

VINOKURSKIY, S.A.; RABINOVICH, N.E.

IDA-1 apparatus for automatic measurement of the arterial
pressure. Nov. med. tekhn. no.2:31-40 '64.

(MIRA 18:11)

VINOKURSKIY, S.A.; GINZBURG, Kh.B.

Manual flat-spring dynamometer DRP-1. Nov. med. tekhn.
no.2:66-68 '64. (MIRA 18:11)

VINOKURSKIY, S.A.; AMAYEVA, I.A.

Gas flow meter. Nov. med. tekhn. no.3:166-169 '65.
(MIRA 19:1)

VINOKUROVSKIY, S.A.; RABINOVICH, N.M.; LUKHIN, E.N.; KRAVCHENKO, V.I.

Analysis of kinematic errors of the recording device of a
apycnometer. Izv. vkh. no.4:23-25 Apr 66. (MIRA 10:7)

VINOKURSKIY, S.A.; GONCHARSKIY, L.A.; RABINOVICH, N.E.

Mechanotron with increased sensitivity to current changes. Trudy
VNIIMIO no.3:179-181 '63 (MIRA 18:2)

BUNIN, A.Ya.; KOZLOVA, L.P.; VINOKURSKIY, S.A.; STETSIN, A.A.

New indicator of intraocular pressure and the results of its
use. Uch.zap. GNII glaz.bol. no.8:189-193'63. (MIRA 16:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh
bolezney imeni Gel'mgol'tsa (for Bunin, Kozlova). 2. Vsesoyuznyy
nauchno-issledovatel'skiy institut meditsinskogo instrumentariya
i oborudovaniya. (for Vinokurskiy, Stetsin).
(EYE, INSTRUMENTS AND APPARATUS FOR)
(INTRAOCULAR PRESSURE)

BUNIN, A.Ya. kand.med.nauk; KOZLOVA, L.P.; VITOKURSKIY, S.A., kand. technicheskikh nauk; STETSIN, A.A.

New indicator of intraocular pressure and the results of its use in preventive examinations. Vest. oft. 76 no.1:75-76 (MIRA 16:6)
Ja-F'63.

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mgol'tsa i Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskogo instrumentariya i oborudovaniya.

(EYE, INSTRUMENTS AND APPARATUS FOR)
(INTRAOCULAR PRESSURE)

VINOKURSKIY, S.A.; GINZBURG, Kh.B.; KORYAKIN, M.F.

Reverse dynamometer for determining the force of weakened
muscles. Med. prom. 15 no.6:57-59 Je '61. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskogo
instrumentariya i oborudovaniya.
(DYNAMOMETER)

VINOKURSKIY, S.A.; VOTCHAL, B.Yo.; AMAYEVA, L.A.

Arterial oscillometer. Med.prom. 15 no.9:48-50 3 '61. (MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskikh
instrumentov i oborudovaniya i Tsentral'nyy institut usovershenstvo-
vaniya vrachey.
(OSCILLOMETER) (BLOOD PRESSURE)

L 27936-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WB

ACC NR: AP6017740

SOURCE CODE: UR/0095/66/000/001/0018/0019

AUTHOR: Vinokurtsev, G. G.

ORG: Gas Pipeline Administration, Tashkent (Upravleniye magistral'nykh gazoprovodov)

TITLE: Planning means for electrochemical protection with comprehensive consideration of local conditions of use of pipelines

SOURCE: Stroitel'stvo truboprovodov, no. 1, 1966, 18-19

TOPIC TAGS: pipeline, electrochemistry

ABSTRACT: One reason for the inadequate protection from soil corrosion of the 700-mm pipeline from Dzharvak through Bukhara-Samarkand-Tashkent-Chimkent, 674 km long and the 100 to 700-mm feeder lines from it is the inadequacy of the plans made for cathode protection. The list of shortcomings of the original plan presented includes: the potential at the drainage point is reduced; the calculations of current and power were not correct; the specific resistance of the soil measured at one point at one time were too varied; the section of the pipeline as a component part of the resistance circuit was taken too low; the protected zones were taken too large; one third of the protectors were installed in soils with specific resistance much greater than 100 ohm/m, where they will not work at all. Therefore, a new plan has had to be drawn up, with more attention paid to careful measurement and planning, and consideration of local conditions. Orig. art. has: 1 table. [JPRS]

SUB CODE: 13, 07 / SUBM DATE: none

UDC: 621.643.001.12

Card 1/1 AC

VINOKURTSEV, G.G.

Field laboratory of electrochemical protection. Stroil.truboprov.
9 no.2:27 F '64. (MIRA 17:3)

Rayonnoye upravleniye Gazoprovoda, Kagan, Bukharskoy
obl.

VINOKURTSEV, G.G.

Electrochemical protection of gas pipelines in Central Asia. Gaz.
delc no.10:24-27 '64. (MIRA 18:1)

1. Tashkentskoye upravleniye magistral'nykh gazoprovodov.

VINOKURTSSEV, N.

When automats were established. Obshchestv. pit. no.7:61-62
Л '59. (MIRA 12:12)

1.Direktor tresta restoranov i knfe, Leningrad.
(Leningrad--Restaurants, lunchrooms, etc.)

VINOPAL, J.

CZECHOSLOVAKIA/Electronics - Electrocells and Semiconductors
Device

H

Abs Jour : Ref Zhur Fizika, No 9, 1959, 20783

A thor : Frank, Helmar; Vinopal, Jaromir

Inst : -

Title : Silicon Junction Rectifiers

Orig Pub : Slaboproudý obzor, 1958, 12, No 10, 639-643

Abstract : After a examination of various types of rectifiers, the authors describe the properties of silicon junction diodes. Comparison of the properties of silicon and germanium diodes is accompanied by a brief explanation on the basis of the band theory. Data are given (including curves for the equations and tables for the parameters), which characterize the properties of silicon junction diodes (types 111 - 124 NP70), designed for voltages up to 300 and currents up to 1 amp, particularly their behavior at higher temperatures. Bibliography, 13 titles.

Card 1/1

VINOPAL, Jaromir, inz., dr.; PISA, Gustav, inz.

Metallurgy of semiconductor pn junctions. Hut listy 17
no.10:712-720 0 '62.

1. Ceskomoravska-Kolben-Danek Praha.

VINOPAL, J., inz., dr.; PISA, G., inz.

Silicon electric power rectifiers. Energetika Cz 11
no.3:143-144 Mr '61.

84115

9.4300 (1035, 1138, 1143)

Z/017/60/C49/011/008/013
E073/E535

AUTHORS: Píša, Gustav, Engineer, Spiess, Petr, Engineer,
Sebek, Švatopluk, Engineer, Vendlerová, Věra, Engineer
and Vinopal, Jaromír, Engineer Doctor

TITLE: New Knowledge Gained in the Development of the
Technology of Germanium and Silicon Rectifier Elements

PERIODICAL: Elektrotechnický obzor, 1960, Vol. 49, No. 11, pp. 579-583

TEXT: In addition to reviewing world trends in semiconductor development, the authors deal briefly with results of development work in the Semiconductor Laboratories of CKD, Prague. The problem of dislocations in germanium has been dealt with extensively in Czech as well as in foreign literature (Refs. 3, 4, 5). Therefore, the authors deal only briefly with the results of extensive experiments, the aim of which was to determine the influence of the absolute number of dislocations on the quality of the P-N junctions and the influence of accumulation of dislocations and of microscopically visible disturbances caused by accumulation of dislocations within a small volume. A more detailed treatment of these is given in a paper by Bürger and

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Sebek which is in the process of publication. In the experiments three germanium single crystals have been used which have a satisfactory specific resistance and a lifetime of the minority carriers. All these three crystals contained in some spots very pronounced grouping of dislocations in the form of lines and stripes. All the cut plates were etched in order to make the dislocations visible. The locations of the disturbances were marked in detail. In order to be able to make a good comparison test discs of 12 mm diameter were cut from these specimens. These could be sub-divided into three groups:

- a) Plates from locations which did not contain accumulations of dislocations but only uniformly distributed dislocations;
- b) Plates from locations that contained slight accumulations of dislocations in the nature of stripes,
- c) Plates from locations that contained considerable line dislocations formed by a large quantity of dislocations. A total of about 150 such plates were investigated which originated

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from three germanium crystals. The characteristics of the three types of discs are reproduced in Fig.1 and it can be seen that the diode of the group (c) reaches only about 40% of the voltage of the diodes of group (a). All the results obtained for the three groups of diodes were used for plotting average value curves. These are similar to the curves in Fig.2. The characteristics of diodes from group (b) were below those of group (a) and on the average were nearer to those of group (c). The experiments have shown the quality of the P-N transitions is decisively influenced by the poorest transition spot, i.e. by the spot that contains a high accumulation of dislocations and it is this spot which determines the properties of the P-N junction. In studying the inverse voltages of diodes, investigations were made on materials with various average numbers of dislocations between zero and several tens of thousands per cm^2 . As a result, the dependence was determined of the inverse voltage of junction rectifiers on the number of

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dislocations, provided that the dislocations are uniformly distributed, without considerable accumulations of stripes or lines. It was found that within wide limits this dependence is not greatly affected by the absolute number of dislocations, provided that these are uniformly distributed. Only in the case of high densities, i.e. above $2 \times 10^4/\text{cm}^2$, will there be a considerable drop of the average voltage of the diodes. The P-N transitions of germanium were first etched electrolytically by means of a hydrofluoric acid and then were etched again with a mixture, the main component of which was hydrogen peroxide with additions of nitric, acetic and hydrofluoric acid. The effect of this new etching mixture was tested on a large number of diodes. The inverse voltage improved considerably, on the average by 100 V, as also did the inverse current (Table 1 and Fig.2). However, the surface of the diode is much more sensitive to the atmosphere and it was necessary to develop a new method of protecting the junctions. For this purpose silicon

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varnishes and silicon vaseline were used but these did not prove satisfactory. Subsequently, polymer type synthetic materials were used for this purpose and the characteristics of a diode after etching with hydrofluoric acid, the above mentioned etching mixture and protection by embedding in a synthetic material, are plotted in Fig.3. For the manufacture of silicon P-N junctions with inverse voltages exceeding 1000 V it is advisable to use silicon with a specific resistance of 100 to 300 Ohm cm and a minimum lifetime of the minority carriers of 200 to 300 μ sec with a homogeneous crystal lattice and without internal stresses and undesirable disturbances. Several methods of etching of silicon plates in etching agents of various compositions were tested. The speed and the depth of etching increases with the concentration of the etching agent and with temperature. The decrease in the thickness as a function of the etching time in various etching agents is plotted in Fig.4. For 150 A rectifiers, a junction area of 200 mm² was chosen in order to obtain longer service life, better heat removal and to avoid excessive over-loading when the

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junctions are fully loaded. ČKD manufactures rectifier systems with N-type silicon with junctions produced by the fusion method in vacuum. Type N silicon is the most easily available in Czechoslovakia and so far has proved satisfactory. Manufacture of P-N junctions by the diffusion method is also being studied, since it is considered to be more suitable for P-N-P-N junctions. The best method of protecting P-N silicon junctions from the effects of the atmosphere is to encapsulate them in vacuum-tight containers. In tests so far good results have been obtained by protecting the junctions with a silicon vaseline prepared in the Research Institute for Organic Synthesis without any addition: the vaseline must be absolutely pure without moisture and degassed in vacuum. Silicon vaseline with additions of halogenized alkylsilanes has not proved satisfactory. The encapsuling of the rectifier systems is also briefly described. There are 5 figures, 1 table and 15 references: 3 Czech, 1 Soviet, 2 German and 9 English.

ASSOCIATION: ČKD Praha, n.p., závod Stalingrad
(ČKD Prague, Stalingrad Plant)

SUBMITTED: July 20, 1960
Card 6/6

VINOPAL, Jaromir, inz., dr.; POSA, Gustav, inz.

Methods of chemical etching of germanium and silicon. Zl tech
obzor 51 no.1:46-47 Ja '62.

43019

8/194/62/000/010/041/084
A061/A126

947050

AUTHORS: Vinopal, Jaromír, Píša, Gustav

TITLE: A method of obtaining the structure of the type p^+-n-n^+ or n^+-p-p^+ for silicon power rectifiers

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 10, 1962, 26, abstract 10-4-51ch P (Czech pat., cl. 21g, 11/02, no. 99437, April 15, 1961)

TEXT: It is noted that junctions are formed by alloying, the alloys used for their fabrication being applied in the form of foils 0.05 - 0.2 mm thick. A foil containing silver, antimony, tin, and germanium is applied to one side, and another containing aluminum, indium, and zinc is applied to the other side of the silicon plate. The two electrodes of the forthcoming rectifier, which are made of tungsten, molybdenum, or tantalum, are also coated with a foil containing, e. g., silver and germanium. The entire multilayer system is annealed at 820-970°C in inert or reducing atmosphere, and is subsequently cooled in the course of 7 - 10 min. The rectifiers thus obtained have a reverse current < 0.5 ma at 1,000 v. [Abstracter's note: Complete translation] N.S.

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Z/017/60/049/005/001/001

E073/E535

9.2150 (also 1138, 1159)

AUTHORS: Vinopal, Jaromír, Engineer Doctor and Píša, Gustav,
Engineer

TITLE: Silicon Power Rectifiers

PERIODICAL: Elektrotechnický obzor, 1960, Vol. 49, No. 5, pp. 268-271

TEXT: Development work on silicon power rectifiers has been in progress at CKD, Prague, Stalingrad Plant, since 1958. The first stage covered development of P-N junctions for ratings of 100 A and peak voltages of 600 V. The aim was to obtain a P⁺-N-N⁺ junction as proposed by R. N. Hall and W. C. Dunlap (P-N Junctions Prepared by Impurity Diffusion, Phys. Rev. (1950), No. 80, p. 467). The rectifier system is produced by alloying one side of the silicon plate with an alloy containing primarily silver and a low content of antimony as the donor, and the other side of the plate with an alloy containing primarily aluminium, which acts as an acceptor. As a result P⁺ and N⁺ zones are formed on the two faces of the silicon plate with a central high resistance N zone formed by the silicon. For manufacturing the P-N junctions, single-crystal silicon of N-type conductivity, with a specific resistance of 84 to 127 Ω cm (average value 106 Ω cm), was used with an average lifetime of the minority carriers of 134 μ sec.
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Table 1 gives measured values of the voltage drop in the forward direction, V for forward currents of 100 and 150 A. respectively, and of the inverse current, μA , for inverse voltages 100 to 800 V. The voltage drop in the forward direction corresponds to the usual values for such cells. The volt-ampere characteristic in the forward direction is plotted in Fig.3. The active surface of the cell can be loaded up to 100 A/cm^2 . In a number of cases inverse currents less than $10 \mu\text{A/cm}^2$ were obtained for voltages of 1500 V. From the point of view of thermal stability it is advisable to have a low inverse current. For the time being an inverse current of 1 mA/cm^2 of the junction at 600 V, measured at normal temperature, is considered to be the maximum permissible limit, the volt-ampere characteristic in the inverse direction is plotted in Fig.4. Fig.5 shows the temperature dependence of the volt-ampere characteristic. In accordance with measured results the developed rectifier cells can be loaded up to 140 to 150°C . If the cooling air temperature is high, the load must be appropriately reduced. The over-load capacity was tested using sinusoidal current pulses of 0.01 sec duration. The starting temperature was 20°C , the

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tested cell withstood a surge of 2150 A but it was destroyed by a surge of 2400 A. By means of the applied technology 80% yield was obtained of satisfactorily etched junctions, of which 70% were diodes with inverse voltages of 600 V and 10% were diodes with inverse voltages between 300 and 600 V. Work is in progress for developing industrial series of silicon rectifiers for the following applications: mine traction (275 V, 500 A); a.c. locomotives (750 V, 4000 A); electrolysis plants for chlorine and aluminium manufacture (450 V, 25 000 A); urban traction (660 V, 1000 A). In conclusion it is stated that the large area P-N silicon junctions are produced in Czechoslovakia without using gold for the transition. Development work has progressed to a sufficient extent to permit starting manufacture on a semi-industrial scale of silicon power rectifiers. Industrial manufacture of these will be accelerated and the prices will be fixed to be comparable with foreign rectifiers of the same type. There are 5 figures, 1 table and 6 references: 3 Czech and 3 non-Czech. X

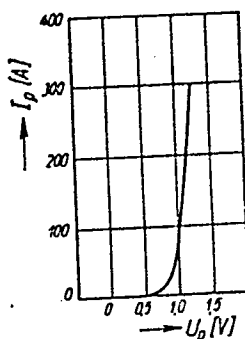
ASSOCIATION: CKD Praha - závod Stalingrad (CKD Prague - Stalingrad Plant)

SUBMITTED: November 29, 1959
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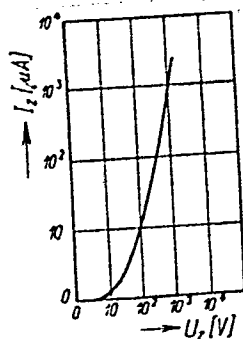
Silicon Power Rectifiers

Fig. 3



Obr. 3. Voltampérové charakteristiky v propustném směru.

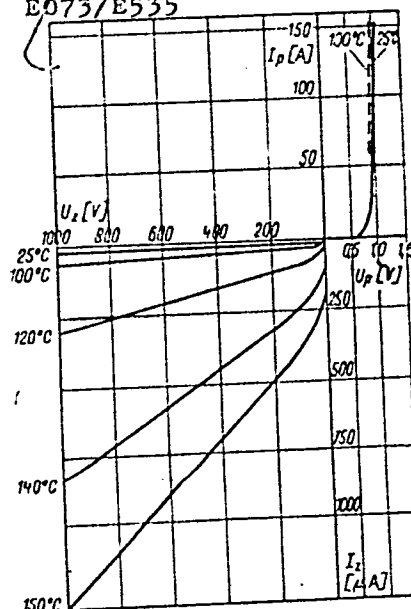
Fig. 4



Obr. 4. Voltampérové charakteristiky v závěrném směru.

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Obr. 5. Voltampérové charakteristiky v závislosti na teplotě.

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Legend

Table 1

1) Number, 2) Forward current, A, 3) Reverse voltage, V,
4) Voltage drop in the forward direction, 5) Inverse current, μ A.

Číslo	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Proud v pro- pust- ném směru [A]	Úbytek napětí v propustném směru [V]																			
100	1,04	1,00	1,09	1,03	1,06	1,03	1,08	1,08	0,97	1,12	1,12	1,04	1,10	1,08	1,11	1,13	1,05	1,03	1,11	1,11
150	1,11	1,17	1,20	1,11	1,16	1,12	1,15	1,16	1,04	1,22	1,24	1,12	1,10	1,16	1,15	1,25	1,11	1,10	1,20	1,20
Zá- věrné na- pětí [V]	Zpětný proud [μ A]																			
100	1	1	1	1	10	1	50	1	1	70	1	1	1	5	20	6	1	1	5	1
200	1	1	1	1	15	1	60	2	3	115	1	1	5	6	40	15	1	1	5	1
300	1	1	1	1	15	1	70	3	4	150	2	1	35	6	70	18	2	1	15	1
400	1	1	1	1	15	1	80	5	5	180	4	1	65	8	100	20	3	1	20	1
500	2	1	1	1	18	1	90	8	6	215	7	2	90	9	180	25	3	1	25	2
600	2	1	1	3	19	1	90	14	7	240	10	5	100	10	270	25	4	1	35	3
700	3	1	2	10	20	1	100	18	8	280	12	20	260	12	450	28	5	1	40	4
800	3	2	3	35	21	1	105	23	10	310	15	80	400	15	600	32	8	3	55	5

KROCZEK, J., inz., dr.; VINOPAL, K.; HRUBY, V.

Selenium rectifiers in power industries. Energetika Cz
7 no.2:77-81 F '57.

VINOPAL, K.

Selenium rectifiers in the power industry. p.77.
(Energetika, Vol. 7, No. 2, Feb. 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

VINOPAL, M., inz.; ECKERTOVA, L., doc. dr.; DEMUTH, M., inz.

Method of gas pressure measurement in closed vacuum systems.
Automatizace 6 no.12:314 D '63.

VINOPAL, S.

Design characteristics of control valves. p. 239

AUTOMATISACE. (Ceskoslovenska vedecka technicka spolecnost pro elektrotechniku pri Ceskoslovenske akademii ved, Odborna skupina automatisace a Ceskoslovenska spolecnost pro sireni politickych a vedeckych znalosti) Praha, Czechoslovakia, Vol. 2, no. 8, Aug. 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 10, Oct. 1959
Uncl.

VINOPAL, S.

Design characteristics of control valves. II. p. 272.

AUTOMATIZACE. Praha, Czechoslovakia. Vol. 2, no. 9, Sept. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960.

Uncl.

VINOPAL, S.

TECHNOLOGY

Periodical AUTOMATISACE. No. 11, Nov. 1958.

VINOPAL, S. Flow meters for liquid metals. p. 364.

Monthly List of East European Accessions (EEA) LC, Vol. 8, no. 3, March, 1959. Uncl.

24695
Z/005/60/000/009/008/015
A121/A126

15.2420

AUTHORS: Kníže, Bedřich, Engineer, (Nymburk), Raškota, Jan, and Vinopal, Zdenek (Prague)

TITLE: None given

PERIODICAL: Vynálezy, no. 9, 1960, 9

TEXT: (21h, 1; Registered November 24, 1959; Patent Application 6766-59). Sheathing method for ceramic radiators of electricity consuming devices with a ceramic body, formed out directly to the proper shape of electricity consuming device. It is characterized by the following: The body is equipped with a metallic or nonmetallic resistor element, the bare parts of which are covered by a layer of heat-resistant cement. After rendering conductive its surface, such a radiator is metal-coated in a galvanic bath by evaporation or by spraying, by means of which a hermetic and noncorrosive metallic protective coating is obtained. X

Card 1/1

VINOSIVSKIY, V.N., dotsent

Selection of the optimum voltage of electric supply systems for
coal mines. Izv. vys. ucheb. zav.; gor zhur. no.10:155-158 '60.
(MIRA 13:11)

1. Kiyevskiy politekhnicheskoy institut. Rekomendovana kafedroy
gornoy elektromekhaniki Kiyevskogo politekhnicheskogo instituta.
(Electricity in mining)

SOV/112-59-4-6941

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 4, p 74 (USSR)

AUTHOR: Vinoslavskiy, V. N.

TITLE: Voltage Regulation in Mine Electric Networks

PERIODICAL: V sb.: Gorn. elektrotehnika, M., Ugletekhizdat, 1957, pp 476-490

ABSTRACT: Various methods for voltage regulation in mine electric networks are considered; as such networks are mainly supplied by 6-kv lines, the local regulation means are considered preferable. A phase-switching booster transformer is recommended as one of simple and economical devices for local voltage regulation. The transformer permits varying the boost voltage by a step-by-step turning the input-voltage vector with respect to the voltage of a regulated line by means of switching the phases of the supply system. The transformer capacity should amount to 10% of the power transmitted if a 10% regulation is desired. A transformer circuit diagram, a voltage vector diagram, and a description of the regulation scheme are presented, as well as oscillograms of boost-voltage transformer switching, the excitation winding being short-circuited during the switching.

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I. V. Kh.

VINOSLAVSKIY, V. N.

"Booster Transformer with Regulation via Conversion of the Phases of the Supply Voltage." Min Higher Education USSR, Kiev Order of Lenin of Polytechnic Inst, Electrical Engineering Faculty, Kiev, 1952
(Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

VOLOTKOVSKIY, Sergey Andronikovich, doktor tekhn.nauk; VASILEVSKIY,
Yevgeniy Viktorovich, inzh.; GUTMAN, Eemanuil Markovich,
kand. tekhn. nauk; VINCOSLAVSKIY, V.N., kand.tekhn.nauk,
retsenzent

[Protection of underground structures from electrolytic cor-
rosion] Zashchita podzemnykh sooruzhenii ot elektrokorrozii.
Kiev, Tekhnika, 1964. 134 p. (MIRA 17:10)

VINOSLAVSKIY, Vasilii Nikolayevich, kand.tekhn.nauk,dots.;
RYBCHENKO, Petr Filimonovich, kand.tekhn.nauk,dots.;
POPOVICH, Nikolay Gavrilovich, kand.tekhn.nauk,dots.;
POLYANSKIY, Nikolay Alekseyevich, inzh.; DANIL'CHUK,
Grigoriy Ivanovich, inzh.; VOLOTKOVSKIY, S.A., doktor
tekhn. nauk, prof., retsenzent; MIROSHNIK, A.M., kand.
tekhn. nauk, retsenzent; DENISENKO, S.A., inzh.,
retsenzent

[Automation of industrial processes in coal mines] Avto-
matizatsiya proizvodstvennykh protsessov ugol'nykh shakht.
[By] V.N.Vinoslavskii i dr. Kiev, Tekhnika, 1964. 406 p.
(MIRA 18:3)

VINOV, M. S.

Dostizhenia sovetskogo produktivnogo zhivotnovodstva / Achievements of Soviet
productive animal breeding / 7. Moskva, Gos. ordena Lenina E-kh
SSSR, 1952. 49 p.

SO: Monthly List of Russian Acquisitions, Vol. 7 No. 1 May 1954.

VINOGRADOV, G. V.

C. H. V-48
Jan 10, 1954
Soaps, fatty oils
waxes & detergents

Soaps, solutions and gels of soaps. G. V. Vinogradov.
Uspekhi Khim. 20, 533-550 (1951).—Review with 124 refer-
ences, dealing largely with structures of soap in solns. and
gels, in aq. and nonaq. media. G. M. Kosolapoff

VINRENZ, Z.

Inaugural address at the 3d National Conference of Scientific
and Technological Workers in the Field of Steel Construction.
p. 12. INZENYRSKE STAVBY. (Ministerstvo stavebnictvi)
Praha.
Vol. 4, no. 1, Jan. 1956

SOURCE: EEAL LC Vol. 5, No. 10 Oct. 1956

VINS, Bohuslav, inz., CSC.

Report on the state and preliminary evaluation of the Czechoslovak test areas of the provenance tests with the spruce of the 1938 international series. Les cas 9 no. 12: 1145-1152 D '63.

1. Vyzkumny ustav lesniho hospodarstvi a myslivosti, Zbraslav-Strnady.

VINS, B.

AGRICULTURE

PERIODICALS SPOBORNIK RADA LESNICTVI VOL 5, no. 2, Feb. 1959

Vins, B. Preliminary results of experiments on the regeneration of firs.
p. 175.

Monthly List of East European Accessions (EEAF), LC, Vol. 2, No. 5,
May 1959, Unclass.

L 30908-66 EWT(1)/FOC

ACC NR: AP6022947

SOURCE CODE: CZ/0085/65/000/005/0152/0155

AUTHOR: Vins, Bohuslav

ORG: Forestry and Game Management Research Institute (VU les. hosp. a mysl.)

TITLE: Problems of dendroclimatological research

SOURCE: Meteorologicke zpravy, no. 5, 1965, 152-155

TOPIC TAGS: forestry, plant growth, meteorology, climatology

ABSTRACT: The article discusses how the fluctuation of the width of the annual rings of trees depends on the influence of weather factors and thereby presents the possibility of investigating those influences on trees in the past. It gives an account of the history, problems and methods of the scientific areas which study the width of annual rings from various points of view (dendrochronological and dendroclimatological research). The method is used above all in forest investigations and practice, but also in many other areas -- meteorology, climatology, astronomy, even archeology and other areas. [JPRS]

SUB CODE: 04, 02 / SUHM DATE: none / ORIG REF: 016 / SOV REF: 007

OTH REF: 030

Cord 1/1 CC

UDC: 551.586: 631

VINS, Bohuslav, inz. CSc.

Standardization of provenance research and testing. Les cas
10 no.2:216-218 F '64

1. Vyzkumny ustav lesniho hospodarstvi a myslivosti, Zbraslav-
Strnady.

VINS, J., inz.; SULC, J., inz.

Gliding quality of plain bearings with galvanically coated linings.
Strojirenstvi 12 no.4:271-277 Ap '62.

1. Statni vyzkumny ustav tepelne techniky (for Vins). 2. Statni
vyzkumny ustav ochrany materialu, Praha (for Sulc).

Vin's, J.

4

V 2257* Use of Plastics With Fabrics for Making Bearings
and Bushings. Použití tkanin s plastem na kluzná uložení.
MI (Czech.) J. Vin's, Strojrenství, v. 5, no. 11, Nov. 1955, p.
845-847.
Strength, processability, and machinability of fabric-reinforced
plastics. Maximum loads, mounting, lubrication, and cooling
of bushings and bearings of these materials. Tables, graphs.

2 may

gyp MS SH

VINS, Jindrich, inz.

"Axial ring packing" by E. Mayer. Reviewed by Jindrich Vins.
Stroj vyr 12 no.1:75 Ja'64.

VINS, Karel, inz.

Semiconductors in industry. Tech prace 15 no.9:672-675 S'63.

1. Vyzkumny ustav pro sdelovací techniku A.S.Popova.

VINEŠ, Karel, inž.

Four-layer semiconductor elements. Slaboproudy order 25 no. 5:
245-246 My 1964.

1. A.S.Pepov Research Institute of Telecommunication, Prague.

23569

Z/009/61/000/007/002/004

E112/E135

11.1220

AUTHOR: Vinš, Luděk

TITLE: Purification of hydrogen with liquid nitrogen

PERIODICAL: Chemický průmysl, 1961, No.7, pp. 348-353

TEXT: Advantages of the purification of hydrogen (required for the synthesis of ammonia) by means of liquid nitrogen are discussed and compared with the conventional method, based on copper salts. A recent Soviet study (Ref.2: I. Burlačenko, Symposium, MCHP, Prague, 1957)

detailing the economic superiority of the liquid nitrogen purification of hydrogen (produced by gasification of brown coal) is quoted. Basic principles of H₂-purification with liquid N₂ are reviewed and standard plant equipment is discussed. The process comprises gradual cooling of crude hydrogen, leading to a partial condensation of the impurities. Essential preliminary treatment consists of complete removal of CO₂ to prevent icing of the heat exchangers. Cooling the crude hydrogen to -190 °C causes condensation of the methane fraction, the quantity and composition of which depends upon the composition of the entering gas. Carbon monoxide, oxygen, argon and last traces of methane are removed by

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Purification of hydrogen with liquid ... E112/E135

washing with liquid nitrogen at -190°C in special column. The purified hydrogen-nitrogen mixture leaves at the upper end of the column while the so-called CO-fraction accumulates at the bottom. Different types and designs of the nitrogen cooling cycles are described. The economics of the cooling process are improved by increased N_2 -pressure and a graph is included in which N_2 -consumption is plotted versus pressure. The effect of temperature in the washing column upon nitrogen consumption is also shown in the form of a graph, indicating a decrease of N_2 -consumption with a decrease in temperature. The merits of different N_2 cooling cycles in the U.S.A. and in Europe are discussed. The author considers that the system developed by Messer of Frankfurt, Germany, offers definite advantages, based as it is on air separation at a pressure of 40 atm. A Czechoslovak design for hydrogen purification with liquid nitrogen (for NH_3 production) is discussed. Sources of H_2 will be either catalytic cracking of natural gas or decomposition of natural gas with simultaneous formation of acetylene. Flow sheets of both processes are submitted. The latter method gives rise to hydrogen of very high methane content. It is therefore necessary to isolate and recycle the methane fraction.

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Purification of hydrogen with liquid ...E112/E135

The Czechoslovak plant is designed to process 14000 to 16000 Nm³ crude hydrogen per hour. The crude H₂ enters the plant at a pressure of 12 atm. Particular attention was paid to the prevention of icing of the heat exchangers. Water vapours with which the entering hydrogen is saturated are removed by means of counter-current exchangers, de-iced by the entering gas, and in ammonia refrigerators, defrozen by means of warm ammonia. The last traces of moisture are removed by absorption on silica gel at -45 °C. Carbon dioxide is also absorbed on silica gel. With maintenance problems in mind the plant was so designed that all heat exchangers can be disconnected and separately defrozen. High-pressure N₂ is passed through twin heat exchangers and an absorber, in order to remove traces of contaminating oil. To compensate for the increase of temperature during processing, an open, high-pressure N₂ cooling cycle (pre-cooled to -45 °C with ammonia) was operated, as it was assumed that a cooling system based on throttled expansion was simpler and more reliable than a cycle with an expansion machine. For the cooling cycle only such quantities of technological nitrogen are used, as are essential for the washing of hydrogen with liquid

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Purification of hydrogen with liquid ...E112/E135

N₂. A diagrammatic representation of the plant for H₂ purification is shown in Fig.6: (1a, 1b - entrance heat exchangers, 2 - separator, 3a, 3b - refrigerators, 4 - drier, 5, 6 - heat exchangers, 7 - evaporator of the CO-fraction, 8 - washing column, 9, 10, 11 - heat exchanger, 12 - drier, 13a, 13b - ammonia refrigerators, 14a, 14b - heat exchangers). Hydrogen enters the plant at +20 to +35 °C under a pressure of 12 atm. It is saturated with water vapours and precooled to -30 °C in the heat exchangers 1a, 1b, by means of the recycled hydrogen-nitrogen mixture. Further refrigeration to -40 - -45 °C is accomplished in two ammonia refrigerators, 3a and 3b. A part of the water vapour is eliminated in drier 4 (Abstractor's note: not marked in sketch but obviously is the smaller container between 3b and 5), by means of silica-gel. Cooled nitrogen is then sent to the deep-freeze section, to be refrigerated in heat exchanger 5 and 6 to -170 °C by means of the recycled hydrogen-nitrogen mixture. The crude hydrogen is finally cooled to -190 °C in the evaporator of the CO-fraction (7). Final purification of hydrogen is carried out in wash tower (8) by means of liquid nitrogen, which is being sprayed down to meet the incoming hydrogen. The CO-fraction accumulates

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Purification of hydrogen with liquid ...E112/E135

at the lower end of the tower and methane and argon are completely removed from the hydrogen. The nitrogen required for the purification and refrigeration enters the unit under a pressure of 180-200 atm. It is sent through heat exchangers 14a and 14 b where cooling is effected by means of the CO-fraction. It is further cooled to -45°C in one of the ammonia refrigerators, 13a or 13b and passes through a silica-gel drier (12) to be freed completely of moisture or oil contaminants. Before entering the deep-freeze section, the nitrogen is divided in two parts: fraction 1 is cooled in heat exchanger 9 by means of the CO-fraction, while fraction 2 is refrigerated in exchanger 10 by means of the nitrogen-hydrogen mixture. Its temperature is brought down to -170°C , while final refrigeration to -190°C is accomplished by throttled expansion. The Czechoslovak plant operates with two heat exchangers for each operation, which are used alternately, permitting removal of the ice without interrupting the process. The heat exchangers, a photograph of which is shown, are of the finned tube type. The following economic data are tabulated:

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Purification of hydrogen with liquid....E112/E135

	Consumption for 100 Nm ³ 3 H ₂ + N ₂ (11 atm)	for 1 ton ammonia
Nitrogen, total, in Nm ³	32	880
Nitrogen for washing	7.45	204
Energy, in kW/h (compression of N ₂ and NH ₃)	8	218
Energy, in kW/h (for purification of H ₂)	4.1	112

It is concluded that the design, construction and operation of the new plant for the purification of hydrogen with liquid nitrogen is more economical than scrubbing with a solution of copper, permitting the reduction of processing costs for the production of synthetic ammonia. It is considered to be equal in construction and assumed parameters to similar plants in foreign countries. It is hoped that the equipment will be not only an essential part of the Czechoslovak plants for synthetic ammonia, but will also become an important export item.

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Purification of hydrogen with liquid.... E112/E135

There are 7 figures (3 graphs, 2 flow diagrams, 1 sketch of plant design, 1 photograph of heat exchanger), 3 tables and 9 references: 3 English, 3 German, 2 Czech and 1 Soviet. The English language references read as follows:

Ref.4: Baker: Low-temperature processes. Chem.Eng.Progr., 51, No.9 (1955), pp. 399-402.

Ref.7: Chow: Phase equilibria for a complex mixture. Proc., Roy. Soc., Ser. A, 192 (1948), pp. 340-364.

Ref.9: The operators report on safety in air and ammonia plants. Chem.Eng.Progr., 55, No.9 (1959), pp. 49-54. X

ASSOCIATION: Závody Vítězného února, n.p., Hradec Králové
("Victorious February" Works, Hradec Králové)

Card 7/8

VINS, Ladislav.

"Use, operation and maintenance of hydraulic drives and machine tools" by Josef Pivonka. Reviewed by Ladislav Vins. Stroj vyr 10 no.7:372 '62.

BABKA, V.; VINS, L.

Special high-speed wrenches. Stroj vyr 9 no.12:624-625 '61.

1. Tona, n.p., Pecky (for Babka) 2. Zavody 9. kvetna, n.p., Praha
(for Vins)

VINS, L.

Design and production of single-purpose machines in factories. p.200.
(Strojirenska Vyroba, Vol. 5, No. 5, May 1957, Praha, Czechoslovakia)

SC: Monthly List of East European Accessions (FEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

VINS, L.

Machine for boring holes in the brake drums of motorcycles.

P. 322

Vol. 3, no. 8, 1955

STROJIRENSKA VYROBA

Praha, Czechoslovakia

Source: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, no. 2
February 1956, Uncl.

VINS, L.

Single purpose machines and American automatic production lines.

P. 302, (Strojirenska Vyroba) Vol. 5, no. 7, July, 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (SEAI) Vol. 6, No. 11 November 1957

VINS, L.

VINS, L. Air press and its use. p. 113

Vol. 4, no. 3, Mar. 1956
STROJIRENSKA VYROBA
TECHNOLOGY
Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

VINS, Ladislav

"Hydraulic drive" by [CSc.] Josef Prokes. Reviewed by
Ladislav Vins. Stroj vyr 12 no.4:309 Ap'64.

VINS, Miroslav

Present situation of glass fiber optics. Sklar a keramika
14 no. 7:203-204 JI '64.

1. Dioptra National Enterprise, Turnov.

VINS, V.

"Abstract of the traffic rules for driving Pioneer motorcycle." p. 766

SVET MOTORU. Praha, Czechoslovakia, Vol. 9, No. 24, Nov., 1955

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September, 1959
Unclas

VINS, V.

Third in Europe. p.280, (Svet Motoru. Praha. Vol. 11, no. 9, Apr. 1957.)

SO: Monthly List of East European Accessions (EEAL) LC., Vol. 6, no. 7, July 1957. Uncl.

VINS, V.

(bk) Motor vehicles on the installment plan. p. 284. (Svet Motoru. Praha. Vol. 11, no. 9, Apr. 1957.)

SO: Monthly List of East European Accessions (EEAL) IC., Vol. 6, no. 7, July 1957. Uncl.

Vins, V.

Vins, V. Attention: winter! p. 141.

V. R. Socialist competition in winter maintenance of highways.
p. 141.

Ht. The Hvezda 500, formula 3. p. 142.

Vol. 10, no. 5, Mar. 1956
SVET MOTCRU
TECHNOLOGY
Czechoslovakia

So: East European Accessions, Vol. 6, May 1957
No. 5

Vins, V.

Vins, V. Traffic signs and highways. p. 571.

Vol. 10, no. 18, Aug. 1956
SVET MOTORU
TECHNOLOGY
Czechoslovakia

So: East European Accessions, Vol. 6, May 1957
No. 5

Vinš, V.

1835. Determination of traces of copper in water. M. Kovalev and V. Vinš (Inst. for Anal. Chem., School of Mining, Ostrava, Czechoslovakia). Z. anal. Chem., 1935, 147 (9), 401-403.—A method is given for the photometric estimation of traces of Cu in water, including mineral water. When the sample is shaken with a soln. of Pb diethyldithiocarbamate in CHCl_3 , Cu is extracted together with Ag and Hg, which do not interfere. **Procedure**—To a 500-ml sample of the water is added 10 ml of a 10 per cent. soln. of K Na tartrate and 10 ml of 3 N NH_4Cl soln., and then the soln. is made weakly alkaline with aq. NH_3 . The soln. is shaken with 10 ml of a CHCl_3 soln. of Pb diethyldithiocarbamate and the yellow to brown layer of Cu diethyldithiocarbamate is separated. The extinction of the copper compound is measured at 500 m μ in a 1-cm cell, an S60 filter being used. The method enables amounts of Cu from 0.02 g per ml to be determined with a relative error of ± 1.5 per cent. The Pb diethyldithiocarbamate reagent is prepared as follows. Lead acetate (0.1 g) is dissolved in water and 5 ml of a 10 per cent. K Na tartrate soln. are added. The soln. is made alkaline with 3 N KOH soln., and 5 ml of 5 KCN soln. are introduced to complex traces of Cu and Fe. Sodium diethyldithiocarbamate (0.12 g) is added, and the pptd. lead salt is extracted in 250 ml of CHCl_3 . The organic layer is removed, shaken with water, re-separated, filtered and dried up to 1 litre. J. H. WATSON

①

VINS, V.

Explaining and emphasizing the right of through traffic. p. 375.

Learning about the transitional types of JAWA-CZ motorcycles. (To be contd.)

p. 376.

SVET MOTORU, Praha, Vol. 9, no. 12, June 1955.

SO: Monthly List of East European Accessions, (EAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

VINS, V.

"Record of the year of 1953." (p. 216).

"What you don't know about the protective shield." (p.217). SVETA MOTORU (Svaz
pro spolupraci s armadou) Praha, Vol 8, No 7, Apr. 1954.

SO: East European Accessions List, Vol 4, No 8, Aug 1954

VINS, V.

"Renewal of Drivers' Licenses." p. 679 (SVET MOTORU. Vol. 8, No. 22,
Oct. 1954; Praha, Czech.)

So: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4,
April 1955, Uncl..

VINS, V.

"Traffic Accidents Caused by Poor Lighting." p. 43 (Svet Motory, Vol. 7, no. 138,
Jan. 1953, Praha)

SO: Monthly List of East European Vol. 3, No. 3 1954
Russian Accessions, /Library of Congress, March 1953, Uncl.

VINS, V.

"New and changed traffic regulations." (To be contd.) p. 550 (Svet Motoru, Vol. 7, No. 154, Sept. 1953, Praha)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress, June. 1954, Uncl.

VINS, V.

"New Year's Resume." p. 18 (Svet Motoru, Vol. 7, no. 137, Jan. 1953, Praha)

SO: Monthly List of East European Accessions, Vol. 3, no. 2, Library of Congress,
Feb. 1954, Uncl.

VINS, 7.

Preventive maintenance of the BEKK device for testing the smoothness and air permeability of paper. p.109.
(Papir A Celulosa, Vol. 12, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

VINS, Vaclav

Driver's enemy, snow, sleet, fog. Siln doprava ll no. 12:
24-25 D '63.

VINS
CZECHOSLOVAKIA/Chemical Technology. Chemical Products and K-5
their Applications. Cellulose and Cellulose
Products. Paper.

Abs Jour: Ref Zhur-Khimiya, 1958, No 1, 3312

Author : Vins Zd.

Inst :

Title : Preventive Maintenance of Bekk's Device for Determining
Paper Smoothness and Permeability to Air.

Orig Pub: Papir a celuloza, 1957, 12, No 5, 109-110

Abstract: It is pointed out that correct operation of the device
is upset by the formation of an amalgam. The basic
rules and practical directions for the correct mainten-
ance of the device are considered.

Card : 1/1

MIKOL'SKIY, Yu.N., inzhener; BELEVITSKIY, A.M., inzhener; VINSHTEYN, E.S., inzhener

Kilns with conveyer calciners put in operation at the Krivoy Rog
cement mill. Tserent 22 no.2:12-14 Mr-Apr '56. (MIRA 9:9)
(Krivoy Rog--Cement industries) (Kilns, Rotary) (Conveying machinery)

ANISIMOV, N.M.; AREF'YEV, V.A.; VINSHTEYN, E.S.; ZATSEPELIN, V.G.

Pneumatic mixing of raw mixes. TSement 26 no.5:19-22 S-0 '60.
(Krivoy Rog--Cement plants) (MIRA 13:10)
(Mixing machinery)

MESH, L.Ya.; KAMINER, D.M.; VINSHTEYN, I.I.

Temperature regulator based on a self-excited self-oscillator.
Avtom. i prib. no. 1:59-60 Ji-Mr '64. (MIRA 17:5)

BAKHEUTSKIY, V.F., tech.; Vronskiy, I.I., tech.

Method for increasing the measurement range of rodless sugarmeters.
Vest. svyazi 25 no.7:7-8 51 165. (NDA 12:8)

ACCESSION NR: AP4020321

S/0302/64/000/001/0059/0060

AUTHOR: Mesh, L. Ya.; Kaminer, D. M.; Vinshteyn, I. I.

TITLE: Temperature controller based on a self-excited oscillator

SOURCE: Avtomatika i priborostroyeniye, no. 1, 1964, 59-60

TOPIC TAGS: temperature controller, dc temperature controller, transistorized temperature controller, thermistor temperature controller, transportation type temperature controller

ABSTRACT: The shortcomings of dc-supplied temperature controllers are briefly reviewed: "bimetallic sensors are unstable while dilatometric switches often do not ensure necessary reliability because of microleakages..."; dc amplifiers are unstable particularly in the $-40+50^{\circ}\text{C}$ range; dc-ac conversions complicate the system. Free from the above drawbacks -- as claimed by the authors -- is a new temperature controller based on a transistorized oscillator

Card 1/2

ACCESSION NR: AP4020321

with phase-controlled self-excitation; the controller is intended for mobile installations. The oscillator is excited only in the case where the unbalance voltage of a thermistor-containing bridge has a certain phase relation to the voltage of the oscillator emitters. A differential gap of 2-3C is ensured by a positive feedback. Tests showed that, within -40 to +50C, the set point drifts by only 0.2C; and the differential by only 0.3C. The change in threshold sensitivity caused by aging of elements and ambient temperature variation has hardly any effect on controller operation. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 31Mar64

ENCL: 00

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

Card 2/2

BAKHMUTSKIY, V.F. (L'vov); VINSHTEYN, I.I. (L'vov); SAS, S.Ye., (L'vov)

Use of impulse power supply for measurement bridge circuits with
semiconductor thermistor in devices of two-position temperature
control. Avtom. i telem. 22 no.2:259-262 F '61. (MIRA 14:4)
(Bridge circuits) (Temperature regulators)

9.6000 (1040, 1089, 1099)

S/103/61/022/002/013/015
B019/B060

AUTHORS: Bakmutskiy, V. F., Vinshteyn, I. I., Sas, S. Ye. (L'vov)

TITLE: Use of a pulse feeding of a measuring bridge with semiconductor thermistors in two-position temperature control devices

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 2, 1961, 259-262

TEXT: A study has been made of the heat balance of a semiconductor thermistor with pulse feeding. By way of introduction, setup and use of two-position temperature control devices are discussed in general. The investigation proper is made on the basis of the diagram shown in Fig. 1. This diagram consists of the pulse generator IC, the measuring circuit MK, the semiconductor thermistor ST, and the two-position indicator II. The following relations are given for the power dissipation in the thermistor with pulse feeding:

$$p(t) = \begin{cases} P & \text{with } n(t_p + t_1) \leq t \leq (t_p + t_1) + t_1 \\ 0 & \text{with } n(t_p + t_1) + t_1 \leq t \leq (n+1)(t_p + t_1) \end{cases} \quad (1)$$

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89182

Use of a pulse feeding ...

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t_1 denotes the pulse duration, t_p the time between the pulses, P the power per pulse. The following heat conduction equations are given by taking account of (1):

$$\begin{aligned} dT/dt + T/\tau &= \theta/\tau + \sigma P \\ dT/dt + T/\tau &= \theta/\tau \end{aligned} \quad (3)$$

Solution $T_n^{(1)}$ is obtained for the n -th pulse, and solution $T_n^{(2)}$ for the time between the n -th pulse and the $(n+1)$ -th pulse, and therefrom, by a passage to the limit $n \rightarrow \infty$, the solutions

$$T_{\infty}^{(1)} = \theta + \sigma P - \sigma P \frac{\exp \frac{t_n + t_p}{\tau} - \exp \frac{t_n}{\tau}}{\exp \frac{t_n + t_p}{\tau} - 1} \exp\left(-\frac{t_1}{\tau}\right), \quad (6)$$

$$T_{\infty}^{(2)} = \theta + \sigma P \frac{\exp \frac{t_n}{\tau} (\exp \frac{t_p}{\tau} - 1)}{\exp \frac{t_n + t_p}{\tau} - 1} \exp\left(-\frac{t_2}{\tau}\right). \quad (7)$$

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Use of a pulse feeding ...

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B019/B060

are obtained. From these equations, one obtains formula

$$N = \frac{(P)_{\text{доп}}}{(P_0)_{\text{доп}}} = \frac{\exp \frac{t_n + t_m}{\tau} - 1}{\exp \frac{t_n}{\tau} \left(\exp \frac{t_m}{\tau} - 1 \right)} \quad (10)$$

which permits determining the power gain obtained by the use of a pulse feeding of the measuring bridge. As may be seen, the power gain increases with growing t_p/τ and decreasing t_i/τ , in which case, however, there exist limit values of these quantities. These limit values are determined, on the one hand, by the measuring instrument, and on the other hand, by the temperature change in the object.

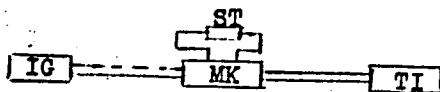


Fig. 1

There are 1 figure and 3 Soviet-bloc references.
Card 3/4

89182

Use of a pulse feeding ...

S/103/61/022/002/013/015
B019/B060

SUBMITTED: April 5, 1960

Card 4/4

VINSHU, I., insh.-arkhitektor

Economical methods for building residential sections of collective
farm villages. Sel'. stroi. 12 no. 4:20-24 Ap '58. (MIRA 11:5)
(Farm buildings)

VINSKI, Ivo, dr, naucni savjetnik (Zagreb, Nemciceva 2)

Growth of capital assets of Yugoslavia in the postwar period.
Tehnika Jug 18 no.1:17-24 Ja '63.

1. Ekonomski institut NR Hrvatske, Zagreb.

VINSKI, Ivo, dr., Zagreb

Economical consequences of injuries in Croatia. Narodno zdrav.,
Beogr. 10 no.6:181-186 1954.

(WORKMEN'S COMPENSATION AND INSURANCE

Yugosl.)

(WOUNDS AND INJURIES, statist.

Yugosl.)

VINSKIY, A., general-mayor inzhenernykh voysk.

Colonel Petrov, commander of an engineering unit and Hero of the
Soviet Union. Voen.-inzh. zhur. 101 no.10:28-29 0 '57. (MLRA 10:11)
(Petrov, Ivan Vasil'evich)

VINSKIY, A.

Gross cutting for mounting shields. Mast.ugl. 6 no.9:14 S '57.
(MIRA 10:11)

1. Nachal'nik uchastka shakhty imeni Vakhrusheva kombinata Kuzbassugol'.
(Mine timbering)

KOTASEK, A.; VINSOVA, N.; BENDL, J.; CERVENKA, J.; CECHEME, E.

Perinatal mortality in late gestoses. *Cesk. gynek.* 29
no.6:470-478 Ag '64.

1. Gyn.-por. klin. fak. vseob. lek. Karlovy University v
Praze (prednosta prof. dr. K. Klaus, DrSc.) a II. gyn.-por.
klin. fak. vseob. lek. Karlovy University v Praze (prednosta
prof. dr. J. Lukas, DrSc.).