

REEL #21
MIRONETS, V.I.

UNCLASSIFIED

PROCESSING DATE--300CT7C

2/2 018

CIRC ACCESSION NO--AP0127345
ABSTRACT/EXTRACT--(U) GP-0--

ABSTRACT. PATIENTS WITH AMYLOIDOSIS (IN PARTICULAR NEPHROSIS) SHOWED SIGNIFICANT CHANGES OF BLOOD COAGULATION EVIDENCING PREDISPOSITION TO THROMBOPHILIA. THE POTENTIALITIES OF THROMBOSIS INCREASE WITH THE ADVANCE OF THE DISEASE DUE TO PROGRESSIVE DEPRESSION OF THE ANTICOAGULATION SYSTEM. FACILITY: KYEVSKODG

INSTITUTA USOVERSHENSTVOVANIYA VRACHEY.

UNCLASSIFIED

USSR

SHCHUKIN, V. N., MIRONOSETSKAYA, I. S.

"Solution of the Problem of Prospective Branch Planning Using Several Optimality Criteria"

Optimiz. Planov Razv. i Razmeshch. Otrasley Prom-sti [Optimization of Plans for Development and Placement of Branches of Industry -- Collection of Works], Novosibirsk, 1971, pp 39-56 (Translated from Referativnyy Zhurnal, Kibernetika, No 2, 1972, Abstract No 2 V505 by M. Kazakova).

Translation: A multi-criterion problem of branch planning is studied. First, problems with particular criteria are solved. Then, by comparing the optimal values of goal functions with values produced for the optima of the remaining criteria, the so-called "loss" and "gain" arising upon deviation from the optimum are calculated. When the permissible relationship between gain for one criterion and loss for another are established by the expert method, an acceptable solution of the problem can be found.

1/1

1/2 005 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--THE U.S.S.R. IS A SEA POWER -U-
AUTHOR--~~MIRONOV, A.~~ M
COUNTRY OF INFO--USSR
SOURCE--KRASNAYA ZVEZDA, AUGUST 4, 1970, P 4, COLS 4-7
DATE PUBLISHED--04AUG70
SUBJECT AREAS--MECH., IND., CIVIL AND MARINE ENGR
TOPIC TAGS--MERCHANT MARINE STATUS, MERCHANT VESSEL DATA, SHIPBUILDING R
AND D
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--2000/0503 STEP NO--UR/9008/70/000/000/0004/0004
CIRC ACCESSION NO--AN0124208

UNCLASSIFIED

2/2 005

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AN0124208

ABSTRACT/EXTRACT--(U) GP-0-- ABSTRACT. IN THIS INTERVIEW T. B. GUZHENKO, MINISTER OF THE MERCHANT MARINE, U.S.S.R., GAVE AN ACCOUNT OF GAINS ATTAINED BY THE SOVIET MERCHANT MARINE. ACCORDING TO GUZHENKO, 80 PERCENT OF THE SOVIET MERCHANT FLEET HAVE BEEN CONSTRUCTED DURING THE LAST DECADE. IN 1970, THE TOTAL TONNAGE OF THE SOVIET MERCHANT FLEET WILL REACH 13,000,000 TONS. MORE THAN 70 PERCENT OF THE SOVIET VESSELS ARE CAPABLE OF SPEEDS HIGHER THAN 14 KNOTS. IN THE OPINION OF THE MINISTER, IT WILL BE ECONOMICALLY FEASIBLE TO INCREASE THE CARGO CAPACITY OF NEW SOVIET TANKERS UP TO 100,000-150,000 TONS, WHICH IS TWICE THE CAPACITY OF THE "SOFIYA" CLASS TANKERS. CURRENTLY THE SOVIET MERCHANT FLEET IS GETTING SPECIALIZED CHIPS OF THE "ZVENIGOROD" CLASS, CAPABLE OF CARRYING 23,000 TONS OF CARGO, AND 36,000 TON VESSELS OF THE "BALTIKA" CLASS. THE LATTER ARE CAPABLE OF SAILING 12,000 MILES WITHOUT REFUELING. IN THE 60, S, A SERIES OF HIGH SPEED VESSELS OF THE "LENINSKIY KOMSOMOL" CLASS, POWERED BY STEAM TURBINES, WAS ADDED TO THE FLEET. CURRENTLY A NEW SERIES OF THE "KAPITAN KUSHNARENKO" CLASS, ADAPTED FOR THE ARCTIC SEAS, ARE BEING BUILT. THEIR CARGO CAPACITY IS ALMOST DOUBLE THAT OF THE LIBERTY SHIPS. THE PARTY HAS SET THE FOLLOWING GOALS FOR THE SOVIET MERCHANT MARINE. TO INCREASE DURING THE FIVE YEAR PLAN THE VOLUME OF THE MERCHANT MARINE CARGO TURNOVER BY THE FACTOR OF 1.8, AND THE TOTAL TONNAGE OF THE FLEET BY APPROXIMATELY 1.5 TIMES. DURING THE FIRST 4 YEARS OF THE FIVE YEAR PLAN, 3 MILLION TONS OF SHIPPING WERE CONSTRUCTED, AND THE MERCHANT MARINE FREIGHT TURNOVER WAS BOOSTED 55 PERCENT.

UNCLASSIFIED

USSR

UDC 621.371.3:621.391.883.6

MIRONOV, A. A.

"On the Problem of Determining the Probability of Detection of a Target by a Secondary Radar"

Izv. Leningr. elektrotekhn. in-ta (News of the Leningrad Electrical Engineering Institute), 1971, vyp. 98, pp 58-60 (from RZh-Radiotekhnika, No 12, Dec 71, Abstract No 12G11)

Translation: Expressions are derived for the probability of suppression of a group of response signals for any number of interrogating stations in the zone of reception of the responder. Bibliography of two titles.
N. S.

1/1

- 49 -

1/3 009 UNCLASSIFIED PROCESSING DATE--23OCT70
TITLE--HEMOPROTEINS. SYNTHESIS OF TWO PEPTIDE FRAGMENTS OF CYTOCHROME C
-U-
AUTHOR--(05)-YEVSTIGNEYEVA, R.P., MIRONOV, A.F., VASILYEVA, G.A., SKIBENKO,
L.V., NIKITINA, T.S.
COUNTRY OF INFO--USSR
SOURCE--ZH. OBSHCH. KHIM. 1970, 40(3), 661-6
DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES, CHEMISTRY

TOPIC TAGS--BIOLOGIC PIGMENT, IRON COMPOUND, PEPTIDE, CHEMICAL SYNTHESIS

CONTROL MARKING--NO RESTRICTIONS.

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1998/0398

STEP NO--UR/0079/70/040/003/0661/0666

CIRC ACCESSIGN NO--AP0121079

UNCLASSIFIED

2/3 009

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0121079

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. BOC EQUALS TERT, BUO SUB2 C, Z
EQUALS PHCH SUB2 O SUB2 C THROUGHOUT. BOC, L, ALA AND N, HYDROXY,
SUCCINIMIDE (HOSU) TREATED IN DIOXANE WITH DICYCLOHEXYLCARBOIMIDE 12
HR GAVE 74PERCENT BOC, L, ALA, OSU, M. 158.3-59DEGREES; SIMILARLY WAS
PREPD. 80PERCENT BOC, O, BENZYL, L, SER, OSU (I) M. 104-5DEGREES. N, Z, L, GLN
IN DMF WAS TREATED WITH PYRIDINE AND ET SUB2 N, FOLLOWED BY PIVALOYL
CHLORIDE AT MINUS 15DEGREES, FOLLOWED IN 15 MIN BY S BENZYL, L, CYSTEINE
ME ESTER, HCL AND ET SUB3 N, AND THE MIXT. HELD 12 HR, FINALLY AT
0DEGREES, TO YIELD 86PERCENT N, Z, L, GLN, S, BENZYL, L, CYS, OME (II), M.
194-200DEGREES. SIMILARLY WAS PREPD. 82PERCENT BENZYL, ESTER ANALOG, M.
187-9DEGREES. N, Z, L, ALA, OSU AND II. HBR WITH N, METHYLMORPHOLINE IN DMF
GAVE IN 5 HR 85PERCENT N, Z, L, ALA, L, GLN, S, BENZYL, L, CYS, OME (III), M.
192.5-4.5DEGREES. SIMILARLY WAS PREPD. 8.5PERCENT
N, BOC, L, ALA, L, GLN, S, BENZYL, L, CYS, OCH SUB2 PH, M. 152-3DEGREES.
TREATING III WITH 36PERCENT HBR IN ACOH 0.5 HR, FOLLOWED BY THE
P, NITROPHENYL ESTER OF N, Z, X, BENZYL, L, CYS IN DMF IN THE PRESENCE OF
N, METHYLMORPHOLINE, GAVE IN 12 HR, 82.5PERCENT
N, Z, S, BENZYL, L, CYS, L, ALA, L, GLN, S, BENZYL, L, CYS, OME, M. 218-19.5DEGREES.
SIMILARLY WAS PREPD. 94PERCENT BENZYL ESTER ANALOG, M. 205-6.5DEGREES,
WHICH WITH N SUB2 H SUB4 IN ETOM, DIOXANE GAVE THE HYDRAZIDE, M.
234-6DEGREES, WHICH TREATED WITH HCL, FOLLOWED BY NANO SUB2, THEN IN 5
MIN BY BENZYL ESTER OF N PRIMEIM, BENZYL, L, HISTIDINE AND ET SUB3 N, GAVE
IN 2 DAYS 80PERCENT N, Z, S, BENZYL, L, CYS, L, ALA, L, GLN, S, BENZYL, L, CYS, N
PRIMEIM, BENZYL, L, HIS, OCH SUB2 PH, M. 188-9.5DEGREES.

UNCLASSIFIED

3/3 009

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--A0121079

ABSTRACT/EXTRACT--I AND L, GLN, S, BENZYL, L, CYS, OME. HBR WITH
N, METHYLMORPHOLINE IN DMF 12 HR 80PERCENT
N, BOC, O, BENZYL, L, SER, L, GLN, S, BENZYL, L, CYS, OME, M. 131.5-3.5DEGREES,
WHOSE HCL SALT TREATED WITH THE NITROPHENYL ESTER OF CYSTEINE IN DMF
WITH N, METHYLMORPHOLINE, GAVE IN 12 HR 80PERCENT
N, Z, S, BENZYL, L, CYS, O, BENZYL, L, SER, L, GLN, S, BENZYL, L, CYS, OME, M.
192.5-4.5DEGREES. THIS SUSPENDED IN DIOXANE, ETOH AND TREATED WITH N
SUB2 H SUB4 1 DAY GAVE THE HYDRAZIDE, M. 200-2DEGREES, WHICH WITH HCL
AND NANO SUB2 GAVE THE AZIDE, WHICH TREATED IN SITU WITH N PRIMEIM,
BENZYLHISTIDINE BENZYL ESTER AND ET SUB3 N IN ETOAC 2 DAYS GAVE
N, Z, S, BENZYL, L, CYS, O, BENZYL, L, SER, L, GLN, S, BENZYL, L, CYS, N PRIMEIM,
BENZYL, HIS, OCH SUB2 PH, M. 184-6DEGREES. FACILITY: MOSK. INST.
TONKOI KHIM. TEKHNOL. IM. LOMONOSOVA, MOSCOW, USSR.

UNCLASSIFIED

UDC 531.787.913.087.92

USSR

KSENOFONTOV, M.YE., PAPLOVA, T.T., ~~MIRONOV, A.I.~~, SMYSLOV, I.I.,
RAPATSKAYA, I.V.

"Tensotransducers Based On Silicon-Spinel"

V sb. Pribory tochnoy mekh. i tekhnol. priborost. (Devices Of Precision
Mechanics And Technology Of Instrument Construction--Collection Of Works),
Moscow, 1971, pp 36-38 (from RZh:Elektronika i yeye primeneniye, No 2, Feb 72,
Abstract No 2B282)

Translation: Tensotransducers [tenzopreobrazovatel'] (T) based on Si-spinel
were produced by build-up on spinel wafers (ground, polished, and annealed in
a H₂ flow at a 1500° C temperature) of a monocrystalline layer of Si by pyroly-
sis of the spinel. With the aid of photolithography, tensorsistors were pro-
duced on the structure prepared, the outlets to which were produced by thermo-
compression. The T produced had the characteristic resistance, 480 ohm;
resistivity, 0.01 ohm.cm; temperature coefficient of resistance, 9.1×10^{-4}
°C⁻¹; coefficient of tensosensitivity (as a function of crystallographic
orientation) 55 ÷ 95. 1 ill. 2 tab. 2 ref. V.B.

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USSR

UDC 539.3

TRAPEZIN, I.I., ZASLAVSKIY, B.V., LOFOVOK, B.N.
and MIRONOV, A.I.

"Calculation of Local Stability of Three-Layer Corrugated Panel at
Normal and Elevated Temperatures"

Moscow, Prochnost' i Ustoychivost' Tonkostennykh Aviatsionnykh
Konstruktsiy, 1971, pp 250-266

Abstract: The subject panel consists of two skin plates with a
trapezoidal corrugated plate located between the two and plug
welded to them.

The local stability is calculated by the formula

$$\sigma_k = K \eta E \left(\frac{S}{l}\right)^2$$

1/2

USSR

TRAPEZIN, I. I., et al., Prochnost' i Ustoychivost' Tonkostennykh Aviatsionnykh Konstruktsiy, 1971, pp 250-266

where σ_k critical buckling stress
 K coefficient of end fixity given on figures 8 and 9
 η plasticity coefficient
 δ plate thickness
 l unsupported length of the plate

Experimental values of buckling stress versus $\frac{l}{\delta}$ for temperatures 20 to 500°C are shown on graphs.

Tables of theoretical and experimental values of buckling stress for different panel dimensions are also presented.

2/2

USSR

UDC 669.721.48(088.8)

BIRYUKOV, L. V., MIRONOV, A. M., SERGHEYEV, V. V., POLYAKOV, Yu. A., and ZABOYEV, Yu. I.

"Method of Processing Wastes"

USSR Author's Certificate No 273441, Filed 13/08/66, Published 7/09/70
(Translated from Referativnyy Zhurnal-Metallurgiya, No 2, 1971, Abstract No 2 G190 P)

Translation: A method is suggested for processing wastes from the production of Mg to carnallite and Cl, including absorption of hydrogen chloride by water, absorption of chlorine by lime producing HCl and CaCl₂, decomposition of the calcium chloride by the hydrochloric acid, producing concentrated Cl₂ and a CaCl₂ solution, addition of MgO and carbonization, separation of the MgCl₂ solution produced from the CaCO₃, addition of spent electrolyte, and evaporation and dehydration of the solution to separate the carnallite. To increase the extraction of concentrated Cl₂, the chlorinated CaO is decomposed at pH 2-3 at a residual pressure in the apparatus of 10-20 mm Hg, while the spent electrolyte is introduced into the MgCl₂ solution in melted form by spraying.

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UDC: 681.327

USSR

DUNYASHEV, K. A., YEROFEYEV, V. M., KRUZE, B. V., MIRONOV, A. M., NOSKOV, V. I.

"Semipermanent Memory"

USSR Author's Certificate No 245840, Filed 1 Mar 68, Published 30 Oct 69 (from RZh-Avtomatika, Telemekhanika i vychislitel'naya tekhnika, No 9, Sep 70, Abstract No 9B410P)

Translation: This Author's Certificate introduces a device containing plates with excitation and read lines and metal punch cards placed between the excitation and read plates arranged on them. In order to improve the operating reliability and technological structure the read plates contain grooves executed in the planes opposite to the operating planes in which the read lines are laid executed, for example, in the form of insulated wires common to all the read plates. Insulating films are glued to the operating surfaces of the excitation plates. There are seven illustrations.

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1/2 010 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--FURTHER GENETIC MAPPING OF THE THYMINE LOCUS OF ESCHERICHIA COLI
K12 -U-
AUTHOR--(03)-ROMANTSOVA, V.YA., SUKHODOLETS, V.V., MIRONOV, A.S.
COUNTRY OF INFO--USSR
SOURCE--GENETIKA 1970, 6(2), 139-47
DATE PUBLISHED-----70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--ESCHERICHIA COLI, MUTAGEN, BACTERIA MUTATION, GENE, THYMINE,
BACTERIAL GENETICS
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--3003/1137 STEP NO--UR/0473/70/006/002/0139/0147
CIRC ACCESSION NO--AP0130165
UNCLASSIFIED

2/2 010

UNCLASSIFIED

PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0130165

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. TREATMENT OF E. COLI HFR H WITH HNO SUB2 AND AMINOPTERIN YIELDED 95 THY MUTANTS. RECOMBINATION STUDIES OF THE COUPLED THY AND CYS GENES SHOWED THAT THE PROPER SEQUENCE IS THY,CYS,HIS AND NOT CYS,THEY,HIS AS HAD BEEN THOUGHT EARLIER. THE THYMINE LOCUS WAS MAPPED BY CONJUGATIONAL 3 FACTOR CROSSES AND A 21ST NEW SITE WAS ESTABLISHED IN THE GENE. FACILITY: INST. GENET. MICROORG., MOSCOW, USSR.

UNCLASSIFIED

USSR

UDC: 513.88:513.83

MIRONOV, A. V., and SARYMSAKOV, T. A., Academician of the Uzbek Academy of Sciences

"The Norm Concept of a Linear Operator in Local Convex Space"

Moscow, Doklady Akademii Nauk SSSR, vol 204, No 1, 1 May 1972, pp 38-41

Abstract: A real or complex vector space E is defined as being normalized over the half-field R^{Δ} , where

$$R^{\Delta} = \prod_{q \in \Delta} R^1_q$$

is the direct product of Δ samples of real straight lines R^1 in Tikhonov topology, if the given mapping $\|\dots\|: E \rightarrow R^{\Delta}_+$, known as the norm over R^{Δ} , satisfies the following conditions: $\|x\| = 0$ if and only if $x = 0$; $\|\lambda \cdot x\| = |\lambda| \cdot \|x\|$, where $\lambda \in R^1$ and is a scalar; $\|x + y\| \leq \|x\| + \|y\|$. In a second definition, the linear operator $A: E \rightarrow F$ has the norm $\|A\|: R^{\Delta}_+ \rightarrow R^{\Delta}_+$, which can be determined from the equation $\|A\|(a) = \sup_{\|x\| \leq a} \|Ax\|$, where $a \in R^{\Delta}_+$. Examples are given

in the use of these definitions, and four theorems involving them are stated and proved. The authors are associated with the V. I. Lenin State University of Tashkent.

1/1

AA0043434 Mironov, B.A.

UR 0482

Soviet Inventions Illustrated, Section I Chemical, Derwent, 1-70

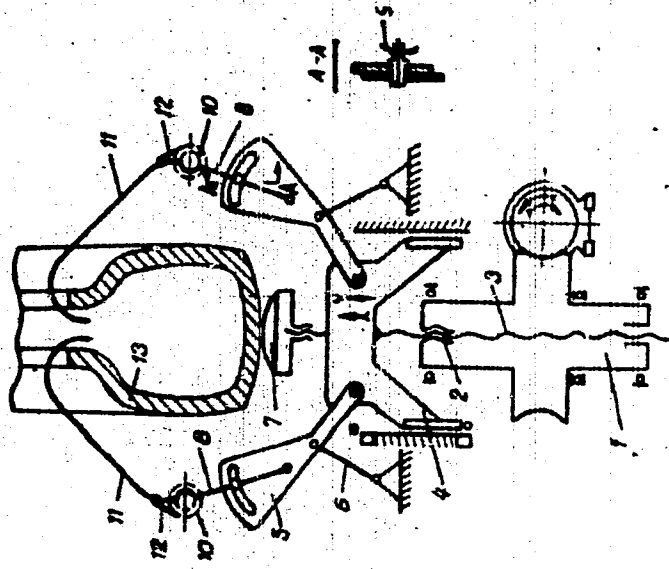
228264 TYRE MANUFACTURE machine for examination, cutting, and buffing, of tyre treads that have been subjected to localised damage, consists of a body section which incorporates the worm gear (1), nut (2) and screw (3). The upper end of the screw connects with the carrier (4) on which the levers (5) are hinge-mounted the levers also having the rocker arms (6) connected. The table (7) fits on top of the carrier. A second set of levers (8) are connected to (5) in such a way that, as they move they are guided by the slots: a special fixing device is used. A ratchet wheel (10) terminates levers (8) on each side, and these in turn support the grippers (11) which can be held in any position by the pawls (12). The tyre is loaded into the machine, held by the grippers, and has the cover (13) put over it. The tyre is free to rotate during the inspection, and then the fixing is done by raising the table (7). Repairs are then carried out whilst the tyre is securely held.

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19761759

AA0043434



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19761760

AA0043434

1.6.67. as 1160377/23-5, MIRONOV, B.A. and others
Tyre Ind. Equipment Res. & Design Inst. (3.6.69)
Bul. 31/8.10.68. Class 39a⁶ Int. Cl. B 29h.

AUTHORS: Mironov, B. A.; Torgovtsev, G. G.; 40
Sal'nikov, A.M.; Belyayevskiy, V. V.
Vsesoyuznyy Nauchno - Issledovatel'skiy i Konstruktorskiy
Institut po Oborudovaniyu dlya Shinnoy Promyshlennosti

3/3

19761761

USSR

UDC 669.71.053.24

KISELEV, V. A., MIRONOV, B. I., LEONT'YEV, L. I., KUDINOV, B. Z.

"Influence of Composition and Cooling Rate of Aluminum-Calcium Slag on Its Friability"

Tr. In-ta Metallurgii. Ural'sk. Fil. An SSSR [Works of Institute of Metallurgy, Urals Affiliate, Academy of Sciences, USSR], 1970, No. 22, pp. 34-40. (Translated from Referativnyy Zhurnal Metallurgiya, No. 5, 1971, Abstract No. 5 G128 by S. Krivonosova).

Translation: The friability of slags (III) improves with decreasing cooling rate and as the compositions of the III move away from the boundaries of the area of primary crystallization of $(CaO)_2 \cdot SiO_2$ and worsens with increasing Si-modulus. The most promising are III with Si-modulus $< 2.85-5$, the compositions of which lie within or near the phase triangle $12CaO \cdot 7Al_2O_3 - 2CaO \cdot SiO_2 - CaO \cdot Al_2O_3$. The cooling rate has less influence than chemical composition on the granulometric composition of slaked III. 2 figs; 2 tables.

1/1

USSR

UDC: 577.4

MELIKHOV, A. N., GUZIK, V. F., KANELIN, V. P., MIRONOV, B. N.

"On Optimizing the Adjustment of Linear Digital Integrating Structures"

V sb. Vychisl. sistemy (Computer Systems--collection of works), vyp. 47, Novosibirsk, 1971, pp 18-31 (from RZh-Kibernetika, No 8, Aug 72, Abstract No 8V452)

[No abstract]

1/1

- 25 -

USSR

UDC: 532.526.4.001.5

ALIMPIYEV, A. I., MAMONOV, V. N., MIRONOV, B. P., Novosibirsk

"Energy Spectra of Velocity Pulsations in a Turbulent Boundary Layer on a Permeable Plate"

Novosibirsk, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 3, May/Jun 73, pp 115-119

Abstract: The paper gives the results of measurements of pulsations of a turbulent boundary layer on a flat permeable plate over a range of variation of the blow-in parameter from 0 to 20. It is shown that in the case of supercritical blow-in there is a zone close to the surface in which the energy spectra of velocity pulsations do not change with increasing distance from the surface, and differ from the spectra in the main body of the boundary layer.

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USSR

UDC 532.526.4

MIRONOV, B. P., LUGOVSKIY, P. P.

"Study of Flow in the Wall Area of a Turbulent Boundary Layer with Injection"
Inzhenerno-fizicheskiy Zhurnal, Vol 22, No 3, 1972, pp 460-466.

Abstract: The method of stroboscopic visualization is used to measure the fields of instantaneous velocities in a turbulent boundary layer with injection. The distribution of average velocity and its pulsation component through the height of the boundary layer is presented for values of $\eta \geq 2$ and various injection parameters. It is noted that with increasing injection, the dimensionless thickness of the viscous sublayer $\eta_1 = u*y_1/\nu$ decreases. The length of the transition zone also decreases. A slight change in static pressure through the height of the boundary layer is demonstrated. 1 Table; 4 Figures; 18 Biblio. Refs.

1/1

1/2 008 UNCLASSIFIED PROCESSING DATE--18SEP70

TITLE--INTENSIFIED PREPARATION OF WHITE ENAMELS IN BEAD MILLS -U-

AUTHOR--(05)-ZAKHARYCHEV, V.P., IOFFE, G.S., NEVZOROV, E.N., MIRONOV, B.V.,
 YERMILOV, P.I.

COUNTRY OF INFO--USSR

SOURCE--LAKOKRASOCH. MATER. IKH. PRIMEN. 1970 (1) 74 M

DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--INDUSTRIAL PRODUCTION, ENAMEL, TITANIUM OXIDE, VARNISH,
 UREA/(U)MCH181 ENAMEL, (U)MCH025 VARNISH

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRA--1989/0546 STEP NO--UR/0303/70/000/001/0074/0074

CIRC ACCESSION NO--AP0107151

UNCLASSIFIED

2/2 008

UNCLASSIFIED

PROCESSING DATE--18SEP70

CIRC ACCESSION NO--AP0107151

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A RHEOL. METHOD WAS DEVELOPED FOR THE DETN. OF THE OPTIMUM TIO SUB2-ALKYD UREA MCHQ25 VARNISH RATIO DURING THE PRODUCTION OF MCH181 ENAMEL (I) IN BEAD MILLS. THE OUTPUT OF THE BEAD MILLS INCREASED BY A FACTOR OF 2.23 WHEN THE OLDER FORMULATION WAS REPLACED BY THE I FORMULATION DEVELOPED FROM RHEOL. DATA.

89

Acc. Nr:

AP0049777

Abstracting Service:

CHEMICAL ABST. 5-70

Ref. Code:

UR0191

M

101972k Determination of acyl groups in cellulose acetate-butyrate. Mironov, D. P.; Grishin, E. P.; Zharkov, V. V.; Pogosov, Yu. B. (USSR); Plast. Massy 1970, (1), 64-5 (Russ). The total content of acyl groups in cellulose acetatebutyrate (I) was detd. by sapon., whereas the content of PrCO groups was detd. by ir spectroscopy at 2970 cm^{-1} . Thus, I was placed in a conical flask and mixed with Me_2CO and set aside for 30-60 min. The mixt. was shaken, and 0.5N aq. MeOH soln. of NaOH was added; the mixt. was refluxed at 65° for 3 hr. The sapond. sample was neutralized with 0.5N HCl and titrated with 0.5N KOH. Optical d. of I was measured at 2970 cm^{-1} and of a std. at 1470 cm^{-1} . The content of PrCO groups was detd. from the ratio D_{2970}/D_{1470} and from the corresponding adsorption coeffs. The content of Ac groups was caicd. from a general equation. CKJR ✓

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REEL/FRAME

19801695

1/2 018 UNCLASSIFIED PROCESSING DATE--20NDV70
TITLE--GDOR OF RUSSIAN LEATHERS AND MEASURES FOR REDUCING IT -U-

AUTHOR--(05)-ARBUZOV, S.V., GORODINSKIY, L.L., MIRONOV, F.V., SUVOROVA,
V.P., SUCHKOV, V.G.
COUNTRY OF INFO--USSR

SOURCE--KOZH. GBUV. PROM. 1970, 12(3), 46-51

DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--LEATHER, SYNTHETIC OIL, SPECIALIZED COATING

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1735

STEP NO--UR/0498/70/012/003/0046/0051

CIRC ACCESSION NO--AP0125356

UNCLASSIFIED

2/2 018

UNCLASSIFIED

PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0125356

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. MEASURES INCLUDE REDUCING THE TEMP. AND DURATION OF MANY OPERATIONS, ESP. FOR BACTERIAL AND IMPORTED RAW HIDES (THE SOFTENING PROCESS WAS ELIMINATED FOR THEM); ELIMINATING NA SUB2 SO SUB3 IN THE ALKALI SOAKING BATH; USING AN UP TYPE EMULSIFIER IN THE DECALCIFYING BATH; USING ACID BLACK S AND FIXER F DURING DYEING AND FIXER F DURING OILING; SALT TREATING INSTEAD OF PICKLING TO HARDEN THE DERMA AND FACE LAYER, ESP. OF BACTERIAL AND IMPORTED STOCKS; LOWERING AIR TEMPS. DURING DRYING; INCREASING THE AMT. OF SYNTHETIC OIL IN MIXTS. WITH FISH OIL; AND COATING WITH ACRYLIC EMULSIONS.

UNCLASSIFIED

USSR

UDC 577.4

MIRONOV, G. A. FEDOTOVA, D. E.

"Algorithm for Analyzing Circuits with Memory"

V sb. Tekhn. diagnostika (Technical Diagnostics -- collection of works), Moscow, Nauka Press, 1972, pp 233-236 (from RZh-Kibernetika, No 7, Jul 72, Abstract No 7V413)

No abstract

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USSR

UDC: 51:330.115

KRINITSKIY, N. A., MIRONOV, G. A., FROLOV, G. D.

"Formal Definition of a Certain Class of Complex Systems"

V sb. Nauch. i prakt. probl. bol'shikh sistem. Sekts. Bol'shivye sistemy. Teoriya, metodol., modelir. (Scientific and Practical Problems of Large Systems--collection of works. Large Systems Section. Theory, Methodology, Modeling), Moscow, "Nauka", 1971, pp 163-167 (from RZh-Kibernetika, No 12, Dec 71, Abstract No 12V860)

Translation: The paper gives a formal definition of some complex systems in the class of potentially algorithmizable systems. The fundamental problem of study is formulated for this class of systems, and a way to solve it is pointed out. Authors' abstract.

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1/2 017 UNCLASSIFIED PROCESSING DATE--09OCT70
TITLE--AMINES IN VOLATILE SUBSTANCES OF RUSSIAN CHEESE -U-
AUTHOR--(04)-GOLOVNYA, R.V., ZHURAVLEVA, I.L., MIRONOV, G.A., ABDULLINA,
R.M.
COUNTRY OF INFO--USSR
SOURCE--MOLOCH. PRGM. 1970, 31(2), 8-11
DATE PUBLISHED-----70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--PROCESSED ANIMAL PRODUCT, FOOD ANALYSIS, AMINE, CHROMATOGRAPHY
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1993/0519 STEP NO--UR/0333/70/031/002/0008/0011
CIRC ACCESSION NO--AP0113410
UNCLASSIFIED

2/2 017

UNCLASSIFIED

PROCESSING DATE--09OCT70

CIRC ACCESSION NO--AP0113410

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE AMINE CONTENT OF VOLATILE SUBSTANCES OF 4 AND 10 MONTH OLD RUSSIAN CHEESE, STORED AT NEGATIVE 3DEGREES AND 85-7PERCENT HUMIDITY, WAS ANALYZED BY GAS LIQ. CHROMATOG. THE TOTAL AMT. OF AMINE CHLOROHYDRATES IN 500 G CHEESE INCREASED FROM 23 TO 29.4 MG. THE QUAL. COMPN. OF THE 21 IDENTIFIED AMINES DID NOT CHANGE SIGNIFICANTLY BUT THE AMTS. OF PIPERIDINE (I) AND ALPHA PICOLINE (II) INCREASED FROM 0.4 TO 15.4 AND FROM 7.3 TO 52.4PERCENT, RESP., AND THAT OF PRIMARY, SECONDARY, AND TERTIARY AMINES DECREASED. THE CONTENTS OF I, II, PYRIDINE AND ET SUB3 N WERE DETD. FACILITY: -INST. ELEMENTOORG. SOEDIN., MOSCOW, (USSR.

UNCLASSIFIED

USSR

UDC: 8.74

MIRONOV, G. A., OSTROVIDOV, M. A.

"Diagnostic Analysis of Single-Cycle Combination Logic Circuits"

V sb. Tsifr. vychisl. tekhnika i programmir. (Digital Computer Technology and Programming--collection of works), vyp. 7, Moscow, "Sov. radio", 1972, pp 182-186 (from RZh-Kibernetika, No 8, Aug 72, Abstract No 8V648)

Translation: A method is outlined for determining the elements which may be out of order. The method utilizes information obtained in an arbitrary algorithm for detecting the presence of a failure. Authors' abstract.

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USSR

UDC 616.61.151-071

MIRONOV, G. S., Col Med Serv, Docent; AKHMET'YEV, V. V., Maj
Med Serv

"Clinical Picture of Hemorrhagic Fever With Renal Syndrome"

Moscow, Voyenno-Meditsinskiy Zhurnal, No 3, Sep 71, pp 51-54

Abstract: A detailed description is given of the clinical picture of hemorrhagic fever with a renal syndrome, as observed in 200 patients in the central area of the USSR. Data are cited on shifts in body temperature, blood pressure, heart rate, heart sounds, red and white cell count, appearance of the skin and mucus membranes in the mouth, urine output and composition, and development of gastrointestinal disorders, pulmonary noises, meningeal signs, visual disturbance, pain in various parts of the body, sleeplessness, asthenia, and subjective malaise. It was concluded that in the Central USSR, hemorrhagic fever with a renal syndrome has an acute onset, usually without a prodromal period. The most important subjective symptoms are headache, lack of appetite, thirst, and pain in the abdomen and lumbar region.

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USSR

MIRONOV, G. S., et al, Voyenno-Meditsinskiy Zhurnal, No 9,
Sep 71, pp 51-54

There is a pronounced decrease in vasotonus, while general
intoxication, central nervous system disorders, hemorrhages,
and renal failure develop to a moderate degree.

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1/2 008 UNCLASSIFIED PROCESSING DATE--20NOV70
TITLE--SYNTHESIS OF SOME DIARYL KETONES -U-
AUTHOR-(05)-MIRNOV, G.S., CHERNYAKOVSKAYA, K.A., FARBEROV, M.I.,
TYULENEVA, I.M., RUSAKOVA, M.S.
COUNTRY OF INFO--USSR M
SOURCE--Zh. PRIKL. KHIM. (LENINGRAD) 1970, 43(3), 620-7
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--ORGANIC SYNTHESIS, AROMATIC KETONE, AROMATIC HYDROCARBON,
PHOSGENE, ALUMINUM CHLORIDE, CHLOROMETHANE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3004/1944 STEP NO--UR/0080/70/043/003/0620/0627
CIRC ACCESSION NO--AP0132205

UNCLASSIFIED

2/2 008 UNCLASSIFIED PROCESSING DATE--20NOV70
CIRC ACCESSION NO--AP0132205
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. DIARYL KETONES WERE PREPD. EITHER
BY THE DIRECT REACTION OF AROMATIC HYDROCARBONS WITH PHOSGENE AND ALCL
SUB3, OR BY THE REACTION OF AROMATIC HYDROCARBONS WITH CCL SUB4 FOLLOWED
BY HYDROLYSIS OF THE INTERMEDIATE DIARYLDICHLOROMETHANE.
FACILITY: YAROSLAV. TEKHNOL. INST., YAROSLAVL, USSR.

UNCLASSIFIED

USSR

UDO 537.511.53:535.37

BURDIYAN, I.I., ~~MIRONOV, I.F.~~ ROZNERITSA, YA. A.

"Recombination Radiation In Pure Gallium Antimonide"

V sb. Issled. slozhn. poluprovodnikov (Investigation Of Complex Semiconductors--
Collection Of Works), Kishinev, 1970, pp 252-254 (from RZh--Elektronika i yeye
primeneniye, No 3, March 1971, Abstract No 38317)

Translation: Single crystals were investigated of p-GaSb with a concentration of holes at room temperature $p = 7 \cdot 10^{16} \text{ cm}^{-3}$ and a mobility $U = 775 \text{ cm}^2/\text{v. sec}$; at a temperature of 80° K , $p = 2 \cdot 10^{16} \text{ cm}^{-3}$ and $U = 3000 \text{ cm}^2/\text{v. sec}$. The sole maximum of radiation (0.712 ev) at a temperature of 300° K is explained by a direct interband radiation transition. At a temperature of 80° K two maxima are discovered in the spectrum of the edge radiation which correspond to energy values of 0.801 and 0.778 ev. 1 ill. 4 ref.

1/1

1/2 020 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--QUANTITATIVE RELATIONS FOR CALCULATION OF FACET RETICULAR DENSITY
AND ATOM BONDS ON FACETS OF CRYSTALS WITH DIAMOND OR ZINC BLEND
AUTHOR--(02)--GRAYFER, M.Z., MIRJONOV, K.YE.

COUNTRY OF INFO--USSR

SOURCE--IZVESTIYA SIBIRSKOGO OTDLENIYA AKADEMII NAUK SSSR, NO 4, SERIYA
KHIMICHESKIKH NAUK, 1970, NR 2, PP 51-57
DATE PUBLISHED--70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY, PHYSICS

TOPIC TAGS--DIAMOND, CRYSTAL, ZINC, MINERAL, CRYSTAL STRUCTURE

CCNTRCL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1993/0579

STEP NO--UR/0289/70/000/000/0051/0057

CIRC ACCESSION NO--AP0113470

UNCLASSIFIED

2/2 020

UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSIGN NO--AP0113470

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. CORRELATIONS FOR CALCULATION OF FACET RETICULAR DENSITY AND ATOM BONDINGS ON (H11), (H11) AND (H10) FACETS OF DIAMOND OR ZINC BLENDE CRYSTAL STRUCTURE TYPES ARE GIVEN. THESE CORRELATIONS ARE BASED ON LATTICE PARAMETERS AND FACET INDEX H. IF FREE SURFACE ENERGY OF EVERY FORM PRINCIPAL FACETS IS KNOWN IT IS POSSIBLE TO ESTIMATE THE FREE SURFACE ENERGY OF (H11), (H11) AND (H10) FACETS. FACILITY: INSTITUT NEORGANICHESKOY KHMII SO AN SSSR, NOVOSIBIRSK.

UNCLASSIFIED

USSR

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UDC 002.704.31

MIRONOV, K. YE., and BORISOVA, L. A.

"Second All-Union Symposium on the Processes of Growth and Synthesis of Crystals and Films of Semiconductor Compounds"

Moscow, Neorganicheskiye Materialy, Vol 6, No 1, Jan 70, pp 188-189

Abstract: A brief report is given on the Second All-Union Symposium on the Processes of Growth and Synthesis of Crystals and Films of Semiconductor Compounds, held in Novosibirsk on 12-16 May 1969. The participants in the symposium heard 148 reports under the following headings: Elementary Processes of Crystal Nucleation and Growth, Macroscopic Models for Quantitative Description of Growth Processes, Models and Methods of Describing Alloying Processes and Distribution of Admixtures, Morphology of Crystals and Films as a Function of Growth Conditions, and Experimental Techniques and Equipment for Investigating the Details of the Growth Process of Semiconductor Crystals and Films.

The proposed procedure for experimental-statistical investigation of the processes of growing semiconductors from a melt was of special interest. It was pointed out that recent years have been characterized by the development of methods of applied mathematics for calculating heterogeneous solid state-gas

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USSR

MIRONOV, K. YE., et al, Neorganicheskiye Materialy, Vol 6, No 1, Jan 70, pp 188-189

equilibria. There were two reports in this area. About half the reports were on the growth of films of semiconductor compounds and solid solutions of them.

The problem of alloying crystals and films of semiconductors was discussed broadly. In the reports connected with experimental techniques and equipment for investigating growth processes, there were discussions of the possibilities of investigating the kinetics and thermodynamics of Mironov, K. Ye., and Borisova, L. A., Neorganicheskiye Materialy, Vol 6, No 1, Jan 70, pp 188-189 evaporation in a superbhigh vacuum at temperatures to 2000°K, observation of the growth of silicon layers by applying the electron paramagnetic resonance method, and investigation of the distribution of admixtures in films with respect to optical properties. The third symposium is planned in 1971.

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- 35 -

AP9053079

UR 0289

PRIMARY SOURCE: Izvestiya Sibirskogo Otdeleniya; AN SSSR,
Seriya Khimicheskikh Nauk, Nr 12(162), Nr 5,
PP 38-42

A. V. Nikolaev, K. E. Mironov,
E. V. Karaseva, A. I. Ryabinin

EXTRACTION IN THE SYSTEM
 $Nd(NO_3)_3-HNO_3-H_2O-(C_4H_9O)_3PO$ at 25°C

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The extraction of neodymium and nitric acid with tributyl phosphate in the above system at 25°C was studied. Distribution coefficients of neodymium, praseodymium or samarium as well as the extraction of HNO₃ in the corresponding systems were compared. Extraction has been compared of neodymium, praseodymium and samarium nitrates from aqueous solvents without acid.

100

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18

UDC 661.143.046.4

USSR

GOLUBEV, I. F., ~~MITROHOV, K. YE.~~, TANANAYEV, A. N., and KINDZHIBALO, L. N.

"Chemical Transformations During Heating of Mixtures of $BaHPO_4$, TiO_2 , BaF_2 and $(NH_4)_2HPO_4$ "

Sb. nauch. tr. VNIИ lyuminoforov i osobo chist. veshchestv (Collection of Scientific Works of All-Union Scientific Research Institute for Phosphors and Ultrapure Substances), 1971, vyp. 6, pp 7-18 (English summary) (from RZh-Khimiya, No 14, 25 Jul 72, Abstract No 14L130 from summary)

Translation: A study was made by thermographic, roentgenographic and luminescent methods of analysis of the chemical interaction during heating of mixtures of $BaHPO_4$, TiO_2 , BaF_2 and $(NH_4)_2HPO_4$. Formation of the luminescent phase of $2BaO \cdot TiO_2 \cdot P_2O_5$ from $BaHPO_4$ and TiO_2 begins at temperature $> 800^\circ$ with the phase transformation of $Ba_2P_2O_9$. On the addition of BaF_2 and $(NH_4)_2HPO_4$ below 400° barium metaphosphate is formed, which plays the role of flux in the formation of $2BaO \cdot TiO_2 \cdot P_2O_5$. Bibliography with nine titles.

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1/2 G23 UNCLASSIFIED PROCESSING DATE--09OCT70
TITLE--MAGNETIC PROPERTIES OF UNALLOYED TRANSFORMER STEEL UNDER VARYING ANNEALING CONDITIONS -U-
AUTHOR--(05)--GREBENIK, N.P., DEVVOTKO, V.I., KAZADZHAN, L.B., MIRONOV, L.V., LOSEV, K.F. \$
COUNTRY OF INFO--USSR M

SOURCE--IZV. AKAD. NAUK SSSR. SER. FIZ. 1970, 34(2), 348-50

DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS, PHYSICS, MECH., IND., CIVIL AND MARINE ENGR
TOPIC TAGS--TRANSFORMER STEEL, MAGNETIC PROPERTY, ANNEALING, ALLOY DESIGNATION, COLD ROLLING, MAGNETIC INDUCTION/(U)08KP LOW CARBON STEEL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1995/0180 STEP NO--UR/0048/70/034/002/0348/0350

CIRC ACCESSION NO--AP0115884
UNCLASSIFIED

2/2 023

UNCLASSIFIED

PROCESSING DATE--09UCT70

CIRC ACCESSION NO--AP0115884

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE TITLE STUDY WAS CARRIED OUT WITH STEEL GRADE 09KP (C 0.065, SI TRACES, MN 0.52, P 0.015, S 0.011, NI 0.07, CR 0.07, CU 0.09, AND AL 0.01 WT. PERCENT) MELTED IN AN ELEC. ARC FURNACE. BANDS, 3.0 MM THICK, WERE SUBJECTED TO BLACK ANNEALING AT 780DEGREES, WHEREUPON THE C CONTENT DECREASED TO 0.009-0.015PERCENT. AFTER PICKLING THE STEEL WAS COLD ROLLED TO 0.50 MM THICKNESS. SPECIMENS WERE CUT OUT LONGITUDINALLY AND TRANSVERSE TO THE ROLLING DIRECTION AND ANNEALED AT 10 PRIME NEGATIVE 2 TORR AT VARIOUS CONDITIONS. MAGNETIC AGING WAS TESTED AT 120DEGREES FOR 120 HR. MAGNETIC INDUCTION SIGNIFICANTLY INCREASED WITH RISING TEMP., REACHING A MAX. AT 700-200DEGREES. THE SP. CORE LOSSES OCCURRED WITH INCREASING ANNEALING TEMP. TO 700-50DEGREES; HIGHER TEMPS. CAUSED ONLY SMALL DECREASES. INCREASING THE HOLDING TIME OVER 1.5-2 HR AT 750DEGREES HAD LITTLE EFFECT ON THE SP. CORE LOSSES. THE AGING AFFECTED THE SP. CORE LOSSES LITTLE. THE ANISOTROPY OF MAGNETIC INDUCTION DID NOT EXCEED 4PERCENT. TO PREVENT WELDING TOGETHER OF SHEETS THE ANNEALING TEMP. SHOULD BE LESS THAN OR EQUAL TO 800DEGREES AND HOLDING TIME LESS THAN OR EQUAL TO 2 HR. FACILITY: TSNIICHM IM. BARDINA, MOSCOW, USSR.

UNCLASSIFIED

1/2 029

UNCLASSIFIED

PROCESSING DATE--23OCT70

TITLE--EFFECT OF SMALL DEFORMATIONS ON THE RECRYSTALLIZATION AND TEXTURE
OF LOW CARBON STEEL WITH VARYING SILICON CONTENT -U-
AUTHOR--(02)-LARINA, L.G., MIRONOV, L.V.

COUNTRY OF INFO--USSR

SOURCE--IZV. AKAD. NAUK SSSR, SER. FIZ. 1970, 34(2), 344-7

DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS, MECH., IND., CIVIL AND MARINE ENGR

TOPIC TAGS--METAL DEFORMATION, LOW CARBON STEEL, SILICON STEEL, METAL
TEXTURE, ANISOTROPY, MAGNETIC PROPERTY, ANNEALING, HOT ROLLING, ALLOY
COMPOSITION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1997/1527

STEP NO--UR/0048/70/034/002/0346/0347

CIRC ACCESSION NO--AP0120308

UNCLASSIFIED

2/2 029

UNCLASSIFIED

PROCESSING DATE--23OCT7

CIRC ACCESSION NO--AP0120308

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. INDUSTRIALLY MELTED STEEL (C
 0.007-0.010, SE 0.21-3.06, MN 0.12-0.18, S 0.003-0.005, P 0.008-0.009,
 CR 0.06-0.07, CU 0.10-0.13, NI 0.044-0.050, AND AL 0.006-0.017 WT.
 PERCENT) WAS STUDIED. HOT ROLLED BANDS, 0.25 MM THICK, WERE ANNEALED A
 780DEGREES UNDER DECARBURAZING CONDITIONS, THEN PICKLED AND COLD ROLLED
 TO 0.51-0.70 MM THICKNESS, ANNEALED IN H AT 750DEGREES FOR 3 HR, AND
 DRESSED TO 0.50 MM FINAL THICKNESS. ANNEALING AT 10 PRIME NEGATIVE 2
 TORR FOLLOWED AT VARYING TEMPS. THEREAFTER THE MICROSTRUCTURE AND
 TEXTURE WERE DETD. THE MAGNETIC PROPERTIES OF INDUSTRIALLY PREPD.
 SPECIMENS AT CRIT. DEFORMATIONS WITH VARYING FINAL ANNEALING CONDITIONS
 WERE ALSO TESTED. THE VALUE OF CRIT. DEFORMATION DECREASED WITH
 INCREASING SI CONTENT AND TEMP. OF FINAL AND INTERMEDIATE ANNEALING. A
 SI CONCNS. SMALLER THAN OR EQUAL TO 3PERCENT THE ANISOTROPY DECREASED
 ONLY AT DEFORMATIONS GREATER THAN CRIT., WHILE AT DEFORMATIONS ABOUT
 CRIT. THE ANISOTROPY INCREASED. THE LOWER THE SI CONCNS. WAS THE MORE
 PRONOUNCED WAS THE LATTER INCREASE OF ANISOTROPY. THE INTERVAL OF
 OPTIMUM DEGREE OF REDN. DEPENDED ON THE SI CONCNS. AND WAS VERY NARROW.
 CRIT. DEFORMATION FOLLOWED BY ANNEALING IN A BELL FURNACE DECREASED THE
 MAGNETIC INDUCTION WHILE ANNEALING AT 1100DEGREES IN A CONTINUOUS
 FURNACE DID NOT. FACILITY: TSNIICHM IM. BARDINA, MOSCOW, USSR.

UNCLASSIFIED

1/2 017 UNCLASSIFIED PROCESSING DATE--09OCT70
TITLE--EFFECT OF ANNEALING TEMPERATURE ON THE MAGNETIC PROPERTIES OF STEEL
E44 IN A DYNAMIC MAGNETIZATION SYSTEM --U--
AUTHOR--(03)--MIRONOV, L.V., POPOVA, V.P., CHERENKOV, V.I.

COUNTRY OF INFO--USSR

SOURCE--IZV. AKAD. NAUK SSSR, SER. FIZ. 1970, 34(2), 336-8

DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--MAGNETIC PROPERTY, TRANSFORMER STEEL, SILICON STEEL, ANNEALING
TEMPERATURE, GRAIN SIZE, ALLOY DESIGNATION/(U)E44 SILICON STEEL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1995/0179

STEP NO--UK/0048/70/034/002/0336/0338

CIRC ACCESSION NO--AP0115883

UNCLASSIFIED

2/2 017

UNCLASSIFIED

PROCESSING DATE--09OCT70

CIRC ACCESSION NO--AP0115863

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE STUDY WAS CARRIED OUT ON THE DYNAMIC AND STATIC MAGNETIC CHARACTERISTICS OF STEEL GRADE E44 (0.2 MM THICK) WITH VARIOUS GRAIN SIZE. SPECIMENS OF 50 MM OUTSIDE DIAM. WERE ANNEALED IN A VACUUM FURNACE FOR 1, 2, AND 4 HR AT 850DEGREES AND 1 AND 2 HR AT 1250DEGREES. FOLLOWING THE DETN. OF STATIC AND DYNAMIC MAGNETIC CHARACTERISTICS, POLISHED SECTIONS WERE INSPECTED UNDER A MICROSCOPE. SPECIMENS ANNEALED AT 1250DEGREES HAD GRAIN SIZES 1.0-1.5 MM PRIME². WHILE THOSE ANNEALED AT 850DEGREES HAD A GRAIN SIZE OF 0.03 MM PRIME². WITH INCREASING FREQUENCY OF MAGNETIZING CURRENT THE DIFFERENCE IN SP. CORE LOSSES BETWEEN SPECIMENS WITH LARGE AND FINE GRAINS INCREASED: E.G. AT 1000 HZ FINE GRAINED STEELS HAD LOSSES 5-8PERCENT LESS THAN THOSE OF COARSE GRAINED STEELS, WHILE AT 9000 HZ THIS DIFFERENCE INCREASED TO 25PERCENT. THUS, STEEL INTENDED FOR USE AT 1000 HZ SHOULD BE SUBJECTED TO HIGH TEMP. ANNEALING TO INCREASE THE SIZE OF GRAINS. FOR EACH RANGE OF FREQUENCIES AN OPTIMUM STRUCTURE OF THE STEEL SHOULD BE SELECTED. FACILITY: TSNIICM IM. BARDINA, MOSCOW, USSR.

UNCLASSIFIED

1/2 019 UNCLASSIFIED PROCESSING DATE--09OCT70
TITLE--PHYSICAL PRINCIPLES OF THE DEVELOPMENT OF TRANSFORMER STEELS FOR
HIGH FREQUENCY MACHINES -U-
AUTHOR--(03)-MIRONOV, L.V., POPOVA, V.P., CHERENKOV, V.I.
COUNTRY OF INFO--USSR *M*
SOURCE--IZV. AKAD. NAUK SSSR, SER. FIZ. 1970, 34(2), 351-5
DATE PUBLISHED-----70
SUBJECT AREAS--MATERIALS, MECH., IND., CIVIL AND MARINE ENGR, PHYSICS
TOPIC TAGS--TRANSFORMER STEEL, HIGH FREQUENCY, MAGNETIC PROPERTY, MAGNETIC
HYSTERESIS, QUALITY CONTROL, PHYSICAL PROPERTY, STEEL TECHNOLOGY
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1995/0181 STEP NO--UR/0048/70/034/002/0351/0355
CIRC ACCESSION NO--AP0115085
UNCLASSIFIED

2/2 019

UNCLASSIFIED

PROCESSING DATE--09OCT70

CIRC ACCESSION NO--AP0115885

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE ENERGY LOSSES IN THE MAGNETIC CORES OF HIGH FREQUENCY MACHINES ARE DETD. MOSTLY BY LOSSES OWING TO EDDY CURRENTS AND NOT TO MAGNETIC HYSTERESIS. THE CURRENT PROCEDURES OF QUALITY CONTROL INVOLVING TESTING THE PROPERTIES OF STEELS AT 400 HZ ARE UNSATISFACTORY. THERE IS A LACK OF DATA WITH RESPECT TO MAGNETIC PROPERTIES AT HIGH FREQUENCIES, THEIR RELATION TO COMPN., STRUCTURE, AND TECHNOL. FACTORS OF THE MATERIAL. ACTIONS THAT SHOULD BE TAKEN ARE CONSIDERED, ESP. IN MODERNIZING THE STEEL PRODUCING TECHNOL., WIDENING THE RANGE OF AVAILABLE STEEL GRADES AND SECTIONS, AND INTRODUCING NEW GRADES STRICTLY FOR HIGH FREQUENCY APPLICATIONS. FACILITY:
TSNIICM IM. BARDINA, MOSCOW, USSR.

UNCLASSIFIED

USSR

UDC 539.3:534.1

MIRONOV, M. V., Leningrad Polytechnical Institute

"Application of the Method of Slowly Changing Parameters for Approximate Calculation of the Transverse Oscillations of Rods"

Kiev, Prikladnaya Mekhanika, No 6, Jun 72, pp 103-110

Abstract: For approximate determination of the frequencies and forms of free transverse oscillations of rods of variable cross section, the equation of the oscillation forms is reduced, by means of the method of variation of arbitrary constants (the method of slowly changing parameters), to a system of four integral equations. This system is solved by the method of successive approximations. It is shown that in distinction from the presently known methods, use of the proposed method does not become more complicated as the number of the principal oscillations increases, whereas the exactness of the results obtained thereby as a rule increases. Although the present article deals with single-span beams, the motion of which is subject to a differential equation in its simplest form, the presented method permits account to be taken also of such additional factors as the rotation inertia of the beam, the influence of shear, the presence of a longitudinal force, etc. 2 tables. 6 references. 1/1

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1/5 026 UNCLASSIFIED PROCESSING DATE--23OCT70
TITLE--MANAGEMENT PROBLEMS IN THE MACHINE TOOL INDUSTRY -U-
AUTHOR--(02)-PARFENOV, V., MIRONOV, N. *M*
COUNTRY OF INFO--USSR
SOURCE--PRAVDA, DEC. 25, P. 2
DATE PUBLISHED--25DEC70

SUBJECT AREAS--BEHAVIORAL AND SOCIAL SCIENCES
TOPIC TAGS--MINISTERIAL CONTROL, R AND D MANAGEMENT ORGANIZATION, COMPUTER CENTER, ECONOMIC PLANNING PROBLEM, BONUS, INDUSTRIAL PERSONNEL, R AND D MANAGEMENT PROBLEM, INFORMATION PROCESSING

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1998/1092 STEP NO--UR/9012/T0/000/000/0002/0002
CIRC ACCESSION NO--AN0121655
UNCLASSIFIED

2/5 026

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AN0121655

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. COMPLETING OUR PUBLICATION OF "LETTERS FROM A MINISTRY", TODAY'S ARTICLE TELLS ABOUT THE WAYS OF IMPROVING THE MANAGERIAL WORK OF EMPLOYEES AT BRANCH "HEADQUARTERS". MORE THAN A THOUSAND SPECIALISTS OF VARIOUS OCCUPATIONS, AGES AND BACKGROUNDS COME TO WORK EACH MORNING AT THE MINISTRY OF THE MACHINE TOOL AND TOOL INDUSTRY. AT 9.55 A.M. THE LINES AT THE CLOAKROOM AND THE ELEVATORS HERE ARE LONGER THAN THOSE AT THE THEATER AFTER A PLAY. BUT PEOPLE COME TO THE MINISTRY DURING THE DAY AS WELL. THEY WALK DOWN THE LENGTHY CORRIDORS, STAND IN LINE OUTSIDE THE OFFICES OF THE DIRECTORS OF CHIEF ADMINISTRATIONS AND OF THEIR DEPUTIES AND ARGUE HEATEDLY AT THE DESKS THAT CROWD THE ROOMS OF THE VARIOUS DEPARTMENTS. THE PHONES RING. A CONSTANT STREAM OF LETTERS, TABLES, REPORTS AND OTHER DOCUMENTS LANDS ON THE DESKS. SUCH IS AN AVERAGE DAY AT THE MINISTRY. "IN OUR MINISTRY, EMPLOYEES OF THE BUSINESS OFFICE WORK IN 17 DIFFERENT LOCATIONS; THEY ARE SCATTERED AROUND THE ENTIRE BUILDING", THE HEAD OF THE OFFICE TOLD US. "THERE ARE NO DIRECT COMMUNICATIONS; ONE HAS TO USE THE TELEPHONE". AFTER HEARING THE REPORT OF THE MINISTRY'S PARTY COMMITTEE, THE BUREAU OF THE FRUNZE BOROUGH PARTY COMMITTEE STATED THAT NO CLEAR CUT PROCEDURE FOR RECORDING AND PROCESSING COMPLAINTS HAS BEEN SET UP IN THE CHIEF ADMINISTRATIONS AND ADMINISTRATIONS. THERE ARE SERIOUS SHORTCOMINGS IN THE WAY THE RECEPTION OF VISITORS IS ORGANIZED. COMPLAINTS AND REQUESTS PRESENTED ORALLY ARE NOT REGISTERED. AS MANY AS 20PERCENT OF ALL DOCUMENTS ARE COMPLETED FROM 10 TO 30 DAYS LATE. THE OFFICIALS OF THE MINISTRY TAKE DIFFERING VIEW OF THIS STATE OF AFFAIRS.

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PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AN0121655

ABSTRACT/EXTRACT--SOME ATTRIBUTE IT TO POOR DISCIPLINE, AND WE CANNOT BUT AGREE WITH THIS. IT IS STILL COMMON FOR ORDERS NOT TO BE CARRIED OUT ON TIME. AND THE GUILTY PARTIES ARE BY NO MEANS ALWAYS CALLED TO ACCOUNT. THIS WAS THE CASE, FOR EXAMPLE, WITH ORDER NO. AK-184, DATED JUNE 10. IN THIS DOCUMENT, MINISTER A. I. KOSTOUSOV ORDERED THE DIRECTORS OF THE CHIEF ADMINISTRATIONS TO WORK OUT MEASURES TO IMPROVE THE SYSTEM OF RECIPROCAL DELIVERIES OF CASTINGS. AN AUTHORITATIVE COMMISSION WAS SET UP, AND DEADLINES WERE FIXED. ALL THE DEADLINES HAVE PASSED, BUT NO MEASURES HAVE BEEN UNDERTAKEN, AND THOSE RESPONSIBLE HAVE NOT BEEN CALLED TO ACCOUNT. EVIDENTLY THIS IS WHY SOME EXECUTIVES HAD OUT PROMISES SO FREELY AND THEN FORGET ABOUT THEM. WHAT INFLUENCE HAS THE ECONOMIC REFORM HAD ON THE WORK STYLE OF THE MINISTRY'S APPARATUS? WE ASKED THIS QUESTION OF MANY RESPONSIBLE STAFF MEMBERS. UNFORTUNATELY, IT IS AS IF THE REFORM HAD BYPASSED THE BRANCH HEADQUARTERS. A GREAT DEAL REMAINS UNCHANGED HERE, JUST AS IT WAS AT ONE TIME IN THE FORMER MINISTRIES. THE MAIN DEFECT IS THAT THE WORK OF THE PLANTS IS OFTEN PLANNED WITHOUT CONSIDERATION FOR THE REQUIREMENT OF THE REFORM. PLANS ARE REVISED AND CORRECTED MANY TIMES DURING THE YEAR. FOR INSTANCE, THE PLAN FOR THE WORK OF THE RYAZAN CENTRAL FOUNDRY HAS BEEN REVISED SIX TIMES. THE SAME APPLIES TO INCENTIVES. BONUSES FOR THE YEAR'S RESULTS ARE ISSUED TO EMPLOYEES OF THE CHIEF ADMINISTRATIONS ON A ROTATING SYSTEM: ONE GROUP ONE QUARTER, ANOTHER GROUP THE NEXT. AND THIS HAPPENS SIMPLY BECAUSE THERE ARE NO ECONOMIC CRITERIA FOR EVALUATING THE EFFICIENCY OF THE WORK OF ANY GIVEN STAFF MEMBER IN THE APPARATUS.

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UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AN0121655

ABSTRACT/EXTRACT--GREAT HOPES ARE HELD HERE FOR THE BRANCH AUTOMATED MANAGEMENT SYSTEM (BAMS) AND FOR THE MINISTRY'S INFORMATION AND COMPUTING CENTER. THE ORDERS TO CREATE AND INTRODUCE THIS SYSTEM IN THE BRANCH WERE ISSUED ON APRIL 19 AND AUG. 17, 1968. DURING THE PERIOD SINCE THAT TIME, "A CERTAIN AMOUNG OF WORK HAS BEEN DONE", AS IT IS CUSTOMARILY PUT. TELETYPE MACHINES HAVE BEEN INSTALLED AT 180 PLANTS, AND 43 INTERCONNECTED INFORMATION STATIONS HAVE BEEN ORGANIZED IN VARIOUS PARTS OF THE COUNTRY TO GATHER CURRENT INFORMATION. A DEPARTMENT FOR THE INTRODUCTION OF COMPUTER TECHNOLOGY HAS BEEN SET UP IN THE MINISTRY'S TECHNICAL ADMINISTRATION. A CENTRAL COMMUNICATIONS OFFICE AND INFORMATION AND COMPUTING CENTER, WHICH IS CONNECTED BY COMMUNICATIONS CHANNELS TO THE NETWORK OF INFORMATION STATIONS, HAS BEEN EQUIPPED IN MOSCOW. AT THE EXPERIMENTAL METAL CUTTING MACHINE TOOLS RESEARCH INSTITUTE, A DEPARTMENT HAS BEEN SET UP TO WORK OUT AND INTRODUCE A BRANCH AUTOMATED SYSTEM. SINCE MAY, 1968, MORE THAN A YEAR AND A HALF AGO, THE INFORMATION AND COMPUTING CENTER HAS BEEN GIVING ALL THE DIRECTORS OF CHIEF ADMINISTRATIONS AND THEIR DEPUTIES A REPORT EVERY TEN DAYS ON PROGRESS IN THE FULFILLMENT OF THE PRODUCTION PLAN BY THE MINISTRY'S PLANTS. NEVERTHELESS, THE STAFF MEMBERS OF THE CHIEF ADMINISTRATIONS CONTINUE TO COLLECT THE VERY SAME DATA BY TELEPHONE EVERY TEN DAYS. NOR IS THAT ALL. THE VERY SAME REPORTS, SIGNED BY DIRECTORS AND WITH OFFICIAL SEALS AFFIXED, STILL ARRIVE AT THE MINISTRY EVERY MONTH BY MAIL. BONUSES ARE GIVEN TO THE COLLECTIVES SOLELY ON THE BASIS OF THESE REPORTS. WHAT IS THE SOURCE OF THIS DISTRUST FOR ELECTRONIC MACHINES?

UNCLASSIFIED

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UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC. ACCESSION NO--AN0121655

ABSTRACT/EXTRACT--IS IT PERHAPS BECAUSE THEY HAVE NOT YET BEEN ADAPTED TO
REPRODUCE THE OFFICIAL SEALS?

UNCLASSIFIED

USSR

UDC 519.24

GERANIN, V. A., GONCHAROVA, A. Ya., MIRONOV, N. A., PRODEUS, A. N.

"Influence of Errors in Quantization of a Random Process on Accuracy of Measurement of Correlation Function"

Metody Predstavleniya i Apparatur' Analiz Sluchayn. Protsessov i Poley, 3-y vses Simpozium. Sekts. 3, [Methods of Representation and Hardware Analysis of Random Processes and Fields. Third All-Union Symposium, Section 3--Collection of Works], Leningrad, 1970, pp 71-76, (Translated from Referativnyy Zhurnal Kibernetika, No 5, 1971, Abstract No. 5V196 by A. Dorogovtsev).

Translation: The dispersion of the estimate of a correlation function of a stable process is studied, constructed on the basis of discrete observations of the process, distorted either by additive random addition or produced at random moments in time, differing slightly from fixed nonrandom moments.

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USSR

AVERKOVICH, N. V., BONDAREVSKIY, Ye. Ya., DANILOV, Yu. G., and MIRONOV, N. N.,
All Union Scientific Research Institute of Physical Culture, Moscow Institute of
Electronic Machine-Building, Kursk Polytechnical Institute, and L'vov Polytech-
nical Institute

"The Level of Physical Fitness of People Living in Various Parts of the Country,
and Methods of Evaluating It"

Moscow, Teoriya i Praktika Fizicheskoy Kul'tury, No 10, Oct 70, pp 34-39

Abstract: Fitness levels were assessed in 30,000 male and female first- and
second-year students at various institutions of higher learning in Moscow, Kursk,
and L'vov. The evaluation was based on performance in various athletic events
(100 m dash, running broad jump, shot put, 1,500 m run, etc.) and compared with
norms established for two different national exercise programs: GTO (Ready for
Labor and Defense of the USSR), which has been in existence for 10 years, and the
recently proposed (1969) GYZR ("Ready for Labor and Protection of the Motherland").
Although the students of the Moscow institutes and university did best in most of
the events in the GTO program, the vast majority of all of the students turned in

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AVERKOVICH, N. V., et al, Teoriya i Praktika Fizicheskoy Kul'tury, No 10, Oct 70,
pp 34-39

an overall performance of satisfactory or better, showing that the GTO exercises are too "easy." On the other hand, performance in the GYZR events was significantly below expectations, primarily because the fitness level of most of the students was too low. Geography is considered to be only one of several factors (e. g., the nature of the institute attended, gym requirements, etc.) cited as responsible for the differences in results among the various institutions.

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1/2 011 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--SCANDIUM HYDROXIDE FORMATION REACTION --U--
AUTHOR--(02)--MIRONOV, N.N., MALKEVICH, N.V. *m*
COUNTRY OF INFO--USSR
SOURCE--ZH. NEORG. KHIM. 1970, 15(3), 599-601
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--SCANDIUM COMPOUND, HYDROXIDE, TERNARY FLUID SYSTEM, NITRATE,
SULFATE, SCANDIUM CHLORIDE, SOLUTION CONCENTRATION
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1994/1874 STEP NO--UR/0078/70/015/003/0599/0601
CIRC ACCESSION NO--AP0115693
UNCLASSIFIED

2/2 011 UNCLASSIFIED PROCESSING DATE--13NOV70
CIRC ACCESSION NO--AP0115693
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE FORMATION OF SC HYDROXIDE (I)
WAS STUDIED BY THE SOLY. METHOD, BY DETN. OF PH AND ELEC. COND. OF
EQUIL. SOLNS., BY POTENTIOMETRIC AND CONDUCTIMETIRC TITRN. AND BY X RAY
POWDER DIFFRACTION. THREE SYSTEMS WERE STUDIED: SCCL SUB3-NAOH-H SUB2
O, SC(OH)SUB3-SUB3-NAOH-H SUB2 O, AND SC SUB2(SO SUB4)SUB3-NAOH-H SUB2
O. ANIONS PRESENT IN THE SYSTEMS AFFECTED I FORMATION. IN THE 1ST 2
SYSTEMS I FORMED AT LOWER OH PRIME NEGATIVE--SC PRIME3 POSITIVE CONC.
RATIOS THAN IN THE LAST SYSTEM. SC (OH)SUB1.75 CL SUB1.25, SC(OH)SUB2
NO SUB3, AND SC(OH)SUB2.32(SO SUB4)SUB0.34, SEPD. IN THE SYSTEMS, RESP.

UNCLASSIFIED

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USSR

UDC 545.661

MIRONOV, N. N., and POLYASHOV, I. M., Department of Inorganic Chemistry and Scientific Research Institute of Chemistry, Gor'kiy, Gor'kiy State University

"Reaction of Europium Hydroxide Formation"

Moscow, Zhurnal Neorganicheskoy Khimii, Vol XV, No 1, 1970, pp 3-4

Abstract: A study was made of the formation of europium hydroxide in sulfuric acid, nitric acid, and chloride solutions by method of solubility residual concentration, measurement of pH and electroconductivity of equilibrium solutions, and apparent precipitation volume. Influence of the salt anion on the formation of europium hydroxide was shown. In all the investigated systems formation of basic salts preceded formation of the hydroxide.

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Acc. Nr:

AP0034111

Abstracting Service:

CHEMICAL ABST. 4-70

Ref. Code:

UR 0078

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71294w Europium hydroxide formation reaction. ~~in Russian~~
 N. N. Polyashov, I. M. (Kafedra Neorg. Khim., Gor'k. Univ.,
 Gorki, USSR). *Zh. Neorg. Khim.* 1970, 15(1), 3-4 (Russ).
 The formation of Eu hydroxide in $\text{Eu}_2(\text{SO}_4)_3\text{-NaOH-H}_2\text{O}$, $\text{EuCl}_3\text{-NaOH-H}_2\text{O}$, and $\text{Eu}(\text{NO}_3)_3\text{-NaOH-H}_2\text{O}$ systems was detd. by measuring soly., pH, and elec. cond. of the equil. solns. at 25° and by detn. the apparent vol. of the ppt. In all investigated systems basic salts $(\text{Eu}(\text{OH})_{2.5}(\text{SO}_4)_{0.5})$, $\text{Eu}(\text{OH})_{1.7}\text{Cl}_{1.3}$, and $\text{Eu}(\text{OH})_{2.5}(\text{NO}_3)_{0.5}$ formed prior to the formation of Eu hydroxide. The nature of the anion affected the process of hydroxide formation. EIMJR

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UDC 911.3:616.981.452

USSR

MIRONOV, N. P.

"Structural Dynamics of the Zone of Plague Bacteria"

V sb. Probl. osobo opasn. infektsiy (Problems of Especially Dangerous Infections -- collection of Works), Saratov, No 4(14), 1970, pp 34-40 (from RZh-Meditsinskaya Geografiya, No 3, Mar 71, Abstract No 3.36.110) by B. Dobrokhotov

Translation: A system of separating the zones of natural plague foci into a series of sequential categories was examined: a zone of natural foci, an autonomous region of focal activity, a section of focal activity or mesofocus, microfoci, or elementary foci. The circulation characteristics of the pathogen and the degree of stability of each unit of the subdivision of the focal territory are discussed. Elementary foci are the most dynamic and most short-lived (no more than one seasonal interepizootic period). Mesofoci, which include a complete system of microfoci, are considerably more stable (decades and centuries). Relatively autonomous foci and especially all natural foci are characteristic for entire geological epochs.

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USSR

UDC 911.2:502.7:591.92(26)

MIRONOV, O. G., Institute of Biology of the Southern Seas, Academy of Sciences
Ukrainian SSR

"Biological Aspects of Sea Water Pollution by Petroleum and Petroleum Products"

Moscow, Izvestiya Akademii Nauk, Seriya Geograficheskaya, No 2, 1972, pp 52-59

Abstract: The first part of this article considers the toxic effect of petroleum and its products on flora and fauna of the Black Sea, and the second part indicates the role of microorganisms in sea water purification.

Sensitivity of phytoplankton to petroleum differs markedly and is of order 3-4 for such diatoms as *Melosira moniliformis* and *Ditylum brightwellii*. In general petroleum is more toxic for zooplankton even in very low concentrations (0.001 ml./liter of sea water). A 5-minute exposure of *D. brightwellii* to 1.0 ml. masut/liter of sea water causes noticeable growth inhibition of this diatom. Increase of the exposure time to 1 hr causes all diatom cells to die 3 days later in unpolluted water. Young (summer brood) fishes can survive in polluted sea water for several days in the presence of 0.25 ml. petroleum/liter, provided they are transferred to unpolluted water thereafter. Emulsified petroleum products are more toxic than petroleum on the water surface. Among several

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MIRONOV, O. G., Izvestiya Akademii Nauk, Seriya Geograficheskaya, No 2, 1972, pp 52-59

benthoses, *G. divaricata*, *B. reticulatum*, and *R. euxinica*, the most sensitive to petroleum is *R. euxinica*, while two other species could remain unaffected for 10-15 days in water containing 1.0 ml. petroleum/liter. Concentration of 0.01 ml. petroleum/liter is toxic for many grayfishes, but it takes 1.0 g petroleum/kg of the sea bottom deposit to kill *Nereis diversicolor*. The most resistant to petroleum are small (2-2.5 g) stone crabs which survive for 15 days in sea water containing 0.1-1.0 ml. navy masut/liter. Fish roe is especially sensitive to petroleum pollution during early stages of development, even in a concentration of 10^{-2} - 10^{-3} ml. petroleum/liter. All flounder roe can be killed by this concentration of petroleum. At 10^{-4} - 10^{-5} ml. petroleum/liter the survival of fish roe is 55-89%. However, all hatched fishes perish in the presence of 10^{-4} ml. petroleum/liter, and 23-40% (control 7-10%) of them degenerate in the presence of 10^{-5} ml. petroleum/liter.

Among petroleum-oxidizing bacteria the most active in many seas and oceans were *Pseudomonas sinuosa* and *Pseudobacterium furcosum*. In places along the Black Sea coastline, where the concentration of petroleum and petroleum products is high the number of these microorganisms reached 1000-10,000

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USSR

MIRONOV, O. G., *Izvestiya Akademii Nauk, Seriya Geograficheskaya*, No 2, 1972, pp 52-59

cells/ml. sea water. Their number increased in water of the Bosphorus Strait where water is highly polluted. The concentration of petroleum oxidizing bacteria in Aegean Sea was not as high. Thirty tests made at 68 places in Mediterranean Sea showed the presence of these microorganisms. This was especially true around Port Said and the Suez Canal. In general there were more petroleum-oxidizing bacteria along the Italian and French coastline than along the African coastline of the Mediterranean Sea. In the northwestern part of Indian Ocean, 30 of the 35 places tested had a high concentration of petroleum-oxidizing bacteria. The characteristic property of these bacteria is their ability to grow on different sources of C. They appear from time to time at different locations following petroleum pollution carried by sea and ocean waters. The oxidizing activity of these bacteria is rapid at first, then it slows down, depending on the petroleum layer thickness. Their role in the water purification process is undeniable. However, many things about their activities are unknown and require further studies.

During his experimental work with microorganisms the author identified about 400 different cultures of petroleum-oxidizing bacteria in the Black, Mediterranean and Red Seas, and in the Indian and Atlantic Oceans.

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USSR

MIRONOV, O. G.

Neftyanoye Zagryazneniye i Zhizn' Morya (Oil Pollution and Sea Life),
Naukova Dumka, 1973, 10 pp.

Abstract: Experimental data on the effect of various oils and oil products on several organisms in the Black Sea are presented in this work for the first time. The book sets forth the results of experiments on the temporary effect of oil products on sea organisms and also the effect of oil pollution on hydrobionts. The role of the ecological factor in the self-purification of the sea habitat from oil products is described. The book is intended for hydrobiologists, oceanologists, fish industry workers, and conservationists.

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USSR

UDC: [621.313.32:537.312.62]001.24

BERTINOV, A. I., MIRONOV, O. M., Moscow

"Selecting the Principal Dimensions of a Synchronous Generator With Superconducting Magneto"

Moscow, Izv. AN SSSR: Energetika i Transport, No 4, Jul/Aug 72, pp 29-38

Abstract: A principal design equation is derived for a synchronous machine in which account is taken of the limiting critical relation between current density and magnetic field for the superconducting material of the field winding. A criterion is proposed for determining the principal characteristics of the generator. It is found that the leakage coefficient of the magnetic circuit in a synchronous generator with superconductive field winding assuming maximum power per unit volume of the magneto is about 0.60-0.75. An increase in the relative inside diameter of the magneto increases the outside diameter of the field winding and reduces the space taken up by the superconductor. Engineering methods are proposed for calculating the dimensions of the armature to give the required leakage coefficient of the magnetic circuit and relative inductive reactance of the armature winding.

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USSR

UDC: [621.313.32.011.23:536.483]001.24

BERTINOV, A. I., ~~MIRONOV, O. M.~~, GOLOVKIN, A. V., Moscow

"Inductive Reactances of a Cryogenic Synchronous Machine With Ferromag-
netic Shield"

Moscow, Izv. AN SSSR: Energetika i Transport, No 4, Jul/Aug 72, pp 61-65

Abstract: The principal inductive reactances of the straight sections of windings are determined in a synchronous machine with cryogenic cooling of the windings and with a magnetic-circuit shield. Engineering methods for calculating the inductive reactances are presented. The results of the studies are compared with the parameters of similar machines without a shield. It is found that a ferromagnetic shield over the windings of the generator increases the emf by a factor of 1.4-1.9 over machines without shielding. The ferromagnetic shield has practically no effect on the inductive reactances of differential scattering.

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USSR

UDC: [621.313.32.011.3/045.7:536.483]001.24

BERTINOV, A. I., ~~MIRONOV, O. N.~~, MOKIIE, V. S., Moscow

"Coefficients of Induction of a Cryogenic Synchronous Machine With Damper System"

Moscow, Izv. AN SSSR: Energetika i Transport, No 4, Jul/Aug 72, pp 56-60

Abstract: The self-inductance of a damper system in a cryogenic synchronous machine without magnetic circuit is calculated. The mutual coefficients of the induction of damper and coils are determined and curves are presented for the mutual inductances as functions of the relative geometric dimensions of the machine. It is found that the self-inductance of the damper and its mutual inductance with the coils are independent of the absolute values of machine diameters. As the thickness of a winding increases, its mutual inductance with the damper decreases. As the number of poles of the machine is increased, the self-inductance of the damper increases and its mutual inductance with the windings decreases. With a variation in the ratio of outside to inside diameter of the damper wall between 1 and 1.1, its self-inductance varies little, and can therefore be taken as constant in designing two-pole and four-pole machines.

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1/2 021 UNCLASSIFIED PROCESSING DATE--20NOV70
 TITLE--FORM COEFFICIENT OF SUPERCONDUCTIVE SYNCHRONOUS MACHINE FIELD -U-
 AUTHCR--(04) BERENOV, A.I., GOLOVKIN, A.V., YESOSHINA, L.A., AKHIEV, O.M.
 CCUNTRY OF INFO--USSR
 SOURCE--ELEKTROTEKHNIKA (ELECTRICAL ENGINEERING), 1970, NO 1, PP 12-16
 DATE PUBLISHED-----70

SUBJECT AREAS--ELECTRONICS AND ELECTRICAL ENGRS.
 TOPIC TAGS--SYNCHRONOUS GENERATOR, FERROMAGNETIC SUPERCONDUCTIVITY,
 MAGNETIC FIELD

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
 PROJY REEL/FRAPE--3004/G250

STEP NO--UR/0292/70/000/001/0043/0046

CIRC ACCESSION NO--AP0130387

UNCLASSIFIED

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UNCLASSIFIED

PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0150987

ABSTRACT/EXTRACT--(U) CP-C- ABSTRACT. THE USE OF SUPERCONDUCTIVE EXCITATION WINDINGS FOR SYNCHRONOUS MACHINES LEADS TO NEW CONFIGURATIONS WHICH REQUIRE MODIFICATION OF THE FUNDAMENTALS OF SUPERCONDUCTIVE MACHINE THEORY. IN THIS STUDY A SIGNAL EXPRESSION IS OBTAINED FOR DETERMINING THE RADIAL COMPONENT OF THE MAGNETIC FIELD INTENSITY IN CLOSED FORM AND THE FORM COEFFICIENT OF THE SUPERCONDUCTIVE SYNCHRONOUS MACHINE FIELD IS DETERMINED. THE DISTRIBUTION OF THE MAXIMUM OF THE MAGNETIC FIELD INTENSITY RADIAL COMPONENT ALONG THE RADIUS IS GIVEN AS A FUNCTION OF THE NUMBER OF POLE PAIRS AND THE RATIO OF THE GEOMETRIC DIMENSIONS OF THE EXCITATION WINDING. THE ANALYSIS SHOWS THAT THE HIGHER HARMONICS HAVE THE HIGHEST VALUE WITHIN THE WINDING.

UDC 669.295:621.777

USSR

MIRONOV, O. S., and KURBATOV, V. S.

"Production Perfection of Profiles from Titanium Alloys"

Moscow, Tsvetnyye Metally, No 3, 1973, pp 63-65

Abstract: Pressure molding of items with a complex configuration was perfected lately because of the use of induction heating, new lubricants with silicon, and building-up the die surface with stellites. Nevertheless all these measures were insufficient for the elimination of surface defects on produced items. Most of these defects were due to pits produced by metal particles adhering to the die surface. Silicon lubricants facilitated the formation of these pits by filling voids on the metal surface. Different phase composition of the soft and hard titanium alloys within the pressure molding temperature range was responsible for the formation of surface defects. There are many theories regarding the sticking of molded metal to the die surface. The most probable one maintains that the sticking of metal is caused by a rapid cooling of the outer metal layer which produces adhesions to the die surface in many places, depending on the contact time. Experiments showed that when the metal outflow rate is short the contact time between the base metal and the adhered metal is sufficient to produce interdiffusion and to eliminate pits on the

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MIRONOV, O. S. and KURBATOV, V. S., Tsvetnyye Metally, No 3, 1973, pp 63-65

metal surface. Best results were obtained with an outflow rate of 1-1.3 m/sec for soft alloys and 1.5-2 m/sec for hard titanium alloys. Surfaces of molded items in these cases were free of imperfections. Presently it is possible to produce molded items 120 mm in diameter, with 1.5 mm wall thickness.

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USSR

UDC 621.314.212.003.13

MIRONOV, F. YE.

"Problems of Improving Transformer Efficiency"

V sb. Tekhn. progress v elektrosnabzh. gorodov (Technical Progress in Municipal Electric Power Supply — Collection of Works), Leningrad, Energiya Press, 1970, pp 50-53 (from RZh-Elektrotehnika i Energetika, No 3, Mar 71, Abstract No 3Ye145)

Translation: The basic factors determining the transformer load of municipal substations are investigated: accuracy of forecasting the calculated loads, overload capacity of the transformers; problems of providing incentive for the maintenance personnel of municipal networks, and so on. It is demonstrated that the transformer power is used inadequately. Recommendations are made with respect to improving the loading of transformers.

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MIRONOV S.A.

UR 0482

3-78

Soviet Inventions Illustrated, Section I Chemical, Derwent,

238380 HEAT TREATMENT OF CONCRETE AND REINFORCED CONCRETE ARTICLES is carried out by means of a.c. of main frequency during the vibrational formation of the articles. The temperature is rapidly increased to 90-100°C (instead of the conventional rate of 200C/hr.), whereby the duration of the articles, the moulds are removed without delay, and the articles are further heated at the same temperature until the desired strength is reached. As electrodes, insulated parts of the forming machines or reinforcement elements are used. Compared with the known methods, this process is shortened by 2-4 hrs. The density of the articles is increased, because the vibrational formation is carried out at elevated temperatures. There is no temperature gradients, so that internal stresses do not develop. The removal of the mould elements is facilitated because of the formation of a vapour layer at the contact surfaces. 26.10.67. as 1194251/29-33. B.A.KRYLOV et alia. Institute of Concrete and Reinforced Concrete. (10.7.69.) Bul.9/20.2.69. Class 80a. Int.Cl. B28c.

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AUTHORS: Krylov, B. A.; Li, A. I.; Malinina, L. A.;
Mironov, S. A.; Rudenko, I. F.; Folomeyev, A. A.;
and Shchurov, Yu. I.

Nauchno - Issledovatel'skiy Institut Betona i Zhelezobetona

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19740002

USSR

UDC 691. 328:539.4

MIRONOV, S.A., Professor, Doctor of Technical Sciences, (Scientific Research Institute of Reinforced Concrete) (NIIZhB), MUGRIM, S.P., Candidate of Technical Sciences, STANISLAVOVA, E.K., Engineer (Construction and Billeting Section of the All-Union Scientific Research Institute for the Construction of Trunk Pipelines) (SKO VNIIST)

"Strengthening of Concrete in Contact With Permafrost Soils"

Moscow, Beton i Zhelezobeton, No 6, June 71, pp 3-5

Abstract: Results are presented of a series of investigations on strengthening of concrete without additions and with chemical additions (small quantities), maintained in permafrost grounds (0 to -30°C), and on the effect of various factors on concrete strengthening. The results show that the rate of strengthening depends substantially on cement activity and that a preliminary maturing of the fresh poured concrete at positive temperatures using electric heating with subsequent thermal curing, ensures the formation of a favorable capillary-porous structure and confers to the concrete a specific strength before freezing. Thanks to this, the strengthening rate in permafrost grounds increases, while the destructive processes due to freezing, decrease. By adding small quantities of salts (calcium chloride) the rate of hardening may be increased. Recommendations are given on consideration of strengthening rate in the foundations and other constructions, erected in permafrost grounds with temperature not lower than -3°C.

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MIRONOV, S.I.

1. INTRODUCTION DATA SHEET JPRS 50625		1. Date of Report 20 July 1973	
2. TITLE ANNEALING OF THIN MAGNETIC FILMS AT HIGH TEMPERATURES			
3. AUTHOR(S) V. D. Verneev, S. I. Mironov			
4. ORGANIZATION(S) Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201			
5. AVAILABILITY STATEMENT As above		6. PERFORMING ORGANIZATION REPORT NUMBER 13. Technical Paper & Transl. Control	
7. AUTHOR(S) ADDRESS SHORNIK NAUCHNINII TUDOV PO PROBLEMAN MIKROELEKTRONIKI, MOSKOVSKIY INSTITUT ELEKTRONOV TEKHNIKI, No 5, 1972, MOSCOW			
8. SUBJECT TERMS The report contains an investigation of the kinetics of the change in the electrical resistance of Ni-Fe two-layer films and Ni-Fe alloys of different composition during annealing in a magnetic field.			
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1/2 033 UNCLASSIFIED PROCESSING DATE--27NOV70
TITLE--MEASUREMENT OF ION TEMPERATURE ON THE TOKAMAK T-3 INSTALLATION BY
USING DOPPLER BROADENING OF THE SPECTRAL LINES OF NEUTRAL HYDROGEN AND
AUTHOR--(02)--SEMENOV, I.B., MIRNOV, S.V.

m

COUNTRY OF INFO--USSR

SOURCE--AT. ENERG. 1970, 28(2), 129-31

DATE PUBLISHED-----70

SUBJECT AREAS--NUCLEAR SCIENCE AND TECHNOLOGY, PHYSICS

TOPIC TAGS--HYDROGEN, DEUTERIUM, ION TEMPERATURE, TEMPERATURE MEASUREMENT,
SPECTRAL LINE, PLASMA PHYSICS/(U)TOKAMAK 3 THERMONUCLEAR DEVICE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--2000/2253

STEP NO--UR/0089/70/028/002/0129/0131

CIRC ACCESSION NO--AP0125831

UNCLASSIFIED

2/2 033

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PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0125831

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. DETAILS ARE GIVEN OF A TECHNIQUE FOR THE DETN. OF THE TEMP. T OF D PLASMA IN THE "TOKAMAK T-3" TORROIDAL PLASMA SETUP BY MEASURING THE DOPPLER BROADENING OF THE H SUBALPHA AND D SUBALPHA SPECTRAL LINES AFTER THE INJECTION OF "COLD" H INTO THE PLASMA; THE VLAUE OF T (AT A PLASMA CONCN. N SUBE. EQUALS (1-2) TIMES 10 PRIME13-CM. PRIME3) INCREASED SIMILAR TO 80-150 EV WHEN THE DISCHARGE CURRENT WAS INCREASED FROM 30-80 KA.

UNCLASSIFIED

1/2 032 UNCLASSIFIED PROCESSING DATE--23OCT70
TITLE--ENERGY CONFINEMENT TIME OF A PLASMA AS A FUNCTION OF THE DISCHARGE
PARAMETERS IN THE TOKAMAK-3 -U-
AUTHOR-(03)-GORBUNOV, E.P., MIRNOV, S.V., STRELKOV, V.S.
COUNTRY OF INFO--USSR
SOURCE--NUCLEAR FUSION VOL. 10, MAR 1970, P. 43-51
DATE PUBLISHED----MAR 70
SUBJECT AREAS--PHYSICS
TOPIC TAGS--THERMAL INSULATION, PLASMA CONFINEMENT, ION DENSITY, CURRENT
DENSITY, (U) TOKAMAK 3 THERMONUCLEAR DEVICE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1985/1836 STEP NO--AU/0000/70/010/000/0043/0051
CIRC ACCESSION NO--AP0101883
UNCLASSIFIED

PROCESSING DATE--23OCT70

UNCLASSIFIED

2/2 032

GIRC ACCESSION NO--AP0101883
ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. THE AUTHORS INVESTIGATE THE THERMAL INSULATION OF PLASMAS IN TOKAMAK-3, TAKING AS THERMAL INSULATION PARAMETER THE ENERGY CONFINEMENT TIME OF THE PLASMA AND RELATING IT TO THE DISCHARGE PARAMETERS: THE STABILIZING MAGNETIC FIELD, THE CHARGED PARTICLE DENSITY, AND THE DISCHARGE CURRENT. IT IS FOUND THAT FOR CHARGED PARTICLE DENSITIES GREATER THAN 2 TIMES 10^{10} TO THE 13TH POWER PER CU CM, THE ENERGY CONFINEMENT TIME IS VIRTUALLY INDEPENDENT OF THE STABILIZING FIELD AND INCREASES SOMEWHAT WITH CHARGED PARTICLE DENSITY AND IN PROPORTION TO THE DISCHARGE CURRENT. FACILITY: AKADEMIIA NAUK SSSR, INSTITUT ATOMNOI ENERGII, MOSCOW, USSR.

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UDC:621.9.025174:669.018.95

MIRONOV, V. A. and MAKSIMOV, YU. M.

"Manufacture of Complex-Shaped Metal-Ceramic Parts by Magnetic Impulse Pressing"

Moscow, Stanki i Instrument, No 9, Sep 73, pp 34-35

Abstract: The method of magnetic impulse pressing allows a significant expansion of the variety of parts made of metal powders. Pressing is performed on magnetic impulse devices. By changing the capacitance of the battery of condensers and the voltage applied, the magnetic field pulse pressure in such a device can be varied. The working tool is a multiple-turn solenoid. Shape formation is achieved by means of a thin-wall electrically conductive envelope die which is deformed by the forces arising upon interaction of the magnetic fields of the inductor and the vortex currents induced in the envelope. Copper and aluminum are the best materials for these envelopes, due to their high conductivity. Further work is continuing, designed to increase the life of inductors, improve devices and mechanize pouring of the powder into the molds.

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USSR

UDC 621.382.3

MIRONOV, V.A., NOVOSEL'TSEV, V.YE., PASYNKOV, V.V., SHINKOV, A.D.

"Calculation Of Time Constant Of Feedback Circuit Of Planar Transistor"

Izv. Leningr. elektrotekhn. in-ta (Journal Of The Leningrad Electrical Engineering Institute), 1972, Issue 108, pp 100-113 (from RZh:Elektronika i yeye primen-
iye, No 11, Nov 1972, Abstract No 11B253)

Translation: A calculation is given of the dependence of the time constant of a feedback circuit on the technological and structural parameters of a planar structure transistor. A grid electrical model was used in which a planar transistor was taken as two-dimensional, i.e., the base region was considered as a thin conductive layer. A comparison of the calculated values of the time constant with those measured on an actual transistor shows that a divergence between the experimental and analytical curve is observed only in the area of large currents.
5 ill. N.K.

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USSR

UDC: 543.42.062

MIRONOV, V. A., FEDOROV, B. V., SHICHKOV, V. V., YACHIN, V. M."Universal Spectral Analyzer for Liquid Media"

Optich. i Titrometrich. Analizatory Zhidk. Sred [Optical and Titrometric Analyzers for Liquid Media], Reports of All Union Conference, 1971, Part 1, Tbilisi, 1971, pp55-60 (translated from Referativnyy Zhurnal Metrologiya i Izmeritel'naya Tekhnika, No 2, 1972, Abstract No 2.32.1093 by V. S. Krasnova)

Translation: The Special Design Bureau of the Weather Bureau, Academy of Sciences, USSR has developed an experimental model of a universal spectral analyzer (A) for liquid media for measurement of action spectra (characteristic and effective). The A includes a two-wave radiator with controlled output spectra, a thermostated cuvette with regulator and temperature measuring device, interchangeable converters and electronic measuring devices and a recording potentiometer. The outputs of both channels of the radiator produce spectra of equal power with an error of equalization relative to the maximum standard level of not over 5% in the 300-760 ~~mμ~~ wave range. The A allows curves of the change of electrical conductivity, partial oxygen pressure and photo-potentials to be measured as functions of wavelength of the incident radiation, radiation intensity, temperature and composition of liquid and gas media, surrounding the objects studied.

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- 151 -

USSR

UDC 621.373.029.52(088.8)

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MAKURIN, P. S., MIRONOV, V. A.

"Infralow Frequency Generator"

USSR Author's Certificate No 240758, Filed 2 Dec 67, Published 14 Nov 70
(from RZh-Radiotekhnika, No 9, Sep 70, Abstract No 9D290P)

Translation: In a low-frequency number generator (see EZHRIE, 1967, 12D351), in order to simplify and improve the reliability, it is proposed that the outputs of both RC-circuits be connected to the input of a comparator via diodes and the control circuits of both current switches be connected to the comparator output.

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1/2 009 UNCLASSIFIED PROCESSING DATE--02OCT70
TITLE--INDAN -U-
AUTHOR-(03)-MIRONOV, V.A., IVANOV, A.P., AKHREM, A.A.
COUNTRY OF INFO--USSR M
SOURCE--U.S.S.R. 263,591
REFERENCE--OTKRYTIYA, IZOBRET., PROM. OBRAZTSY, TOVARNYE ZNAKI 1970,
DATE PUBLISHED--10FEB70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--CHEMICAL PATENT, CHEMICAL SYNTHESIS, ISOMERIZATION, AROMATIC
HYDROCARBON
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1993/0021 STEP NO--UR/0482/70/000/000/0000/0000
CIRC ACCESSION NO--AA0113021
UNCLASSIFIED

UNCLASSIFIED

PROCESSING DATE--02OCT70

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CIRC ACCESSION NO--1A0113021

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. INDAN IS PREPD. BY CATALYTIC

DEHYDROISOMERIZATION OF SPIRO(4,4)NONA,2,4,DIENE AT 250-400DEGREES.

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UR 0482

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Soviet Inventions Illustrated, Section II Electrical, Derwent, 10/

235099 MULTICHANNEL THYRISTOR COMMUTATOR when knob (b) is depressed the supply voltage is applied to RC network (7) and (2) and to the control network of the second channel, but the thyristor does not switch on because break down voltage of the stabiliser (8) is higher than supply voltage. When the voltage on the condenser (2) reaches threshold of the comparator (4), this sends a pulse through the diode (3) which switches on second channel, while first disc switch is switched off by commutating capacitor (9). Process stop by stop repeats itself. Diodes (10) are safeguarding controlling electrodes of the thyristors (1).

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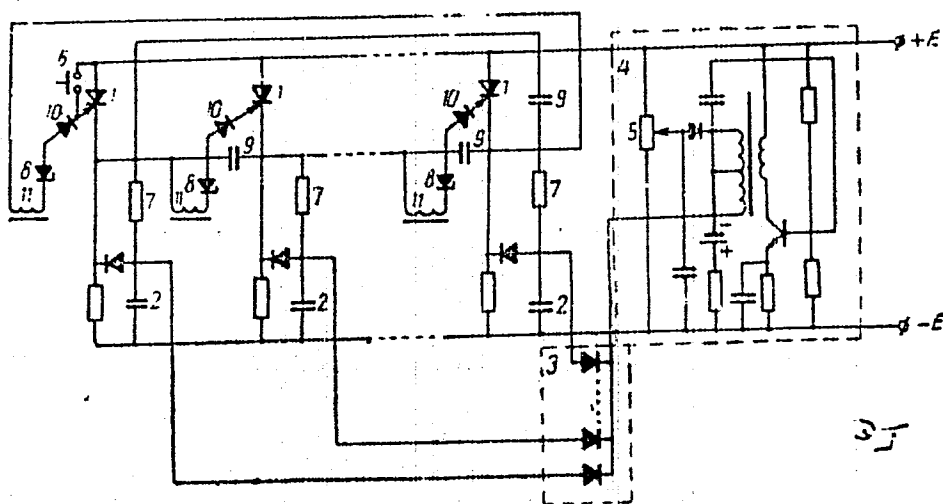
2.12.67. as 1201302/18-24, MAKURIN, P.S. and MIRONOV, V.P. (3.6.69) Bul. 5/16.1.69. Class 21a, Int. Cl. H 03k.

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51/2 025 UNCLASSIFIED PROCESSING DATE--11SEP70
TITLE--CYCLIC UNSATURATED COMPOUNDS. 31. CONVENIENT METHOD FOR DETERMINING
SUBSTITUENT CONFIGURATION IN POSITION SEVEN OF THE NORBORNENE SKELETON
AUTHOR--MIKOS, E.P., FADEYEVA, T.M., AKHREM, A.A., MIRONOV, V.A.,
POLKOVNIKOV, B.D.
COUNTRY OF INFO--USSR

SOURCE--IZV. AKAD. NAUK SSR, SER. KHIM, 1970, (1), 129-34

DATE PUBLISHED-----70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--ANHYDRIDE, DICARBOXYLIC ACID, CYCLIC GROUP, HEPTENE,
HYDROGENATION, THERMAL DECOMPOSITION, NMR SPECTRUM, IR SPECTRUM,
CHEMICAL KINETICS, MOLECULAR STRUCTURE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1984/2671

STEP NO--UR/0062/70/000/001/0129/0134

CIRC ACCESSION NO--AP0200275

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2/2 025

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PROCESSING DATE--11SEP70

CIRC ACCESSION NO--A0200275

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. HYDROGENATION OF ENDO, ANHYDRIDES OF 7, SYN, METHYL, AND 7, ANTI, METHYL BICYCLO (2.2.1) HEPTANE, 5, 6, DICARBOXYLIC ACIDS WAS STUDIED KINETICALLY; THE SYN ISOMER WAS HYDROGENATED AT ABOUT HALF THE RATE DISPLAYED BY THE ANTI ISOMER OR BY THE UNSUBSTITUTED ANHYDRIDE. THE HYDROGENATION MIXT. FROM THE SYN ISOMER GAVE 7, SYN, METHYL BICYCLO (2.2.1) HEPTANE, 5, 6, DICARBOXYLIC ANHYDRIDE, M. 122 TO 3 DEGREES, WHICH HYDROLYZED TO FREE DICARBOXYLIC ACID, DECOMP. 178 TO 9 DEGREES (DI ME ESTER, B SUB 2 48 TO 9 DEGREES, N PRIME 20 SUB 0 1.4933, WAS PREPD. WITH CH SUB 2 N SUB 2). SIMILARLY THE ANTI ISOMER WAS HYDROGENATED TO THE SATD. ANALOG, M. 134 TO 6 DEGREES, WHICH GAVE THE FREE 7, ANTI, METHYL BICYCLO (2.2.1) HEPTANE, 5, 6, DICARBOXYLIC ACID, DECOMP. 169 TO 7 DEGREES. NMR AND IR SPECTRAL CURVES WERE SHOWN. THE CONFIGURATION OF THE SUBSTITUENT IN THE 7 POSITION IN THE BICYCLOHEPTENE SKELETON CAN BE CONVENIENTLY DETD. BY THE DETN. OF RELATIVE RATES OF HYDROGENATION.

UNCLASSIFIED

USSR

UDC 534.222.2

VINOKUROV, A. YA., KUDRYAVTSEV, YE. M., MIRONOV, V. D., TREKHIOV, YE. S.

"Study of Oscillatory Relaxation of Carbon Monoxide"

V sb. 3-y Vses. simpozium po goreniyu i vzryvu, 1971 (Third All-Union Symposium on Combustion and Explosion, 1971--collection of works), Chernogolovka, 1971, pp 282-284 (from RZh-Mekhanika, No 11, Nov 71, Abstract No 11B123)

Translation: The distribution of the density ρ in the relaxation zone of a shock wave and the time τ of oscillatory relaxation of CO in the 2,200-3,500°K temperature range are found by measuring the radiation intensity of the valence band of the CO molecule (wavelength 4.76 microns). The dependence of τ on T is described by the formula

$$\rho\tau = \exp(194T^{-1/3} - 10.7) \{1 - \exp(1 - 3080/T)\}^{-1} \text{microseconds} \cdot \text{at} \quad (1)$$

The existing divergence of the values of τ found from the data of other authors is possibly connected with the fact that, in contrast to (1), the other authors represent the result of averaging τ over the relaxation zone.

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S/019/60/000/016/012/134
A152/A029

AUTHOR: Mironov, V.F.

TITLE: A Method of Obtaining Vinyl Trichlorosilanes and Methyl Trichloro-
silanes

PERIODICAL: Byulleten' izobreteniy, 1960, No. 16, p. 10

TEXT: Class 120, 201. No. 130884 (644411/23 of November 17, 1959). This method is distinguished by the following special feature: the vat remains from the direct synthesis of methyl silane chlorides, containing disilane chlorides, are combined with vinyl chloride and passed through a quartz tube heated up to 600 - 700°C.

Card 1/1

MIRONOV, V. F.

S/019/60/000/05/064/350
D003/D006

5(1)

AUTHORS: Mironov, V.F. and Pogonkina, N.A.

TITLE: Method of Obtaining β -Iso-Thio-Cyano-Alkyl-Trialkyl Silanes

PERIODICAL: Byulleten' izobreteniy, 1960, Nr 5, p 17 (USSR)

ABSTRACT: Class 12o, 26₀₃. Nr 126495 (631993/23 of 25 Jun 1959).
Using sulfuric acid for treatment of mixture of trialkyl-
allyl or trialkyl-propenyl silane and salt of thiccyanic
acid.

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