 (MIRA 8 no.12 ...50 D '54.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 20720-65 EEO-2/EWT(d)/EWT(1)/EEC-4/EED-2/EWA(h) Pm-4/Pn-4/Pac-4/Peb/Pl-4
ACCESSION NR: AP5001372 AEDC(b)/RAEM(j) S/0106/64/000/012/0042/0050 AFTC(b)

AUTHOR: Mikheyev, N. G.; Pirogov, A. A.

8 B

TITLE: Method of suppressing spurious phase modulation [Report at the Moscow City Board of NTORiE, 29 Oct 63]

SOURCE: Elektrosvyaz', no. 12, 1964, 42-50

25

TOPIC TAGS: noise suppression, spurious phase modulation

ABSTRACT: A new "phase limiter," in a sense analogous to the amplitude limiter, which is applicable to various synchronous master-oscillator devices is suggested. By linear combination of two waves — one of them subject to filtration and the other derived from the system output — the waves distorted by phase modulation (PM) are converted into waves with undesirable AM; the latter is suppressed by an amplitude limiter, and the wave is subsequently filtrated in the oscillatory circuit of a regenerative-type tuned amplifier. A functional

Card 1/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

L 20720-65

ACCESSION NR: AP5001372

diagram and the principal theory of the PM-suppressor are presented. Experiments carried out with a one-stage laboratory hookup at 100 kc corroborated the efficiency of PM suppression; a two-stage device yielded still better results. Orig. art. has: 11 figures and 12 formulas.

ASSOCIATION: none

SUBMITTED: 11Jun64 ENCL: 00

SUB CODE: EC NO REF SOV: 004 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

Shaknovich, I. G., and Piragov, A. A. ZINOW JEWSK CLAYS AS RAW MATERIAL FOR GOOD PRODUCTS WITH A HIGH CONTENT OF Al_2O_3. *Ogneupory*, 2 [9] 23-29 (1934). The Zinow-Jewsk (Ukrainia) deposits have 39-59% Al_2O_3 and produce good refractories.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

Refractory bricks in ovens for carbonization of pitch

A. Pirogov *Coke & Chem* (U. S. S. R.) 1935, No. 1, 30-5. Three samples were examd. Requirements for refractoriness and d. must be more rigid. B. C. A.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

A

Pirogov, A. A. INCREASING THE THERMAL RESISTANCE OF BRICK FOR COKE-OVEN DOORS. *Coke & Chem.* (U. S. S. R.), 8 (7) 53-59 (1935).—Refractory materials with a grog base are more suitable for lining coke-oven doors than semi-acid materials with quartz and grog base. Grog brick with increased thermal resistance can be obtained by introducing into the charge a high proportion of kaolin or by using pure kaolin. Grog with a grain size of 5 to 6 mm and with a clay or clay kaolin base can be used with the same effect. Increasing porosity also increases thermal resistance; in the case of easily fritted clays, a light firing and the impregnation of a small quantity of grog powder have the same effect.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

C S

3

701. PRODUCTION OF LIGHTWEIGHT REFRACTORIES AND SUPER-REFRACTORIES BY THE FROTHING METHOD.—A. A. Pirogov (Ogneupory, 6, [illegible], [illegible]). Lightweight refractories are made from non-plastic materials (quartzite, chromite, magnesite, corundum, etc.), by a frothing method using a colloidal foaming agent. A basic condition is that a highly grogged suspension, containing only a very small proportion of plastic material, must be used to avoid deformation and to produce a good texture.

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

17

Light-weight, heat-insulating refractories and super-refractories. A. A. Pisanov. *Ukrain. Nauch.-Issledovatel. Inst. Ogneuporov Kiselovoporov* 42, 1-36(1936).—Light-wt. SiO_2 refractories have a relatively high temp. of deformation (1400-1540°) under load, satisfactory mech. strength and a refractoriness of 1670-1700°. The thermal cond. is one-third that of ordinary SiO_2 brick. High-Al_2O_3 light-wt. products (on a corundum base) have high refractoriness (over 1920°) and a const. vol. at high temps. Light-wt. chrome magnesite products are highly resistant to slag corrosion and have a refractoriness of 1500-1530° under load. Light-wt. fireclay bricks have an incipient deformation under load at 1290-1360°, an after-shrinkage of 0.6% at 1380° and a refractoriness of 1750°.

M. V. Condoide

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

C 5

3

[illegible]. SEMI-PRODUCTION TRIALS ON THE MANUFACTURE OF INSULATING REFRACTORIES BY THE FROTHING METHOD.—A. A. Pirogov, A. Reisen and L. [illegible] (Ogneupory, [illegible]). The foam is stabilized with [illegible] each of resin and glue, and is cast into bricks. The products, using different batches, had porosities from [illegible]-70% and crushing strengths of [illegible]-2,000 lb/sq. in. Under a load of 14 lb/sq. in. subsidence commenced at 1,[illegible]-1,370°C.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

C5

3

[illegible]

[illegible] PRODUCTION OF FROTHED GROOGED HEAT INSULATING MATERIALS AT THE FOBOL WORKS.—A. A. [illegible] and L. R. [illegible] (Gyanyhoy, 6, 1,[illegible], [illegible]). The manufacture of [illegible] bricks by mixing prepared foam with a [illegible] clip, is applied to full-scale production. Laboratory work forms the [illegible] [illegible] the following factors: (a) the [illegible] hand; (b) type of clay; (c) grog grading; (d) action of acid or [illegible] in stabilizing the foam; (e) the use of [illegible] grog. The manufacture of bricks up to 30 in. cubic is described; special attention is paid to drying problems. Data on density of foam-clip mixtures, effect of [illegible] addition, drying and firing shrinkage, and the properties of the fired bricks are presented. The trials culminated in the production of a batch of 500 bricks.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

COMMON ELEMENTS

COMMON VARIABLES INDEX

AUTHOR INDEX

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

A.C.S.

Refractories

Production of frothed grogged heat-insulating materials at the Podol Works. A. A. Pirogov and L. R. Bilson. *Ogneupory*, 1938, No. 7, pp. 1[illegible]-97; abstracted in *Trans. Brit. Ceram. Soc.*, 42 [4] 30A (1943).—The manufacture of insulating brick by mixing prepared foam with a highly grogged slip is applied to full-scale production. Laboratory work forms the first part of the paper. The works trials investigate the following factors: (*a*) the proportion of the clay bond, (*b*) type of clay, (*c*) grog grading, (*d*) action of acid or gypsum in stabilizing the foam, and (*e*) the use of porous grog. The manufacture of blocks up to 14-in. cube is described; special attention is paid to drying problems. Data on density of foam-slip mixtures, effect of sawdust addition, drying and firing shrinkage, and the properties of the fired brick are presented. The trials culminated in the production of a batch of 500 brick.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

PROCESSES AND PROPERTIES INDEX

19

C A

The influence of technical factors on the properties of frothed grog masses. A. A. Pirogov and L. R. Bilson. *Ukrain. Nauch.-Issledovanie. Inst. Ogneuporov Kisloteporov* No. 44, 109-13(1938); *Chem. Zentr.* 1940, I, 1887.—In continuing earlier work (cf. *C. A.* 33, 5142[3]) further exptl. results are reported on the manuf. of refractories from frothed grog. Only clay of good plasticity can be used. The products are refractory at 1690°, have a d. of 0.80-0.85 g. per cc. and a resistance to compression of 20-30 kg./sq. cm. M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7

A C S.

Refractories

Technical requirements for lightweight refractories. A. A. Pirogov and A. I. Roizen. *Vestnik Standartizatsii*, 1939, No. 9, 9-13. *Khim. Referat. Zhur.*, 1940, No. 3, 80-81. *Chem. Abs.*, 36, 2695 (1942). Standards are proposed. All refractories are divided according to their properties into two classes (*A* and *B*) and according to their volume weight into four classes (*L*-1.3, *L*-1.0, *L*-0.8, and *L*-0.6). The permissible deviations are ±0.1. According to their mechanical properties and appearance, each of the four classes is subdivided into first and second grades. The paper describes the physical-chemical properties of lightweight refractories in the U.S.S.R. **Discussion.** A. F. Myrtsymov. *Vestnik Standartizatsii*, No. 10, pp. 13-14. M. proposes (1) to double the proposed requirement for mechanical strength, (2) to set more exact standards for volume weight, (3) to devise a method for determining the heat conductivity, and (4) to increase the requirements for appearance.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341010013-7"