L 12013-65
ACCESSION NR: AP4048208

the coatings. Inner stress was measured by an optical method, and adhesion was evaluated from the critical stress limit causing the film to peel. Strength and adhesion of the coatings were found to be dependent on inner stresses. To relieve inner stresses in the aged coatings, the mineral fillers (cement, quartz sand, or kaolin) were modified by adding surface-active agents ("alkamon," octodecylamine, etc.). Critical stress limits were significantly decreased with an increasing modifier content (up to 6%), regardless of the nature and degree of filling. Tensile strength of the coatings reached a maximum value, varying with the nature of the filler and modifier content and corresponding to an inner stress 1.5 times lower than that in unmodified coatings. Modification of mineral fillers produces coatings with low inner stress and minimum warping of materials. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: MT

NO REF SOV: 006   OTHER: 000   ATD PRESS: 3124

Card 2/2

GUBENKO, A.B.; AL'PERIN, V.A.; CHAPSKIY, K.A.

Improve the quality of glass-reinforced polyester plastics.
Standartizatsiia 29 no.7:59 Jl '65.   (MIRA 18:11)

GUBENKO, A.S. (Khar'kov,2, ul.Girshmana,d.5, kv.5)

Inflammatory tumors of the small intestine. Klin.khir. no.5:
71-72 My '62.   (MIRA 16:4)

1. Kafedra khirurgii (zav. - prof. G.M.Gurevich) Khar'kovskogo
stomatologicheskogo instituta na baze Khar'kovskoy 17-y
klinicheskoy bol'nitsy.
                    (INTESTINES---TUMORS)

GUBENKO, A.V.; NASONOV, V.N. (Moskva)

Problems of structural mechanics in connection with the use of
plastics in construction. Stroi.mekh. i rasch.soor. 7 no.5:1-4
'65.
(MIRA 18:10)

9,4300 (1150, 1151, 1136)

AUTHORS: Fistul', V. I. and Gubenko, A. Ya.

TITLE: Resistivity of high-alloy germanium

PERIODICAL: Fizika tverdogo tela, v. 3, no. 5, 1961, 1617-1619

TEXT: In low-alloy semiconductors (without degeneration) the mobility of the carrier and hence also the resistivity of a crystal are mainly determined by the scattering of the carriers from ionized impurities and from the ela- stic lattice vibrations. With low impurity content of the semiconductor the experimental results are in good agreement with the theoretical ones. As was shown by V. A. Johnson and K. Lark-Horowitz (Phys. Rev., 71, 374, 1947) resistivity (ρ) depends on the impurity concentration N in the following way: $\rho = 6270 \cdot N^{-1/3}$ ohm.cm. The experiments were made with a Ge single crys- tal which had been purified such that the resistivity was 50 ohm.cm. Then, it was alloyed by Chokhral'skiy's method of pulling it from the melt. Arse- nic was used as impurity. It was introduced into the melt in the form of Ge + (15-20%) As. Specimens with the dimensions 10 · 4 · 1 mm were cut out from the pieces obtained. The experimental results were represented in the Card 1/3

23135

Resistivity of ...

S/181/61/003/005/040/042
B111/B202

figure (Curve 1) (n-the carrier concentration). The dashed curve shows the relation obtained by Johnson and Lark-Horowitz. The deviation between the experimental results and the relation obtained by Johnson - Lark-Horowitz does not exceed 17 %. Due to this small deviation the conclusions drawn by Johnson and Lark-Horowitz are wrong. Curve 2 shows the dependence of the p-type conductivity of germanium which had been obtained from the data of Ref. 8 (F. A. Trumbore, A. A. Tartaglia, J. Appl. Phys., 29, 1511, 1958). The authors give two empirical formulas for the dependence of the

of the resistivity of germanium: a) for n-type: $\rho_n = 4.3 \cdot 10^8 \cdot n^{-0.6}$ and

b) for p-type germanium: $\rho_p = 8.15 \cdot 10^9 \cdot n^{-066}$. There are 1 figure and 8 references: 2 Soviet-bloc and 6 non-Soviet-bloc
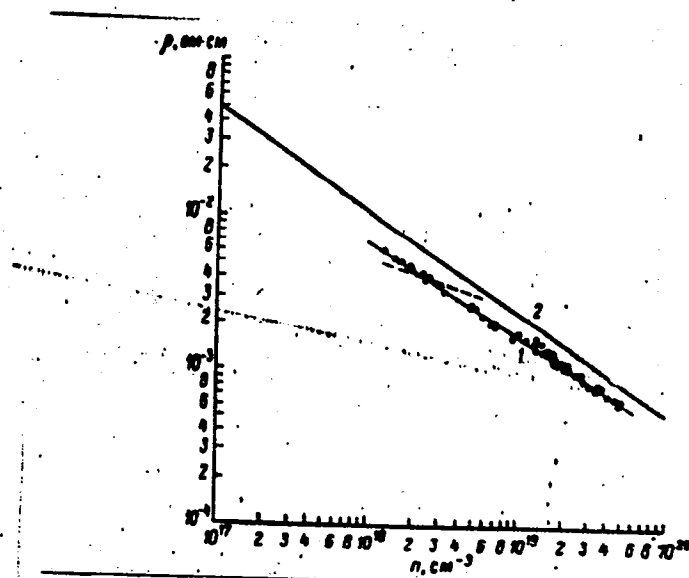
SUBMITTED: December 19, 1960

Card 2/3

Resistivity of ...

23135
S/181/61/003/005/040/042
B111/B202

Card 3/3

L 17539-65   EWT(m)/EWP(t)/EWP(b)   IJP(c)/AFWL/ASD(a)-5/AS(mp)-2/SSD/RAEM(a)/
RAEM(c)/ESD(dp)/ESD(c)/ESD(gs)/ESD(t)/Pa-4   JD/JG

ACCESSION NR: AP4043914   S/0136/64/000/008/0082/0086

AUTHOR: Gubenko, A. Ya.

TITLE: Alloying germanium with arsenic and gallium for tunnel-type diodes

SOURCE: Tsevelny*ye metally*, no. 8, 1964, 82-86

TOPIC TAGS: germanium, arsenic, gallium, concentration, tunnel diode, single
crystal, precipitate, dislocation, temperature gradient, crystal growth

ABSTRACT: The growing of single crystals in the alloying of Ge with Ga and As
causes certain difficulties: since crystals grow in a melt in which alloys are con-
centrated, any increase in the concentration at the solid-liquid interface would
enhance the formation of a second phase nuclei which leads to the formation of
polycrystalline regions. In order to obtain the maximum possible concentration
of alloys in the crystal, the authors recommend to decrease supercooling while
the abstraction of alloys at the interface should be intensified. The authors ac-
complished this by employing a high temperature gradient as a result of intensi-

Card 1/2

L 17539-65
ACCESSION NR: AP4043914

fied cooling and by mixing the melt intensively. The crystals were grown in a standard Chokhralskiy installation. Crystals without dislocations containing 10^{18}-10^{19} cm^{-3} As and 10^{18}-5 . 10^{19} cm^{-3} Ga were produced. The ease with which crystals with low-density dislocations are produced is attributed to the formation of precipitates in crystals that consists predominantly of alloy atoms. The precipitates strengthen the material and since thermal stresses lie below the increased yield point, dislocations do not occur. Furthermore, alloy atoms contribute to a strengthening of the material creating fields of stresses. Resistivity along the length of the crystals remained almost invariable at lowest values. The authors recommend high temperature gradients both in the solid phase and in the melt for the production of the maximum concentration of alloys. The authors produced crystals with maximum concentrations of 5.8 10^{19} As and 1.3 10^{20} cm^{-3} Ga. The orig. art. has 2 figures.

ASSOCIATION: None
SUBMITTED: 00   ENCL: 00
SUB CODE: MM, EC   NO REF SOV: 000   OTHER: 002

Card 2/2

L 40208-66   EWT(1)/EWT(m)/T/EWP(t)/ETI   IJP(c)   JD/GG

ACC NR: AP6030065   SOURCE CODE: UR/0363/66/002/005/0939/0941

AUTHOR: Gubenko, A. Ya.

ORG: none

TITLE: Effect of temperature gradients on the growth shape of germanium crystals

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 5, 1966, 939-941

TOPIC TAGS: temperature gradient, crystal growth, germanium, temperature dependence, crystal surface, crystal symmetry

ABSTRACT: The effect of temperature gradients on the growth shapes of germanium crystals heavily doped with various impurities was studied. The effect of the temperature gradient of growth shapes can be traced in crystals grown in thermal fields of differing shape. Crystals grown under conditions of uniform thermal fields -- the temperature gradient is identical in all directions -- have growth shapes with symmetrically developed faces. All growth shapes found, including round shapes, were polyhedrons. It is shown that depth of the supercooling region in the melt near and crystal and shape of the isotherm determine character of growth shape and the external crystal face. Orig. art. has: 4 figures.
[JPRS: 36,774]

SUB CODE: 20 / SUBM DATE: 10Jul65 / ORIG REF: 003 / OTH REF: 002

Card 1/1   UDC: 548.19

1. GUBENKO, F. P.

2. USSR (600)

4. Tobacco

7. Anatomical characteristics of the tobacco leaf. Tabak 13 no. 6, 1952.

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

GUBENKO, G.B. [Hubenko, H.B.], kand.tekhn.nauk

Ways to improve the assortment and strength of the products
of the Volodars'kiy Clothing Factory in Donetsk. Leh.prom.
no.3:37-39 Jl-S '63.   (MIRA 16:11)

GUBENKO, I.B.

Conference on liquid extraction processes. Khim. i tekh. topl. i
masel. 6 no.10:69-70 O '61.   (MIRA 14:11)
                    (Extraction (Chemistry))

31978
S/081/61/000/023/053/061
B106/B101

//.2230

AUTHORS: Betts, G. E., Gubenko, I. B., Karmin, B. K., Lukashevich, I. P.,
Markova, L. M., Segalevich, A. Ye., Troitskaya, N. I.,
Chernozhukov, N. I., Guseva, V. I.

TITLE: Test of petroleum products as plasticizer fillers for rubber
compounds from divinyl styrene rubber. Communication I

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 560, abstract
23P346. (Tr. N.-i. in-ta shin. prom-sti, sb. 5, 1960, 5-20)

TEXT: For the purpose of examining the possibility of enlarging the raw
material basis for the production of olefin rubber, a study has been made
of the effect of paraffin-naphthene hydrocarbons (I) and aromatics (II),
isolated from different kinds of petroleum at different stages of
processing, on the physicomechanical properties of standard rubbers from
CKC-30A (SKS-30A). Addition of I and II in an amount of 35% to a mixture
of rubber and softener deteriorates the physicomechanical properties of
vulcanizates and enhances their elasticity. The tensile strength of rubber
containing I drops from 274 (standard rubber) to 173 - 226 kgf/cm^2 while

Card 1/2

31978
S/081/61/000/023/053/061
Test of petroleum products...   B106/B101

its tear resistance drops from 81 to 47 - 54 kgf/cm. The tensile strength
of rubber containing II drops to 200 - 245 kgf/cm^2 and its tear resistance
to 52 - 64 kgf/cm. The thermal stability and the bonding strength of
doubled rubbers decrease substantially after vulcanization. High-molecular
products of comparatively higher viscosity deteriorate the strength
properties of rubber less than do low-molecular ones. A test of 29 products,
obtained from differently processed petroleum asphalts, deasphalted products,
distillates, and raffinates, have shown that the most interesting of these
products are a deasphalted petroleum asphalt, the residual high-viscosity
oil, a secondary raffinate, and an aviation tar. These products ensure
satisfactory physicomechanical properties, elasticity, and brittleness
temperature (-50 C) of vulcanizates. [Abstracter's note: Complete trans-
lation.]

Card 2/2

S/065/62/000/006/002/007
E075/E136

11.9/0

AUTHORS: Gubenko, I.B., Karaseva, A.A., and Chernozhukov, N.I.

TITLE: Two-stage deasphalting of vacuum residues from
             Eastern crudes

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.6, 1962,
             15-17

TEXT: A two-stage deasphalting process was used to produce
viscous cylinder oils. The process was carried out in a large
pilot plant including a countercurrent column of 75 mm diameter,
height 6.3 m. Ratios of propane to oil volumes used in the first
stage were 7-3:1 and 13:1. With the use of the two-stage process
the yield of the deasphalted residue increased by 30-40% for the
vacuum residues from sulphurous Eastern crudes and by 15-20% for
the residues with low sulphur contents. All hydrocarbon groups
in the oil deasphalted by the two-stage process have higher
viscosities (from 20 to 62 cs at 100 °C) than the corresponding
hydrocarbons in the single-stage deasphalted oil (from 12 to
46 cs at 100 °C). The aromatic hydrocarbons in the latter oil

Card 1/2

Two-stage deasphalting of vacuum .. S/065/62/000/006/002/007
E075/E136

have lower viscosity indices (10 to 20 units) than the oils
after the two-stage deasphalting process. The oils contain
48-52% aromatic hydrocarbons with $n_D^{20} > 1.54$ compared with
20-26% for the oils obtained with the single-stage deasphalting.
The viscous oils (37 cs at 100 °C) from the sulphurous crudes
had better anti-wear and load carrying properties than the oil
П -28 (P-28) from Baku crudes.
There are 3 tables.

Card 2/2

RAPOPORT, I.B.; ZHAROVA, Ye.Ya.; VELIZAR'YEVA, N.I.; GRYAZNOVA, N.N.;
    GUBENKO, I.B.; MOSHKIN, P.A.

Fatty alcohols from the products of oxidation of solid paraffins.
Khim. i tekh. topl. i masel 10 no.12:18-22 D '65.
                                                (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke
nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.

GUBENKO, I.B.; KARASEVA, A.A.; CHERNOZHUKOV, N.I.

Two-stage deasphalting of tars from eastern crudes. Khim.i
tekh.topl.i masel 7 no.6:15-17 Je '62.   (MIRA 15:7)
                    (Petroleum—Refining)

IVIN, S.Z.; KONDRAT'YEV, Yu.A.; SHELAKOVA, I.D.; ZAYSHLOVA, I.A.; GUBENKO, I.I.

Reactivity of ethylenamide-O-alkylmethyl phosphinates and
thio phosphinates. Zhur. ob. khim. 35 no.7:1218-1220 Jl '65.
(MIRA 18:8)

GUBENKO, I. S., DADYKINA, N. V., SALGANIK, R. I., MOROZOVA, T. M., KHENADEL, I. I.,
DREVICH, V. F.

"Pyroninophilic Granules of Fractions Isolated Cellular Nuclei"

report submitted for the First Conference on the problems of Cyto and
Histochemistry, Moscow, 19-21 Dec 1960.

Institute of Cytology and Genetics, Siberian Division Academy of Sciences USSR,
Novosibirsk.

SALGANIK, R.I.; GUBENKO, I.S.

Pyroninephilic granules appearing in the cytoplasm after
deoxyribonuclease treatment. TSitologiia 5 no.6:674-676
N-D '63.   (MIRA 17:10)

1. Laboratoriya nukleinovykh kislot i Laboratoriya tsitologii
Instituta tsitologii i genetiki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

SALGANIK, R.I.; KIKNADZE, I.I.; MOROZOVA, T.M.; GUBENKO, I.S.; DREVICH, V.F.

Nature of pyronin-stained granules in a fraction of isolated
cell nuclei. TSitologiia 5 no.5:499-505 S.0 '62.

(MIRA 18:5)

1. Laboratoriya nukleinovykh kislot i Laboratoriya obshchey
tsitologii Instituta tsitologii i genetiki Sibirskogo otdeleniya
AN SSSR, Novosibirsk.

LEVIT, A.V.; VUSTINA, U.D.; GUBENKO, L.N.

A new Toxoplasmalike organism in laboratory white mice. Trudy
Inst. zool. AN Kazakh. SSR 22:34-43 '64.

(MIRA 17:12)

L 64180-65   EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b)/EWA(c)   JD
ACCESSION NR: AP5021549   UR/0286/65/000/013/0013/0013
                                                 548.55 : 670.029.73

AUTHOR: Smirnyy, V. V.; Volynets, F. K.; Kozlov, S. I.; Gubenko, L. P.;
Mitrofanov, P. I.; Okhapin, A. A.

TITLE: A method for gas-flame annealing of single crystals / Class 12, No. 172287

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 13

TOPIC TAGS: single crystal growing, crystal dislocation, annealing

ABSTRACT: This Author's Certificate introduces a method for gas-flame annealing of
single crystals grown from powder in an oxyhydrogen flame and rotated without turn-
ing of the crystallization burner. Residual thermal stresses are reduced by heat-
ing the crystal through tubes which open directly into the flame. 2. A modifica-
tion of this method in which the dislocation concentration is reduced by connecting
the tubes alternately beginning from the top during growth of the crystal.

ASSOCIATION: none
SUBMITTED: 14Aug64   ENCL: 00   SUB CODE: SS,MM
NO REF SOV: 000   OTHER: 000

Card 1/1

KONEV, D.A., kand. sel'skokh. nauk; GUBENKO, M.K., starshiy nauchnyy
sotrudnik

Canned rabbit meat. Trudy TSNIIPPa 9:28-32 '62.
                                          (MIRA 16:6)

          (Meat, Canned)   (Rabbits)

GUBENKO, N. D.

5316. GUBENKO, N. D. Stroitel'stvo Zhilykh Domov Dlya Rabochikhkrovncye Delo
Zavodskogo Komiteta. Rasskaz... Pred. Zavkoma Teploelektrotsentrali im.
F. E. Dzerzhinskogo. (M.), 1954. 1 L., Slozh. v 6 s., s 1LL. 25. sm. (Mosk.
Gor, Sovet Prof. sojuzov. Polozhitelpyy Opyt frofscyuzncy Rabotyusem Pro-
forganizatisiyam Moskuy). 2.000 Ekz Bespl.--(55-881) 331.881: 333.83 (47-311)

SO: Knizhnaya Letopis', Vol. 1, 1955

Gubenko, N.V.

AUTHORS: Braynin, I. Ye., Prof. and Gubenko, N. V., Eng. 129-9-1/14

TITLE: Influence of the brand composition of soft sheet steel on its impact strength and its tendency to aging. (Vliyaniye marochnogo sostava myagkoy listovoy stali na udarnuyu vyazkost' i sklonnost' yeye k stareniyu).

PERIODICAL: "Metallovedeniye i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.9, pp.2-4 (U.S.S.R.)

ABSTRACT: According to literary data increased contents in the steel of manganese and phosphorus do not show an influence on its tendency to mechanical ageing (1-3). The authors found no literary data on the influence of other admixtures on the carbon steel and, therefore, they studied this problem statistically on a large number of heats. The investigation was carried out on basic open hearth "Steel 3" produced in 30 ton open hearth furnaces by the scrap process. The metal was deoxidised in a ladle by means of a 45% ferrosilicon so as to obtain 0.12-0.20% Si in the finished steel. In addition, 1 kg of aluminium per ton of liquid steel was fed into the ladle. The cast ingots weighed 1.5 tons and it was rolled into 10 mm thick sheet. The composition of the individual melts varied between the following limits: 0.12-0.18% C; 0.35-0.55% Mn; 0.12-0.20% Si; 0.016-0.036% P; 0.026-0.040% S.

Card 1/3

Influence of the brand composition of soft sheet steel 129-9-1/14
on its impact strength and its tendency to aging. (Cont.)

For statistical evaluation the results were used of impact tests of 1720 sheets of 285 different melts in the as rolled state and after mechanical ageing. For each melt the average value of the impact strength was obtained from tests on 3 to 15 sheets, testing two specimens for each sheet. Data on the influence of the carbon content on the impact strength before and after ageing are given in Table 1, data on the influence of manganese on the impact strength before and after ageing are given in Table 2, whilst Tables 3 to 5 give the respective influences on the impact strength before and after ageing of Si, P and S. Finally, in Table 6, data are given on the relative influence of carbon, manganese, phosphorus and sulphur on the impact strength before and after ageing. Increase of the contents of carbon, manganese, phosphorus and sulphur, within the tolerances of the investigated grade of steel, reduces its impact strength in the as rolled state and after mechanical ageing but does not affect its tendency to ageing. Increase of the Si content does not affect the impact strength in the as rolled state but reduces somewhat the tendency to ageing as a result of an increase in the content of metallic aluminium owing to the lower rate

Card 2/3

BRAYNIN, I.Ye., prof.; GUBENKO, N.V., inzh.

Effect of the method of introducing aluminum on the quality
of hearth steel. Izv.vys.ucheb.zav.; chern.met. 2 no.10:
89-99 O '59.   (MIRA 13:3)

1. Donetskiy industrial'nyy institut.
    (Steel--Metallurgy) (Aluminum)

S/137/61/000/011/091/123
A060/A101

AUTHOR: Gubenko, N. V.

TITLE: Effect of preliminary heat-treatment upon the toughness and mechanical ageing susceptibility of low-carbon steels

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 7, abstract 11I37 ("Tr. Donetsk. industr. in-ta", 1958, 32, 157-168)

TEXT: An investigation was carried out of the various forms of preliminary heat-treatment (normalizing, hardening with tempering, high tempering on H_B and a_k before and after ageing) of steel 3, killed and rimmed steel. The steels were rolled from a 3-ton ingot into 14-mm thick sheets. It was established that annealing of rolled sheet-steel leads to enlargement of the grain, lowering of a_k and an increase in the susceptibility to ageing with an increase of grain fineness. Normalizing raises the a_k and lowers the ageing susceptibility of steel. High tempering with slow cooling raises somewhat the a_k before and after ageing; rapid cooling after the tempering lowers the a_k. Hardening with subsequent high tempering considerably increases the a_k and lowers the ageing susceptibility of the steel.   T. Fedorova
[Abstracter's note: Complete translation]
Card 1/1

S/137/62/000/001/140/237
A052/A101

AUTHORS: Braynin, I. Ye., Gubenko, N. V.

TITLE: The effect of thermal hardening on mechanical properties and ageing
             tendency of low-carbon steel

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 35, abstract 1I239
             (V sb. "Stal'", Moscow, Metallurgizdat, 1961, 395 - 411)

TEXT: The effect of heat treatment on mechanical and magnetic properties
and microstructure of MCT.3кп (MSt.3kp) steel before and after strain ageing
(exposure of samples stretched by 10% to 250°C during 1, 3, 8, 24 and 50 hours)
was investigated. The heat treatment consisted of hardening at 900°C and temper-
ing at different temperatures and rates of cooling (in water or with the furnace).
The microstructure was investigated with an optical and electronic microscope
with a magnification of 500 and 5,000 respectively. It is established that the
tempering conditions affect the tendency to ageing, that is the changes of pro-
perties after it; these changes appear in the first 1 - 3 hours of exposure,
and thereafter the characteristics remain on the almost same level as before.
The optimum combination of strength and ductility was achieved after water har-

Card 1/2

The effect of thermal hardening on...

S/137/62/000/001/140/237
A052/A101

dening at 900°C and tempering at 450°C during 1 hour with water cooling. There
are 34 references.

Ye. Bukhman

[Abstracter's note: Complete translation]

Card 2/2

BRAYNIN, I.Ye.;GUBENKO, N.V.

Effect of preliminary hardening on the deformation aging processes in low-carbon steel. Fiz. met. i metalloved. 16 no.3:444-447 S '63.   (MIRA 16:11)

1. Donetskiy politekhnicheskiy institut.

GUBENKO, P.I.

Improving the process of the recovery of secondary tin as dense deposits from tin plate scraps. Kons. i ov. prom. 14 no.6:13-16 Je '59.   (MIRA 12:8)

1.TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshche-sushil'noy promyshlennosti.
                         (Tin)

REZNIK, B.Ye.; SKARRE, O.K.; GRECHANOVSKIY, V.F.; DLUGACH, R.Ye.;
        Prinimali uchastiye: NEDOSHOPA, G.N.; SEREBRO, V.D.;
        OVDIYENKO, A.N.; GUBENKO, R.V.

        Phototurbidimetric and radiometric methods for the determina-
        tion of sulfates in pure iron oxide. Khim. prom. no.5:381-
        384 My '63.   (MIRA 16:8)

        1. Dnepropetrovskiy gosudarstvennyy universitet (for Reznik,
        Skarre, Grechanovskiy, Dlugach).

ACCESSION NR: AP4040544   S/0064/64/000/006/0440/0442

AUTHOR: Grechanovskiy, V. F.; Reznik, B. Ye.; Skarre, O. K.; Dlugach, R. Ye.;
Gubenko, R. V.

TITLE: Production of ferric oxide with low iron content

SOURCE: Khimicheskaya promy*shlennost', no. 6, 1964, 440-442

TOPIC TAGS: ferric oxide, production, purification, analytical grade ferric oxide,
ferrite production, electrical industry, ferric carbonate

ABSTRACT: A procedure was worked out for the production of analytical grade ferric
oxide which comprises an improvement on the iron carbonate precipitation and cal-
cining method:

$$FeSO_4 + (NH_4)_2CO_3 \rightleftarrows FeCO_3 + (NH_4)_2SO_4$$

$$2FeCO_3 \xrightarrow{O_2} Fe_2O_3 + 2CO_2$$
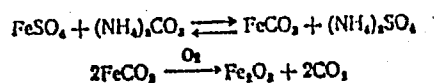
In the improved method the second wash after calcining is eliminated and the amount

Card 1/2

ACCESSION NR: AP4040544

of distilled water required in the first wash is reduced. The conditions found most amenable to the production of an $FeCO_3$ precipitate with a reduced amount of impurities which are fairly readily washed out include: pouring a 40% solution of $FeSO_4 \cdot 7H_2O$ (preheated to 60-65C) into a strongly agitated 25% $(NH_4)_2CO_3$ solution preheated to 35-40C and taken in two-fold excess (not in stoichiometric amounts). Mixing is to be continued for 30-60 minutes and the mixture then allowed to stand one hour. The precipitate is washed with hot water on the filter, dried and calcined. Subsequent washing is not required. Analysis of the ferric oxide thus produced showed sulfate content in the 0.01-0.08% range and alkali and alkaline earth content of 0.02-less than 0.05%. Such material may be used in ferrite production, in the electrical and radio technology. Orig. art. has: 1 equation and 4 tables.

ASSOCIATION: None

SUBMITTED: 00

SUB CODE: IC.   NO REF SOV: 003

ENCL: 00

OTHER: 000

Card 2/2

L 25064-65   EWT(m)/EPF(c)/EWP(j)/T   Pc-4/Pr-4   RM

ACCESSION NR: AP5002213   S/0303/64/000/006/0014/0016

AUTHOR: Orobchenko, Ye. V.; Pryanishnikova, N. Yu.; Gubenko, R. V.

TITLE: Lacquers and enamels based on oiliness alkyd resins modified with
synthetic fatty acids having 20 or more carbon atoms

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 6, 1964, 14-16

TOPIC TAGS: lacquer, enamel, alkyd resin, glyptal resin, fatty acid, phthalic
anhydride, tallow oil

ABSTRACT: Experiments were carried out on the production of synthetic glyptal or
alkyd enamel resins modified with C_{20} fatty acids from the Volga-Don Combine in
order to expand the market for natural fat substitutes. After several attempts
to produce a resin which would combine well with pigments and could be stored
without solidifying failed, a mixture of 26.7% phthalic anhydride, 19.6% glycerol,
18% synthetic fatty acid and 35.7% tallow oil was found most advantageous. The
product has a low acid number, polymerization takes place in 150-240 seconds, and
it is readily soluble in either white spirit or toluene. When dissolved in xy-
lene, the resin makes a lacquer with an acid number of 5, a viscosity of 15 sec,
at 18 - 20C, 50% solid residue and a drying time of 2 hours when 10% desiccant is

Card   1/2

L 25064-65

ACCESSION NR: AP5002213

added. The process required esterification by glycerol at 180 - 200C for half an
hour and then condensation at 240C for 2.5 - 4 hours. After drying for 2 hours
at 120C, the lacquer had good hardness, elasticity, and resistance to water,
gasoline, electricity and pressure, as required by GOST 8018-56. It is now used
in making blue, brown and red enamels which are better in some ways than the
FSKh brand used on farm machinery, and which conform to GOST 926-52. Orig. art.
has: 9 tables and 1 graph.

ASSOCIATION: None

SUBMITTED: 00   ENCL: 00   SUB CODE: MT

NO REF SOV: 001   OTHER: 000

Card 2/2

Obtaining ferric oxide with a low iron content. Khim. prom.
no.6:440-442   Je '64.   (MIRA 18:7)

L 04021-67   EXT(m)/EWT(m)   JM

ACC NR: AP6006720   (A)   SOURCE CODE: UR/0303/66/000/001/0018/0020

AUTHOR: Orobchenko, Ye. V.; Pryanishnikova, N. Yu.; Gubenko, R. V.

ORG: None

17

TITLE: Paint and varnish materials based on carbamide-alkyd resins

B

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 1, 1966, 18-20

TOPIC TAGS: varnish, urea resin, alkyd resin

ABSTRACT: The paper describes the synthesis of carbamide-alkyd varnishes from glyptal resins containing no fats. The carbamide component used was K-411-02 butanolized urea-formaldehyde resin. The varnishes were prepared by mixing this resin in the cold with a 50% toluene solution of the alkyd resin. A study of the physicomechanical properties of the carbamide-alkyd films dried for 1 hr at 120 °C showed that their impact strength and hardness increase with the acid number of the alkyd resin. When the content of the carbamide component exceeds 80%, the impact strength decreases; when the resin content drops below 50%, the films cease to dry. The optimum physicomechanical properties are obtained when the components of the carbamide-alkyd resins are taken in the proportion of 1:1. It is shown that by using glyptal resins modified with C_{20} and higher synthetic fatty acids and with distilled tall oil in combination with butanolized urea-formaldehyde resin, one can obtain enamels and primers forming stable atmosphere-resistant hot-drying coatings, whereas glyptal resins modified with

Card 1/2   UDC: 667.633.263.3

ACC NR: AP6006720

C_7-C_9 synthetic fatty acids in combination with butanolized urea-formaldehyde resin can be used to prepare colorless varnishes and a hot-drying white enamel for inner and outer coatings. Orig. art. has: 2 figures and 5 tables.

SUB CODE: 11/ SUBM DATE: none

Card 2/2

OYKS, G.N., doktor tekhn. nauk; BORODIN, D.I.; TSYKIN, L.V.; KAPUSTIN, I.V.;
    SOROKIN, A.A.; KUTSENKO, A.D.; ZAGREBA, A.V.; REKHLIS, G.N.;
    TRUSEYEV, A.I.; Prinimali uchastiye: GUBENKO, S.M.; FOMIN, S.I.;
    KUBLITSKIY, A.M.; SAF'YANOV, V.P.; VOLYNKIN, V.M.

Some problems in the hydrodynamics of a converter bath. Met.
i gornorud. prom. no.3:29-31 My-Je '65.   (MIRA 18:11)

LAZIDI, G.Kh.; GUBENKO, T.L. (Krivoy rog)

Functional state of the thyroid gland in silicosis. Gig.
truda i prof. zab. 4 no.12:42-43 D '60.   (MIRA 15:3)

1. Krivorozhskiy nauchno-issledovatel'skiy institut gigiyeny
truda i professional'nykh zabolevaniy.
(THYROID GLAND)
(LUNGS—DUST DISEASES)

GUBENKO, T.L. [Hubenko, T.L.]

Commercial production of gamma globulin from placental serum by
the rivanol-alcohol method. Ukr. biokhim. zhur. 33 no.1:14-21 '61.
(MIRA 14:3)

1. Biochemical Laboratory of the Odessa Research Institute for
Epidemiology and Microbiology.
            (GAMMA GLOBULIN)   (BLOOD—SEDIMENTATION)
                    (RIVANOL)

GUBENKO, T.L. [Hubenko, T.L.]; SMIRNOVA, V.I. [Smyrnova, V.I.]

Improved rivanol-alcohol method for obtaining γ^2-globulin. Ukr. biokhim. zhur. 35 no.5:747-753 '63.   (MIRA 17:5)

1. Mechnikov Research Institute for Epidemiology and Microbiology, Odessa.

GUBENKO,T.P., professor

Incidental losses in rotary oil-well drilling. Nauch.zap. IMA L'viv. fil. AN URSR no.1:41-60 '53.   (MLRA 8:11)
                (Oil well drilling)

GUBENKO,T.P.

Capacitor-excited braking system for induction motors. Nauch.zap.
IMA L'viv. fil. AN URSR. Ser. avtom. i izm. tekh.3 no.2:84-126 '54
    (Electric motors, Induction)   (MIRA 8:11)

GUBENKO, Tikhon Pavlovich

GUBENKO, Tikhon Pavlovich (L'vov Polytechnic Inst) - Academic degree of Doctor
of Technical Sciences, based on his defense, 25 November 1955, in the Council of
the Moscow Order of Linin Power Engineering Inst imeni Molotov, of his dissertation
entitled: "Induction Machine Under Deceleration Conditions."   for the Academic
Degree of Doctor of Sciences

SO: Byulleten' Ministerstva Vysshego Obrazovaniya SSSR, List No. 3, 4 February 1956
    Decisions of the Higher Certification Commission Concerning Academic Degrees
    and Titles.

JPRS/NY   554

8 (5)

SOV/112-57-5-10297

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 5, p 103 (USSR)

AUTHOR: Gubenko, T. P.

TITLE: Induction-Machine Operation Under Stator-Winding Distorted-Symmetry
Conditions (Rabota induktsionnykh mashin pri iskazhenii simmetrii statornoy
obmotki)

PERIODICAL: Nauch. zap. L'vovsk. politekhn. in-t, 1955, Nr 34, pp 75-112

ABSTRACT: Intentional distortion of the symmetry of stator windings is used to
obtain flat mechanical characteristics of a motor that are useful in regulating
speed, in limiting speed when a load is lowered by a crane, and in decelerating.
There are 35 possible non-symmetrical winding schemes, which can be broken
into the following three groups: (1) a series connection of positive-, negative-,
and zero-phase-sequence impedances; (2) independent connection of all phase-
sequence impedances; (3) a series-parallel connection of the impedances.
Equivalent circuits and expressions for positive-, negative-, and zero-phase-

Card 1/2

SOV/112-57-5-10297

Induction-Machine Operation Under Stator-Winding Distorted-Symmetry Conditions

sequence currents are presented for all 35 connection schemes. Importance
of the expressions for braking drives is noted. A detailed analysis brings the
conclusion that the well-known Fortesque scheme (1918), in which two
paralleled phases are connected to a single supply phase, and which has been
adopted by "Siemens-Schuckert" in hoist drives, is considerably inferior in its
braking effectiveness to other non-symmetrical schemes. On the whole, all
such schemes differ little from plugging and dynamic-braking schemes. The
mechanical characteristics of motors with a non-symmetrical scheme can be
built by a graphoanalytical method on the basis of equivalent circuits. Experi-
mental investigations of a 4-kw, 130-v, 1,440-rpm motor yielded mechanical
characteristics for various schemes that were close to the estimated
characteristics, and also permitted determination of the degree of non-
symmetry of currents.

L.B.G.

Card 2/2

GUBENKO, T.P., professor.

Circle diagrams of induction machines. Vest. elektroprom. 27 no.4:53-60
Ap '56.   (MLRA 9:11)

1. L'vovskiy politekhnicheskiy institute.
   (Electric motors, Induction)

GUBENKO, T. P. (Dr. Tech. Sci.)

      "Method of distortion of symmetry of stator winding and voltage for regulating and retarding speed of rotation of an asynchronous motor."

paper read at the Session of the Acad. Sci. USSR, on Scientific Problems of Automatic Production, 15-20 October 1956.
<u>Automatika i telemekhanika,</u> No. 2, p. 182-192, 1957.

9015229

BARDACHEVSKIY, V.T.; VELICHKO, Yu.T.; VLASENKO, N.V.; GUBENKO, T.P.;
DRYAKHLOV, A.I.; KARANDEYEV, K.B.; KARNYUSHIN, L.V.; MAKSIMOVICH,
N.G.; SOKOL'NITSKIY, G.Z.

M.G. Liukov. Izv. vys. ucheb. zav.; energ. no.5:127 My '58.

(MIRA 11:8)

(Liukov, Mikhail Grigor'evich, 1915-1958)

Gubenko, T.P.

AUTHORS: Andriyevskiy, A.I., Antonovich, A.V., Bogatyrev, N.A., Glushchenko, I.P., Gubenko, T.P., Zamora, Ye.P., Karandeyev, K.B., Lukin, V.I., Lukin, S.I., Maksimovich, M.G., Mozer, V.P., Petrenko, S.I., Papernyy, Ye.A., Privalova, K.A., Sinitskiy, Yu.I., Sinaikov, Ya.T., Shcherbakevich, B.P., Chuchman, I.S., Yagello, I.M., Brilinskiy, B.M., and others

SOV/143-58-10-20/24

TITLE: O.Ye. Krushel', Deceased

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika, 1958, Nr 10, p 147 (USSR)

ABSTRACT: This is an obituary of Doctor of Technical Sciences, Professor Georgiy Yevgen'yevich Krushel' of the L'vovskiy politekhnicheskiy institute (L'vov Polytechnic Institute). Krushel' was born in Moscow in 1912 as the son of an engineer. He died on July 20, 1958 because of an accident. He graduated in 1931 from the "Proftekhshkola". While working in the industry, O. Ye. Krushel' studied at the Khar'kovskiy mekhaniko-mashinostroitel'nyy institut (Khar'kov Institute of

Card 1/3

extensively prime movers for the feed pumps of high-power boiler-turbine units. Besides research work, Krushel' devoted his attention to the training of engineers in his field. The Soviet Union lost one of its foremost scientists. There is 1 photograph.

Card 3/3

GUBENKO, Tikhon Pavlovich. Prinimali uchastiye: KARANDEYEV, K.B.,prof.;retsenzent;
BASKUTIS, P.A., prof., retsenzent; KOSTENKO, D.P., dots., retsenzent;
LUKIN, V.I., dots., otv. red.; BLIKH, V.V., red.; SARANIUK, T.V., tekhn.
red.

[Loci of the electric current of induction machinery; application and
methodology for designs] Geometricheskie mesta tokov induktsionnykh
mashin; metodika postroenii i primenenie. L'vov, Izd-vo L'vovskogo
univ., 1960. 258 p.   (MIRA 14:9)

1. Chlen-korrespondent AN SSSR (for Karandeyev).
          (Electric motors, Induction)

S/105/60/000/05/25/028
B007/B008

AUTHORS: Andrianov, V.N., Astakhov, N.V., Gubenko, T.P., Kostenko, M.P.,
             Larionov, A.N., Lopukhina, Ye.M., Petrov, G.N., Somikhina, G.S.,
             Yuferov, F.M., Chilikin, M.G.

TITLE: Yu.S. Chechet (Deceased)

PERIODICAL: Elektrichestvo, 1960, No. 5, p. 89

TEXT: Yuriy Sergeyevich Chechet, Professor at the Moskovskiy energeticheskiy
institut (Moscow Institute of Power Engineering), scientist and pedagogue, and
an expert in the field of electrical micromachines, died on February 26, 1960.
He was born on February 2, 1894. He studied at the mekhanicheskiy fakul'tet
Kiyevskogo politekhnicheskogo instituta (Department of Mechanics at the
Kiyev Polytechnic Institute) from 1913 to 1919. From 1919 teaching activity in
Odessa and in Moscow. In 1923 he graduated from the elektrotekhnicheskiy
fakul'tet Moskovskogo vysshego tekhnicheskogo uchilishcha (Department of
Electrical Engineering at the Moscow Higher Technical School). He published
about 40 scientific studies. From 1931-1942 Director of the kafedra elektriche-
skikh mashin (Chair for Electrical Machines) at the Moskovskiy institut

Card 1/2

Yu. S. Chechet (Deceased)   S/105/60/000/05/25/028
                                             B007/B008

mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (Moscow Institute of the
Mechanization and Electrification of Agriculture). From 1942 until his death he
was Professor at the kafedra elektricheskikh mashin Moskovskogo energeticheskogo
instituta (Chair for Electrical Machines at the Moscow Institute of Power
Engineering). At the same time he directed a chair at the Voyenno-inzhenernaya
Krasnoznamennaya akademiya im. Kuybysheva (Military "Red Banner" Engineering
Academy imeni Kuybyshev) for a number of years. He took his doctor's degree in
1940. He wrote his dissertation on "Theoretical Principles for the Designing of
Universal Micromotors" ("Teoreticheskiye osnovy proyektirovaniya universal'nykh
mikrodvigateley."). He was a Deputy of the Mossovet (Moscow Soviet of Workers'
Deputies) and holder of the Order of Lenin and a number of medals, as well as
Chairman of the Section Electrical Machines of the MONITOE. There is 1 figure.

Card 2/2

KASUM-ZADE, D.S. (Baku); KULIYEV, S.M. (Baku); SHISHCHENKO, R.I. (Krasnodar), SIDOROV, N.A. (Krasnodar); SHASHIN, V.D. (Kazan'); KAS'YANOV, V.M., (Moskva); GUBENKO, T.P. (L'vov)

Well bottom automatic device for turbodrilling; comments on A.A.
Minin's article published in "Neftiance khoziaistvo," no.10 1959.
Neft.khoz. 38 no.2:19-22 F '60.   (MIRA 13:8)
                    (Turbodrills)

S/135/63/000/002/008/015
AC06/A101

/ 23 &J

AUTHORS: Gubenko, T. P., Doctor of Technical Sciences, Batranin, Yu. Ye.,
            Kirpatovskiy, S. I., Lukin, V. I., Candidates of Technical Sciences,
            Rybakov, V. V., Fal'kevich, V. P., Engineers

TITLE: Automatic quality control of spot welding by infrared radiation

PERIODICAL: Svarochnoye proizvodstvo, no. 2, 1963, 25 - 27

TEXT: In 1960 - 1961, the authors have been studying at the L'vov Poly-
technic Institute the correlation between infrared radiation and the welding
process and the quality of the weld joints produced. The results obtained were
used to develop an automatic device for quality control of spot welding during
the welding process by the intensity of the infrared radiation flux which is ir-
radiated from the annular electrode-adjacent zone of the part to be welded. When
the given infrared radiation level, corresponding to a given diameter of a spot,
has been attained, the welding current is switched-off. The machine consists of
the measuring head and the measuring unit, which are described and illustrated.
The device was tested on spot-welding machine WP 62 d/60 with up to 500 kg elec-

Card 1/2

Automatic quality control of...

S/135/63/000/002/008/015
A006/A101

trode compression force. The welding current attained 18 kamp. Special experimental welding tests were performed; optimum conditions were not observed, i.e. the current and the electrode compression force were lowered or increased, and the methods of preparing the specimens varied. The main properties of the new machine were revealed by investigating the dependence of the weld joint strength and the dimensions of the cast nucleus upon the parameters of the welding conditions and the preparation of the specimens. It was found that the scattering of results in the breaking force per welded spot was only +6% at varying compression force of the electrodes. Analogous results were obtained when the welding current was changed. The strength of the weld joint was 2,600 kg on the average for 2.5 mm thick plates and varied within +8%. The tests show that high stability of welding one spot is assured, independent of the changes in welding conditions, parameters and preparation of specimens. There are 5 figures

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov Polytechnic Institute)
(Rybakov)

Card 2/2

GUBENKO, T.P., doktor tekhn.nauk, prof.; FIL'TS, R.V., inzh.

Calculation of the characteristics of symmetrical modes of induction
motors with excitation from static condensers. Elektrichestvo
no.10:58-61 O '65.
(MIRA 18:10)

1. L'vovskiy politekhnicheskiy institut.

GUBENKO, Tikhon Pavlovich, doktor tekhn.nauk, prof.; DENIS Bogdan Dmitriyevich, kand.tekhn.nauk, dotsent; KUZ'MYAK, Boris Danilovich, starshiy prepodavatel'

Reviews and bibliography. Izv.vys.ucheb.zav.; elektromekh. 8 no.8:954-955 '65.   (MIRA 18:10)

1. L'vovskiy politekhnicheskiy institut.

GUBENKO, T.P., dokter tekhn. nauk, prof.

Reviews and bibliography. Elektrotekhnika 36 no.8:63-64 Ag '65.
(MIRA 18:9)

GUBENKO, T.P.; DEVYATKOV, N.D.; DOMANSKIY, B.I.; DONSKOY, A.V.; YEFREMOV,
        I.S.; ZHEZHERIN, R.P.; KAGANOV, I.L.; MANDRUS, D.B.; NETUSHIL,
        A.V.; PODGURSKIY, Ye.L.; ROZENFEL'D, V.Ye.; SVENCHANSKIY, A.D.;
        CHUKAYEV, D.S.; SHLYAPOSHNIKOV, B.M.

        Professor G.I. Babat; obituary. Elektrichestvo no.1:94 Ja '61.
                                                            (MIRA 14:4)
                    (Babat, Georgii Il'ich, 1911-1961)

KLIMENKO, K., doktor ekonom.nauk (Moskva); GUBENKO, V. (Moskva);
     KATSENELINBOYGEN, A., mladshiy nauchnyy sotrudnik (Moskva);
     LUKASHINA, Ye. (Moskva); POLIS, L. (Moskva).

     Calculating cost with automation. Bukhg.uchet 14 no.11:39-43
     N '57.   (MIRA 10:11)

     1. Glavnyy bukhgalter zavoda imeni Ukhtomskogo (for Gubenko).
     2. Institut ekonomiki AN SSSR (for Katsenelinboygen). 3. Starshiy
     bukhgalter kuznechno-pressovogo tsekha zavoda imeni Ukhtomskogo
     (for Lukashina). 4. Starshiy ekonomist kuznechno-pressovogo
     tsekha zavoda imeni Ukhtomskogo (for Polis).
               (Automation) (Agricultural machinery industry--Costs)

GUBENKO, V.A., inzh.; NORENKO, V.P., inzh.

Investigating parameters of welding in a protective, water vapor
atmosphere. Svar. proizv. no.3:20-22 Mr '62.   (MIRA 15:2)

1. Kramatorskiy nauchno-issledovatel'skiy i proyektno-tekhnologicheskiy
institut mashinostroyeniya.
                    (Electric welding) (Protective atmospheres)

L 28474-66   EWP(k)/EWT(m)/T/EWP(v)/EWP(t)/ETI   JD/HM

ACC NR: AP6010140   SOURCE CODE: UR/0125/66/000/003/0029/0032

AUTHOR: Gubenko, V. A.; Bagryanskiy, K. V.   64
                                                                      B

ORG: [Gubenko] NIIPTmash; [Bagryanskiy] Zhdanov Metallurgical Institute (Zhdanovskiy metallurgicheskiy institut)

TITLE: Effect of certain properties of gases on the parameters of the welding arc

SOURCE: Avtomaticheskaya svarka, no. 3, 1966, 29-32

TOPIC TAGS: welder,   gas property, arc welding, argon, ammonia, water vapor, hydrogen, heat conductivity / GS-500 welder   16

ABSTRACT: The experiments dealt with the magnitude of the welding current I_w, arc voltage U_{arc} and minimal possible arc voltage U_{min} during the automatic beading of St. 3 steel plates with Sv-08 wire electrode (diameter 2mm). The arc was exposed to air and various gases: argon, ammonia, water vapor, hydrogen. Arc burning in the vapors of electrode metals was also investigated. Power source: GS-500 welding current generator; gas consumption ~ 25 liters/min; electrode feeding rate 75-300 m/hr. These experiments primarily showed that the power of arcs burning in various gases is roughly the same given a constant electrode feeding rate and increases with this rate. Further, different voltages are required for arcs of the same power that burn in different atmospheres; then the welding current intensity varies for one and the

Card   1/2   UDC: 621.791.014

L 28474-66

ACC NR: AP6010140

same fusion rate of electrode wire. Thus, gaseous atmospheres may be arranged into a series by degree of their influence on welding current. In a decreasing sequence of current intensity this series is: arc with supply of argon; arc in vapors of electrode metals without supply of air; arcs with supply of air, ammonia, water vapor and hydrogen, respectively. This order is reversed with respect to U_{arc} and U_{min}. Arc current and voltage are most greatly affected by the heat conduction of the gases occupying and surrounding the arc gap; by contrast the effect of ionization potential, excitation potential, and dissociation energy is in this respect secondary. At high temperatures hydrogen is the gas with the highest heat conduction and argon, with the lowest. Thus, e.g. given the same arc current intensity, the increase from 1 to 2 m^3/hr in the supply of argon, a gas with a low heat conduction, increases the arc voltage V_a to a lesser extent (from 90 to 100 v) than the addition of the same amount of the highly heat conducting argon-hydrogen mixture to argon (50% Ar + 50% NH_3) (V_a increases from 90 to 120 v). The increase in heat conduction of the gaseous phase increases the total arc voltage owing to the dominant increase in cathode and anode voltage drop and decrease in arc current, all other conditions remaining equal. Given the same current intensity, arcs burning in the more highly heat-conducting gases are characterized by higher electrode power and hence also greater productivity of the process. Orig. art. has: 4 figures, 2 tables.

SUB CODE: 13, 11/ SUBM DATE: 11Mar65/ ORIG REF: 012

Card 2/2

GUBENKO, V.A., inzh.

Oxidizing properties of water vapor during welding. Svar.
proizv. no.7:12-14 Jl '63.   (MIRA 17:2)

1. Nauchno-issledovatel'skiy i proyektno-tekhnologicheskiy
institut mashinostroyeniya, Kramatorsk.

GUBENKO, V.A., inzh.; BAGRYANSKIY, K.V., kand. tekhn. nauk

Double arc formation during gas-arc cutting. Svar. proizv. no.3:
25-26 Mr '65.   (MIRA 18:5)

1. Zhdanovskiy metallurgicheskiy institut.

GUBENKO, V. K.

Thiocyanate compounds in dog saliva and cerebrospinal fluid. V. K. Gubenko. *Byull. Eksptl. Biol. Med.* 13, No. 3/4, 102-3(1942). — Up to 3 mg. % of CNS compds. are found in dog saliva from the submaxillary glands; the gland excretion of CNS compds. weakens (or exhausts itself) rapidly. Artificial feeding of KCNS increases the content of CNS compds. in saliva. In the cerebrospinal fluid up to 2 mg. % of CNS compds. are found; these are not increased by feeding KCNS.   G. M. Kosolapoff

USSR/Medicine - Effects of Low   Nov/Dec. 52
                    Temperatures

"The Functional Interrelationships of the Cortex of
the Great Hemispheres and the Internal Organs of an
Organism Subjected to the Effects of Low Tempera-
tures," V.K. Gubenko, Chair of Normal Physiol,
Stavropol Med Inst

"Zhur Vysh Nerv Deyat" Vol 2, No 6, pp 835-843

Describes experiments on animals exposed to low
temperatures. Observations revealed a species dif-
ferentiation in adaptive reaction of warm-blooded
organic to low temperature; dogs showed consider-
ably more favorable reaction than rabbits. In
this process of adaption a definite dynamic flow
of changes in the functional state of the cere-
bral cortex was observed. Says this dependence
of changes of the vegetative reactions on the
functional state of the higher sections of the
cerebrum as well as the increase of the organ-
ism's resistance to temperature changes clearly
demonstrate the decisive part played by the
higher sections of the central nervous system
in the process of adaption.

246730

GUBENKO, V.K., Cand Med Sci -- (diss) "Effect of *hypothermal* cooling on conditioned reflex reflex activity and certain vegetative functions." Stavropol', 19-7, 18 pp (Min of Health RSFSR. Voronezh State Med Inst) (KL, 28-58, 109)

- 78 -

COUNTRY   : USSR
CATEGORY   : Pharmacology, Toxicology. Narcotics

ABS. JOUR.   : RZBiol., No. 12 1958, No. 55575

AUTHOR   : Gubenko, V.K.
INST.   : Stavropol Medical Institute
TITLE   : The State of the Conditioned-Reflex Activity and
                of Certain Vegetative Functions upon Cooling of
                Dogs under Conditions of General Narcosis
ORIG. PUB.   : Uch. Zap. Stavropol'sk. Med. In-t, 1957, No.1,
                4-94

ABSTRACT   : Defensive motor electro-skin conditioned reflexes
                disappearing in cold, narcotized dogs, were com-
                pletely restored 25-30 min. after cessation of
                cooling. Restoration time was shortened upon re-
                petition of cooling under narcosis (did not ex-
                ceed 25 min.). Narcotized animals show markedly
                reduced resistance to cold. After numerous cool-
                ings under narcosis (rectal temp. 30°) and without
                narcosis in dogs, no pathologic functional changes
                were observed. The observations were carried out
                over a period of 5 years. -- From the author's
                resume.
CARD: 1/1

BUDYLIN, V.G., prof.; GUBENKO, V.K.

Method of investigating gas exchange in dogs. Uch. zap. Stavr. gos. med. inst. 12:60-61 '63.

Gas exchange in old dogs. Ibid.:62-63

Alteration of gas exchange under the influence of pathological interoception in old and young dogs. Ibid.:71-72

Effect of cortisone on the gas exchange in old dogs. Ibid.:73-74
(MIRA 17:9)
1. Kafedra normal'noy fiziologii (nauchnyy rukovoditel' prof. V.G. Budlin) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

GUBENKO, V.P., podpolkovnik med.sluzhby

Result of the use of plastic surgery in closing a burn wound.
Sbor.nauch.trud.Kiev.okruzh.voen.gosp. no.4:40-41 '62.

(BURNS AND SCALDS)   (SKIN GRAFTING)   (MIRA 16:5)

GUBENKO, V.S. (Dnepropetrovsk)

One type of integral transformations. Prikl. mekh. 1 no.4: 67-72 '65.

(MIRA 18:6)

1. Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo transporta.

AUTHORS: Mossakovskiy, V. I., Gubenko, V. S.

TITLE: On the Pressure of a Annular-shaped Die on an Elastic Semi-space (O davlenii kol'tsevogo shtampa na uprugoye poluprostranstvo)

PERIODICAL: Nauchn. zap. Dnepropetr. un-t, 1956, Vol 45, pp 171-175

ABSTRACT: The problem concerns the pressures developed underneath a rigid, flat-base die with a plan-view configuration of a circular ring. The proposition is reduced to one of the linear-stress relationship problems with the aid of a method suggested by V. I. Mossakovskiy (Prikl. matem. i mekhan., 1954, Vol 18, Nr 2, pp 187-196, RZhMekh., 1955, Nr 1, abstract 317). A linear second-order differential equation is indicated for the solution of the linear-stress problem obtained.

                                                         N. A. Rostovtsev

                        1. Dies--Pressure   2. Stress analysis
Card 1/1   3. Mathematics--Applications

AUTHOR: Gubenko, V.S. (Dnepropetrovsk)   40-21-2-16/22

TITLE: Some Contact Problems of the Theory of Elasticity and Fractional Differentiation (Nekotoryye kontaktnyye zadachi teorii uprugosti i drobnoye differentsirovaniye)

PERIODICAL: Prikladnaya Matematika i Mekhanika, 1957, Vol 21, Nr 2,
                                                       pp 279-280 (USSR)

ABSTRACT: In order to transform the Laplace equation

$$(1) \quad \frac{\partial^2 u_0}{\partial \varsigma^2} + \frac{1}{\varsigma} \frac{\partial u_0}{\partial \varsigma} + \frac{\partial^2 u_0}{\partial z^2} = 0$$

for the spatial axial symmetric case into the Laplace equation for the plane

$$(2) \quad \frac{\partial^2 u_{-1/2}}{\partial \varsigma^2} + \frac{\partial^2 u_{-1/2}}{\partial z^2} = 0 \,,$$

the author differentiates (1) n times with respect to ς and he obtains

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Some Contact Problems of the Theory of Elasticity   40-21-2-16/22
and Fractional Differentiation

$$(3) \quad \frac{\partial^2 u_n}{\partial \varsigma^2} + \frac{2n+1}{\varsigma} + \frac{\partial u_n}{\partial \varsigma} + \frac{\partial^2 u_n}{\partial z^2} = 0$$

with

$$u_n = c \frac{\partial^n u_0}{\partial(\varsigma^2)^n} \qquad\qquad c - \text{arbitrary constant}.$$

In the last equation the derivative of the order $1/2$ with
respect to ς^2 is taken and it is put $n = -1/2$. Then

$$u_0 = c \frac{\partial^{1/2} u_{-1/2}}{\partial(\varsigma^2)^{1/2}} \quad \text{and the equation (3) reduces to (2).}$$

This method is applied to two examples in order to reduce
spatial contact problems to plane problems. There are 4 So-
viet references.

SUBMITTED: May 19, 1956

AVAILABLE: Library of Congress

Card 2/2   1. Elasticity--Theoretical analysis

GUBENKO, V. S., Candidate Phys-Math Sci (diss)-- "Spatial contact problems in

the theory of elasticity". Dnepropetrovsk, 1959. 9 pp (Min Higher Educ Ukr SSR,

Dnepropetrovsk State U im 300th Anniversary of the Unification of the Ukraine

with Russia), 125 copies (KL, No 25, 1959, 125)

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

GUBENKO, V.S. (Dnepropetrovsk)

Pressure of an axisymmetric annular punch on an elastic layer
and an elastic semispace. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i
mashinostr. no.3:60-64 My-Je '60.   (MIRA 13:6)
                    (Punches)

GUBENKO, V.S. (Dnepropetrovsk)

Pressure of a set of circular annular punches on an elastic
semispace. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i mashinostr. no.4:
145-147 Jl-Ag '60.   (MIRA 13:8)
        (Elasticity)   (Punches)

GUBENKO, V.S. (Dnepropetrovsk); MOSSAKOVSKIY, V.I. (Dnepropetrovsk)

Pressure of an axisymmetric annular stamp on an elastic semispace.
Prikl. mat. i mekh. 24 no. 2:334-340 Mr-Ap '60.   (MIRA 14:5)
(Elasticity)

GUBENKO, V.S. (Dnepropetrovsk)

Problems of a circular punch cohering with a semispace and a layer
weakened by an annular groove. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i
mashinostr. no.5:151-153 S-O '61.   (MIRA 14:9)
(Punches) (Elastic plates and shells)

MOSSAKOVSKIY, V.I. [Mossakovs'kii, V.I.] (Dnepropetrovsk); ..., V.J.
        [Rubenko, V.J.] (Dnepropetrovsk)

        Solving the problem of the pressure of a circular die on an
        elastic semispace. Prykl. mekh. 7 no. 1:25-33 '61.
                                                        (MIRA 14:2)

        1. Dnepropetrovskiy s l'skokhozyaystvennyy institut.
                        (Elastic plates and shells)

31206

S/106/61/000/012/010/010
A055/A127

9, 9/10

AUTHORS: Rodionov, Ya. S., Qubenko, V. S.

TITLE: On the possibility of a numerical prediction of the ionosphere state

PERIODICAL: Elektrosvyaz', no. 12, 1961, 64 - 66

TEXT: This article deals with the possibility of applying statistical extrapolation to the prediction of the critical frequencies of the F_2 layer some hours in advance. Calculations were made for the ionization density. For the extrapolation of this density a linear operator was used expressing the predicted deviation of the ionization density $\Delta N_{pred}(t_{pred})$ in the form of the weighted sum of the observed deviations in the preceding moments $\Delta N(t_k)$:

$$\Delta N_{pred}(t_{pred}) = \sum_{k=0}^{n} A_k \Delta N(t_k).$$

The zero number corresponds to the last observation. The coefficients A_k are found from the system of linear equations:

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On the possibility of a...

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A055/A127

$$\sum_{k=0}^{n} A_k R(t_k, t_m) = R(t_{pred}, t_m),$$

$$m = 0, 1, 2, \ldots, n;$$

where $R(t_i, t_j)$ is the coefficient of correlation between the ionization densities at the moments t_i and t_j. The ratio $\gamma = \sigma_{pred}/\sigma$ (where σ is the RMS deviation of the ionization density from its average monthly value, and σ_{pred} is the RMS deviation of the predicted values of the ionization density from its real values) was chosen as the criterion of the prediction efficiency. If $\gamma < 1$, the chosen extra-polation method gives a positive effect. After reproducing the formulae giving the probability of rejection and the probability of the absence of reflection, respectively, the authors state the practical results of their investigation. To take into account the fact that the process is nonstationary, an operator (i. e. a separate set of coefficients A_k) was calculated for every hour of the day. All the calculations were made for June and December. The time of observation was 18 hours, and the predicted time 6 hours. The results of the calculations (carried out by the electronic digital computer of T. T. Kulikova) show that the statistical extrapolation gives a positive effect for June as well as for December of the years

Card 2/3

On the possibility of a...

1948, 1950 and 1953. The index of the extrapolation efficiency for every month was:

$$Y_{aver.} = \frac{1}{24} \sum_{i=0}^{23} Y_i,$$

where Y_i corresponds to the i-th hour of the day. For December, the values of Y_{aver} proved to be somewhat greater than for June. A table reproduced in the article shows the dependence of Y_{aver} on the level of solar activity. This table indicates that there is no clearly defined dependence of Y_{aver} upon the number of sun-spots. There are 3 figures, 2 tables and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Shibata, Watanabe, On a method of short-term prediction of foF_2. "Journ. Radio Res. Lab.", 1960, 7, no. 29. The names of the Soviet-bloc authors or scientists mentioned in the article are: L. N. Lyakhova and T. T. Kulikova.

Card 3/3

S/110/60/000/004/003/005
E073/E535

9.2530

AUTHOR: Gubenko, Ye. I., Engineer

TITLE: Magnetic Amplifier as a Multi-contact Relay

PERIODICAL: Vestnik elektropromyshlennosti, 1960, No.4, pp.53-56

TEXT: The magnetic amplifier, Fig.2, is a four-contact relay of the transformer type. Each of the four separate load circuits has its own feedback with coefficients exceeding unity. The power fed into the primary winding should be calculated in accordance with the number of "contacts". In other respects the operation of this magnetic amplifier is similar to that with a single switching circuit. Experimentally determined dependences of I_H in three circuits as a function of I_H in the fourth with a constant control current I_y show that fluctuations in the current intensity between 0 and 70 mA in one load circuit will produce changes not exceeding 4 to 10% in the other three load circuits. This is attributed to the fact that the amplifier operates on the saturated section of its characteristic. The characteristics of the four-"contact" relay show that the magnetic amplifier does not lose its relay properties if individual load circuits are eliminated. Slight

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Magnetic Amplifier as a Multi-contact Relay

fluctuations were observed in the "pull" and the "drop away"
currents; this is not an important drawback since the parameters
are always chosen with a certain reserve due to the fluctuations
in the supply voltage and the frequency. In the tested magnetic
amplifier the total power at the output of the "contacts" was about
0.25 W. The "contacts" can be normally open or normally closed
and polarized 2-position "contacts" can also be obtained. The
following conclusions are arrived at: it is possible to produce
magnetic amplifiers acting as contactless relays with several
uniform electrically independent output circuits. A change in the
parameters of the individual circuits has scarcely any influence on
the operating conditions of the other output circuits. By changing
the "shift" (pre-magnetization) current, relays with differing
characteristics can be obtained. Fluctuations in the voltage and
frequency of the mains supply has the same effect as in an ordinary
choke-type contactless relay. The obtained results can be applied
for designing a 2-contact transformer type relay with character-
istics corresponding to a 3-position polarized relay. There are
7 figures and 2 Soviet references.
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S/110/60/000/004/003/005
E073/E535

Magnetic Amplifier as a Multi-contact Relay

Fig.2

Magnetic amplifier -
transformer type relay
with 4 "contact" relays.

[Abstractor's Note:
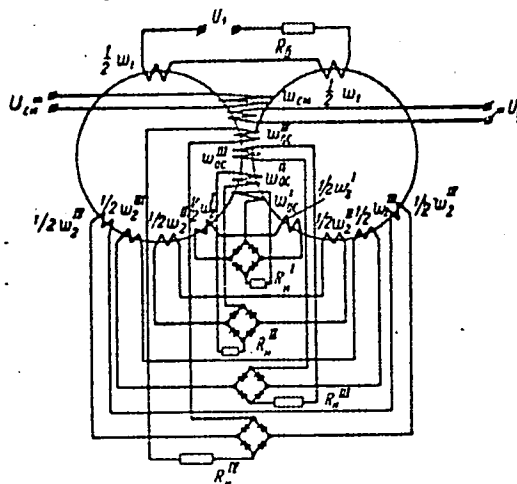Symbols not defined]

Рис. 2 Магнитный усилитель — реле трансформаторного типа с четырьмя цепями .контактов".

Card 3/3

ACC NR: AT7004480   SOURCE CODE: UR/3245/66/000/002/0140/0143

AUTHOR: Gubenko, Ye. I.

ORG: Kiev Institute of Automation (Kiyevskiy institut avtomatiki)

TITLE: An adaptive system for collection and processing of information

SOURCE: Kharkov. Institut gornogo mashinostroyeniya, avtomatiki i vychislitel'noy
tekhniki. Pribory i sistemy avtomatiki, no. 2, 1966. Promyshlennaya telemekhanika
(Industrial telemechanics), 140-143

TOPIC TAGS: adaptive control, automatic control system, control theory, information
processing, information theory

ABSTRACT: In the construction of a system for collection and processing of informa-
tion the time spent in the interrogation of data channels constitutes a problem. The
length of the interrogation affects the rate of the checking of error by a system of
automatic control. This article describes a system of information collection and
processing with an adaptive variable work cycle and the selection of a parameter for
error checking. The system consists of the following organization: a) specification
of the dispersion D of the parameter; b) a unit for information gathering and
processing. A system flow chart is given and discussed. Units included account for
the time function $f(t)$ with provision for integrating $\int f(t)dt$ per cycle and for summing
these integrals. Another unit determines the full cycle time and accounts for $\frac{1}{T}$ for

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ACC NR: AT7004480

division of the sum of integrals into the cycle time value, from which m_o, the mathematical expectation, may be determined. The system also includes one unit for control function storage (memory), one for computing $D = [f(t) - m_o]^2$, and a unit for measuring variance. The system functions on the principle of statistical analysis of control parameters, and is described as being inexpensive in terms of electronic component costs and simple to build and use. Orig. art. has: 2 figures.

SUB CODE: 09/ SUBM DATE: none

Card 2/2

89000

9. 2530 (1068, 1164)

S/119/61/000/001/004/013
B019/B067

AUTHOR: Gubenko, Ye. I., Engineer

TITLE: Quick-acting Magnetic Amplifier as Dynamic Relay

PERIODICAL:Priborostroyeniye, 1961, No. 1, pp. 8 - 9

TEXT: In the introduction, the author describes the advantages of
magnetic amplifiers in automation and telemechanics. He describes the
design of magnetic relays and their approximative calculation. Fig. 1
shows the circuit of a dynamic magnetic relay, consisting of two single-
core magnetic amplifiers. Each of these amplifiers contains a core with
two coils. The load circuit consists of a coil w_2, a diode, and a load
resistor R as well as of the source E_n. The control circuit consists of
the coil w_1, a diode, the source E_n', and the control voltage E. The
dynamic relay has two outputs which can be used for the connection of
adequate circuits. The two output voltages are shifted by one semiperiod
as compared to their corresponding supply voltages. The following

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Quick-acting Magnetic Amplifier as   S/119/61/000/001/004/013
Dynamic Relay   B019/B067

assumptions are made when making approximate calculations of magnetic
amplifiers: 1) The core has a rectangular hysteresis loop. 2) E_n and E_n'
are sinusoidal. 3) A_1 and A_2 are ideal diodes. 4) Control and load
circuits have active resistances. The mode of operation of these magnetic
amplifiers under the above conditions is described in detail. The initial
data for the calculation are summarized as follows: 1) Dependence of the
magnetic field strength H on the time of magnetization t_m of the core:
$H = f(t_m)$. 2) Maximum induction B_m in the magnetic field H_m. 3) Remanence
B_r. 4) Geometrical dimensions of the core. 5) Resistance of the valves.
The author then gives approximation formulas for the supply voltage, the
magnetizing current and the supply voltage of the input coil. Finally,
he describes a test relay designed according to the circuit described
with which satisfactory results were obtained. There are 1 figure and
3 references: 1 Soviet and 2 US.

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s/119/61/000/001/004/013
B019/B067
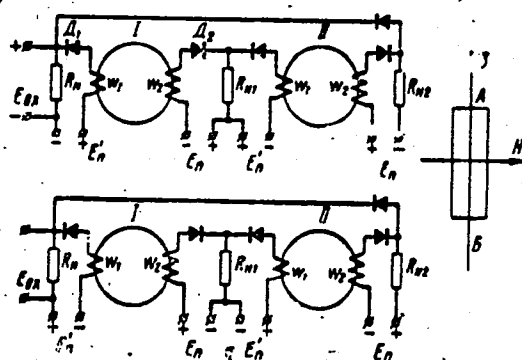
Legend to Fig. 1: E_{6x} input resistance. $Д_1$ and $Д_2$ diodes, w_1 and w_2 magnetic coils, E_n and E'_n supply voltages.

Card 3/3

GUBENKO, Ye., dotsent, kand. tekhn.nauk; KARNOVSKIY, A., dotsent, kand. tekhn.
nauk; YAKOVLEV, B., dotsent, kand. tekhn. nauk

Reviews and bibliography. Vest. TSNII MPS 24 no.5:63 '65. (MIRA 18:9)

1. Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo transporta.