

SHEYNKMAN, M.K.; LUK'YANCHIKOVA, N.B. [Luk'ianchykova, N.B.]

Effect of mobility fluctuations on photocurrent noise.
Ukr. fiz. zhur. 8 no.10:1103-1109 0 '63. (MIRA 17:1)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

L 31048-65 EMT(E)/EMT(n)/EMD(t)/E/EEC(t)/EMF(e)
ACCESSION NR: AP5004320

Pz-6 IJP(e) JE/AT
S/0185/65/010/001/0027/0038

34
31
B

AUTHOR: Luk'yanchykova, N. B. (Luk'yanchikova, N.B.); Markevych, I.V. (Markevich, I.V.);
Fedorus, R.A. (Fedorus, R.A.); Sheynkman, M.K.

TITLE: Investigation of photocurrent noise of CdS single crystals with various contacts

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 10, no. 1, 1965, 27-38

TOPIC TAGS: cadmium sulfide, single crystal, photocurrent, noise spectrum, photo-response spectrum

ABSTRACT: The contact noise of CdS single crystals equipped with various ohmic electrodes was investigated. Unlike in other studies, the contact noise was separated from the volume noise by using a probe method of noise measurement. The spectrum of the photoresponse to a weak sinusoidally modulated light of constant intensity was plotted simultaneously with the noise spectrum measurements. The methods of preparing the photosensitive CdS crystals and of depositing the current contacts on the crystals are described. The form of the investigated samples and their electrodes is illustrated in Fig. 1 of the Enclosure, which shows also the

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block diagram of the measurement set-up. The noise and photoresponse spectra were taken in the frequency range from 2 cps to 1 kcs. At 2 cps the equivalent noise impedance of the measuring set-up was 20 kilohms. The results indicate that it is possible to obtain noiseless ohmic contacts on thin and thick CdS single crystals either by welding-on indium or by cathode sputtering of cadmium. Other methods of electrode preparation resulted in noisy contacts. The noise spectrum and the square of the photoresponse were found to differ from theoretical, and large values of $\Delta N^2/N \gg 1$ (N -- number of carriers in the sample, ΔN^2 -- dispersion of the carrier number) were observed, whereas ordinary theory yields $\Delta N^2/N = 1$. The measurements have shown that the value of $\Delta N^2/N$ is not connected with the quality of the contacts, since values both less than unity and appreciably larger than unity (for example, 500) were obtained. Many facts indicate that the variations in these quantities are due to inhomogeneities in the crystals. "The authors are thankful to Academician V. Ye. Lashkar'ov for valuable remarks." Orig. art. has: 6 figures, 7 formulas, and 1 table.

ASSOCIATION: Instytut naviyprovodnykiv AN UkrSSR, Kiev (Institute of Semiconductors, AN UkrSSR)

Card 2/4

L 31088 65

ACCESSION NR: AP5004320

SUBMITTED: 07Mcy64

ENCL: 01

SUB CODE: ES, OF

HR REF SOV: 006

OTHER: 016

Card 3/4

31018-55

ACCESSION NR: AP5004320

ENCLOSURE: 01

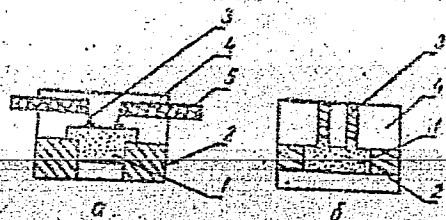


Fig. 1. Sections through measured samples with electrodes.

a - Thin single-crystal plates (up to 100 microns thick).

b - Thick single crystal (several mm).

1 - CdS single crystal, 2 - metal contacts, 3 - probe, 4 - mica, 5 - copper foil

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L 18764-66 EWT(m)/T/ENP(t) IJP(c) JD

ACC NR: AP6003775

SOURCE CODE: UR/0181/66/008/001/0134/0141

AUTHORS: Luk'yanchikova, N. B.; Sheynkman, M. K.

ORG: Institute of Semiconductors, AN UkrSSR, Kiev (Institut poluprovodnikov AN UkrSSR)

TITLE: Low frequency noise of the photocurrent in single crystal cadmium sulfide

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 134-141

TOPIC TAGS: photocurrent, cadmium sulfide, single crystal, photo-resistor, signal to noise ratio

ABSTRACT: This is a continuation of earlier work by the authors on the low frequency photocurrent noise of CdS, (FTT v. 4, 1213, 1962), where it was shown that the resistance fluctuations of this material have a high spectral density $(\Delta N^2)/N$ at sufficiently low temperatures, reaching values of 10^4 and more. Since the earlier investigations were confined to homogeneous semiconductors, the authors investigate

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ACC NR: AP6003775

the magnitude and spectrum of the noise and the photoresponse spectra in single-crystal CdS containing inhomogeneities at frequencies 1 -- 4000 cps. A simultaneous study was made of the distribution of the optical resistance and the relaxation times of the photocurrent along the samples. In some samples the inhomogeneities of resistance were introduced artificially. The photosensitive CdS single crystals were produced by several methods, and were illuminated weakly with light of wavelength ~ 520 or ~ 630 nm from which the infrared component was cut out. Most measurements were made at room temperature and in air, although some were made in vacuum and at other temperatures. The spectral-measurement apparatus was described elsewhere (UFZh v. 10, 27, 1965). The results show that the resistance and relaxation-time inhomogeneities of the photocurrent greatly influence the form of the spectrum and the spectral distribution. The noise spectrum exhibits characteristic peaks which are due to the presence of a narrow high-resistance region near one of the electrodes, and such an inhomogeneity leads to high values of $(\Delta N^2)/N \gg 1$. There is no clear-cut explanation of these peaks as yet. The authors thank V. Ye. Lashkarev for interest in the work and a discussion. Orig. art. has: 5 figures, 4 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 05Jul65/ ORIG REF: 015/ OTH REF: 020

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L 26064-66 EEC(k)-2/EWT(d)/EWT(1) IJP(c) AT

ACC NR: AP6013521

SOURCE CODE: UR/0120/66/000/002/0170/0179

AUTHOR: Luk'yanchikova, N. B.; Garbar, N. P.

56
55
B

ORG: Institute of Semiconductors AN UkrSSR, Kiev (Institut poluprovodnikov AN UkrSSR)

TITLE: A device for spectral measurements of low-frequency photocurrent noises in semiconductors

2 1/2

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1966, 178-179

TOPIC TAGS: photoconductor, semiconductor device, white noise, noise analyzer

ABSTRACT: The authors describe an instrument for studying the spectra of photocurrent noises in the frequency range from 1 cps to 5 kc. The device has an extremely low inherent noise level and rapid response. A block diagram of the installation is shown in the figure. Photoconductor R_0 and series-connected load resistor R_1 are supplied with dc voltage from battery E . A small wire resistor R_2 is connected in series with the specimen for calibration. The noise signal is amplified by the preamplifier and fed to the spectrum analyzer. After linear detection of the signal and averaging, dc voltages appear at the output of the analyzer which are proportional to the average noise on the corresponding frequencies. These voltages are measured by a dc VTVM. A schematic diagram of the preamplifier is given. This unit has an amplification factor of $1.3 \cdot 10^4$ with nearly uniform frequency response in the working wavelength range.

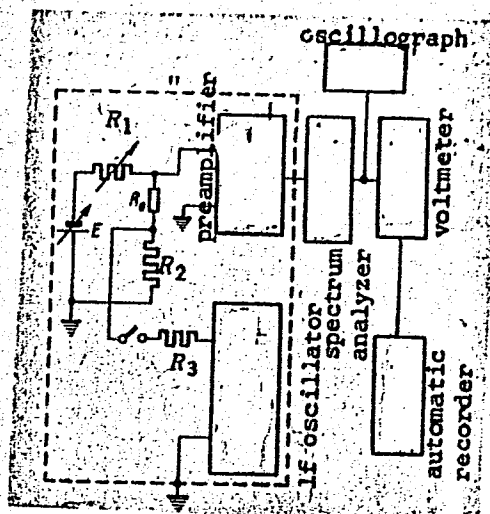
UDC: 612.317.75:539.293.535.215

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ACC NR: AP6013521

The spectrum analyzer is a narrow-band amplifier which is designed for simultaneously measuring noises on 20 fixed frequencies in the given range. Measurement time is considerably reduced by the use of this multichannel analyzer. A white noise generator in the working frequency range is used for calibrating the instrument. R_3 is a buffer resistor for eliminating the shunting effect of the calibrating resistor on the output stage of the oscillator. In conclusion the authors are grateful to M. K. Sheynkman for interest in the work and consultation. Orig. art. has: 2 figures. [14]



SUB CODE: 09/ SUBM DATE: 14Feb65/ ORIG REF: 004/ OTH REF: 001

ATD PRESS: 4252

Cord 2/2 CC

ACC NR: AP6033562

SOURCE CODE: UR/0181/66/008/010/3004/3009

AUTHOR: Luk'yanchikova, N. B.; Sheynkman, M. K.

ORG: Institute of Semiconductors, AN UkrSSR, Kiev (Institut poluprovodnikov AN UkrSSR)

TITLE: Photocurrent noise and superlinearity of lux-ampere characteristics in CdS and CdSe single crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 3004-3009

TOPIC TAGS: correlated noise, photoconductivity, optic property, internal photoeffect, optic center, cadmium sulfide, cadmium selenide

ABSTRACT: This is a continuation of earlier work (FTT v. 4, 1213, 1962) where it was shown theoretically that the photocurrent noise can reach a large level in photoconductors with non-constant quantum yield of the internal photoeffects, which depends on the filling of the adhesion levels. The present paper is devoted to a theoretical and experimental investigation of the connection between this noise, as represented by the quantity $\Delta n^2/n$ (n - photocarrier density, Δn^2 - its dispersion) and the superlinearity of the lux-ampere characteristics of the current, as represented by a parameter α , in single crystals of CdS and CdSe. The single crystals used in the investigation were described in an earlier paper (UFZh v. 10, 27, 1965). The measurements were made at 300K in air (CdS) and at 120 and 300K in vacuum (CdSe). The theory is applied to the usual photoconductor scheme, which calls for the presence of two types of recombination centers and adhesion centers, and described in detail by the authors.

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elsewhere (FTT v. 7, 1717, 1965 and elsewhere). In addition, α and $\Delta n^2/n$ were measured in the same samples for identical values of n ; α was varied with the aid of additional infrared quenching illumination or by temperature quenching of the photocurrent. The results have established that when $\alpha > 1$ and $\Delta n^2/n > 1$, $\Delta n^2/n$ first increases in proportion to α , but eventually this dependence can become nonmonotonic. The experimental results were in qualitative agreement with the theory. The authors thank V. Ye. Iashkarev for discussion of the work. Orig. art. has: 6 figures and 5 formulas.

SUB CODE: 20/ SUBM DATE: 01Apr66/ ORIG REF: 006/ OTH REF: 012

Card 2/2

BOYARCHUK, I., nauchnyy sotrudnik; DONETS, S. [Donets', S.] , nauchnyy sotrudnik;
LUK'YANCHUK, A. nauhenyy sotrudnik

Adjustable plow system for making furrows on hillsides. Mekh. sil'.
hosp. 13 no.8:10-11 Ag '62. (MIRA 15:7)

1. Ukrainskiy anuchno-issledovatel'skiy institut mekhanizatsii i
elektrifikatsii sel'skogo khozyaystva.
(Plows) (Soil conservation)

LUK^oYANCHUK, A.A., inzh.; DONETS, S.M., inzh.

RM-15 rotary spreader of organic fertilizers. Mashinostreennic
no.1379-81 Ja-F '63. (MIRA 16:7)

(Fertilizer spreaders)

CHUGIN, P.I., zoetekhnik; LUK'YANCHUK, D.I., veterinarnyy fel'dsher.

Our experience in eliminating sterility in cows. Veterinariia
32 no.6:23-27 Ja '55. (MLRA 8:7)

1. Kolkhaz imeni Shevchenko, Vinnitskoy oblasti.
(COWS) (STERILITY IN ANIMALS)

LUK'YANCHUK, I.G.

Rewinding of an output transformer. Izm.tekh. no.9:42 5 '60.
(MIRA 13:9)

(Electric transformers)

LUK'YANCHUK, I. N. (Veterinary Doctor)

"Simultaneous inoculation of swine against erysipelas and plague"

Veterinariya, vol. 39, no. 8, August 1962 pp. 39

Handwritten: Luk'yanchuk, M. I.
LUK'YANCHUK, M. I., Engineer

"Utilization of Scale and Methods for Its Collection in Locomotive Practice." Sub 18 Jun 47, Moscow Order of the Labor Red Banner Electro-mechanical Inst of Railroad Engineers imeni F. E. Dzerzhinskiy

Dissertations presented for degrees in science and engineering in Moscow in 1947.

SO: Sum.No. 457, 18 Apr 55

LUK'YANCHUK, O.

May we hear the murmur of Communist Youth League parks ("may our
parks and orchards bloom." Reviewed by O.Luk'ianchuk). Znan.ta
pratsia no.11:31 N '59. (MIRA 13:8)
(Ukraine--Parks)

ZHODZISHSKIY, T.I., kand.tekhn.nauk; KRASNOVSKIY, R.O., kand.tekhn.nauk;
LUK'YANSHUK, P.M., inzh.; KURITS, F.K., inzh.

Roofing for industrial buildings from gas-ash silicate.
Prom.stroi. 43 no.12:33-35 '65.

(MIRA 18:12)

L 15805-65 RAEM(c)/ESD(t)/ASD(a)-5
 ACCESSION NR: APL048309

S/0292/64/000/011/0008/0011

AUTHORS: Lodochnikov, E. A. (Engineer); Luk'yanchuk, V. P. (Candidate of technical sciences); Kufe, V. A. (Engineer)

TITLE: Factors determining the specific power of capacitive generators

SOURCE: Elektrotakhnika, no. 11, 1964, 8-11

TOPIC TAGS: capacitive generator, power equipment, field intensity, permeability

ABSTRACT: The factors determining the energy characteristics of disk capacitive generators of both the unipolar and bipolar types were investigated. Starting with the general expression for the power maximum of a capacitive generator, the expressions for both types of generator were determined. For the bipolar generator

$$P_{\max} = \frac{E^2 \epsilon m (D_1 - D_2) n \varphi_0 (p \delta, D_1 + D_2)}{15}$$

and for the unipolar generator φ_u replaced φ_b . In this equation E is the excitation voltage, ϵ is the dielectric permeability, m is the number of disks, D_1 and D_2 are the external and internal diameters of the disks, n is the number of revolutions. The complex functions φ_b and φ_u of D_1 and D_2 and $p \delta$ (p is the number of pole pairs and δ is the gap between the disks of the rotor and the stator) differ greatly for

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ACCESSION NR: AP4048309

each type. The effects of the individual variables were considered. For air at atmospheric pressure $E \sim 3$ kv/mm is the maximum, but compressed gases (H at 37 atm yields $E = 62$ kv/mm) or a vacuum permit a higher E . In vacuums of 10^{-5} mm of Hg an E exceeding 100 kv/mm is theoretically possible, but electrode properties decrease the obtainable value to 25-30 kv/mm. For generators operating at $E = 50$ kv/mm, a capacitive generator has a specific weight $4\frac{1}{2}$ times less than an inductive generator of the same power. For equal weights, the capacitive generator requires an E of only 24 kv/mm for equal power. At atmospheric pressure the capacitive generator is 64 times heavier. The effect of ϵ variation is small because only gases were considered and their ϵ are approximately equal. The dependence of ϕ_b and ϕ_u on the number of pole pairs and gap width is seen in Fig. 1 on the Enclosure. Since there are no windings, the output of a capacitive generator, operating at its maximum, is fixed in the design. All theoretical possibilities for $p\delta$ are not obtainable in practice, as construction is limited by providing stability and form for the disks, the precision of the gaps, and the stability of the insulation. The precision of the gaps is controlled by the hardness of the disks and the minimization of their play. From a construction point of view, the unipolar generator is simpler, but the bipolar type has superior electrical characteristics. For outputs 25-40 kv, the specific power of capacitive generators is considerably larger than for other types. Orig. art. has: 1 table, 5 figures, and 12 equations.

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L 15805-65
ACCESSION NR: APL048309

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: EE

NO REF SOV: 002

OTHER: 003

Card 3/4

L 15805-65

ACCESSION NR: AP4048309

ENCLOSURE: 01

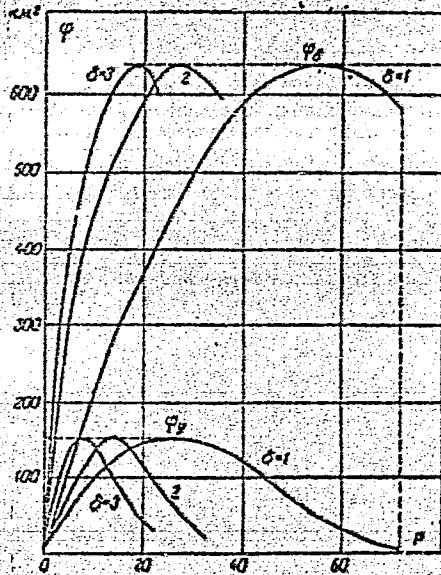


Fig. 1. Dependence of the functions ϕ_b and ϕ_u on the number of pole pairs. $D_1 = 250$ mm; $D_2 = 90$ mm; $a = d = 2\delta$ (a is the distance between stator plates, and d is the plate thickness).

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FINKEL'SHTEYN, A.V.; LUK'YANCHUK, S.V.; NAUKINA, M.A.; KUZ'MINA, Z.M.

Solvatochromism of some substituted nitrobenzenes and Hammett's constants. Zhur. fiz. khim. 38 no.12:2964-2965 D '64.

(MIRA 18:2)

1. Sibirskiy tekhnologicheskiy institut.

LODOCHNIKOV, E.A., inzh.; LJK'YANCHUK, V.P., kand. tekhn. nauk;
KUFA, V.A., inzh.

Factors determining the unit power of large capacitive generators.
Elektrotehnika 35 no.11:8-11 N '64. (MIRA 18:6)

LUK'YANENKO, A.M.

In the Coordinating Council on Welding. Avtom.svar. 13
no.2:92-93 F '60. (MIRA 13:5)
(Steel--Welding)

25(1)

S/125/60/000/03/017/018
D042/D001

AUTHOR: Luk'yanenko, A.M.

TITLE: In the Coordination Council on Welding

PERIODICAL: Avtomaticeskaya svarka, 1960, Nr 3, pp 95-96

ABSTRACT: On the 15th and 16th of December 1959, at the Institut elektro-
svarki im. Ye.O. Patona AN USSR (Electric Welding Institute
imeni Ye.O. Paton AS UkrSSR) a conference took place of the
Coordination Council on Welding at which 104 thematic plans
of scientific research work for 1960 were examined. The
plans were presented by scientific research organizations,
higher educational institutions and plants. The President
of the Council, academician of the AN USSR (AS UkrSSR) B.Ye.
Paton delivered a report on the work of the Council for
1959 and gave a detailed analysis of the plans of scientific
research work in the field of welding for 1960. In 1960
special attention must be paid to: developing the welding
technology and equipment for mechanized arc and gas-arc

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In the Coordination Council on Welding

welding in construction and field work; to the development of production and automatic welding lines for different branches of industry; to the creation of new welding methods of higher productivity; and to develop in 1960 and in the years following, methods for the continuous checking of weld quality. The conference noted that not sufficient attention is being paid to the cost, standardization, normalization and unification, and also to the construction of production lines. The conference decided to organize a yearly All-Union conference on welding, starting in 1960, with the first to be held in Kiyev on 15 - 20 November 1960.

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S/125/60/000/007/010/010
A161/A029

AUTHOR: Luk'yanenko, A.M.

TITLE: At the Coordination Council for Welding

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 7, p. 95

TEXT: The Koordinatsionnyy sovet po svarke (Coordination Council for Welding) considered in December 1959 the welding research plans of institutes, colleges and industry works. Corrections were suggested to eliminate duplications and research of no practical or theoretical interest. VNIIAvtogen, TsNII-TMASH, VNIIST, NKMZ, Tomskiy politekhnicheskii institut (Tomsk Polytechnical Institute) and other organizations have already amended their plans accordingly, but some have until now given no information to the Council. The importance of the matter is emphasized. ✓

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S/125/60/000/008/011/012
A161/A029

AUTHOR: Luk'yanenko, A.M.

TITLE: At the Coordination Council for Welding

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 8, pp. 95 - 96

TEXT: A conference on gas-electric cutting was convened at VNIIVTOGEN, in Moscow, on April 15, 1960, on recommendation of Koordinatsionnyy sovet po svarke (Coordination Council for Welding); 23 delegates from 13 organizations took part. The problems of cutting with "penetrating arc" were discussed in the main part. This process is highly productive and many industrial plants in the USSR have started using it. The penetrating arc cuts stainless steel, aluminum and aluminum alloys and copper of 80 - 100 mm thickness; it is applicable to cutting magnesium, brass, titanium and other metals. More extensive use of the method is hampered by insufficient production of equipment, measuring devices and thorated tungsten electrodes. Besides, some problems connected with the process must yet be studied. The conference took the following decisions: 1) to consider the supply of perfect cutting equipment and electric power equipment for the industry an urgent task; 2) to approve production of the first Soviet gas-elec-

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tric cutting machine¹⁴ by VNIIVTOGEN and to speed up the development of a cutting-layout machine with program control¹⁴ equipped with component units for cutting with penetrating arc; 3) to ask the organizations concerned to speed up the development of simplified equipment and to deliver the experiment units to industrial plants for tests, and at the same time to raise the output of already existing patterns with accessory component units for gas-electric cutting; 4) to recommend all organizations developing or using penetrating arc cutting to send information to VNIIVTOGEN for coordination; 5) to ask GNTK RSFSR to arrange with the Gosplan RSFSR measures for increased output of thorated tungsten, hydrogen, and argon-hydrogen mixtures for gas-electric cutting; 6) to recommend VNIIVTOGEN to publish in the course of the first six months of 1960 the terminology draft for gas-electric cutting suggested at the conference; 7) that the distribution of work to different organizations, as discussed at the conference, is to be approved. In accordance with a decision of the Coordination Council, several organizations convened during 1959 conferences for: a) discussions of scientific-technical reports on work in progress; b) discussions of major tasks for the nearest future; c) discussions of basic trends of research; d) coordination of work on separate problems. The Coordination Council decided to publish in a symposium the major decisions of the coordinating conferences convened in 1959. ✓

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At the Coordination Council for Welding

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In April 1960, Bulletin No. 3 of the Coordination Council had been published, with information on proceedings of the 1959 conferences on the following topics: 1) equipment for gas-electric cutting; 2) air-arc cutting; 3) brittle failure and vibration resistance of welded structures; 4) welding of heat-resistant and scale-resistant steel; 5) welding of high-strength steel and the cold-cracking problem; 6) practical application of mechanized welding assembly lines and modern auxiliary welding equipment; 7) the prospective further mechanization of welding and development of welding in shielding gas in the ship building industry; 8) the corrosion resistance of welded joints in stainless steel; 9) a second scientific- industrial conference on the results of research and practical application of automatic vibro-arc surfacing. ✓

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S/125/60/000/009/015/017
A161/A130

AUTHOR: Luk'yanenko, A.M.

TITLE: At the Coordination Council for Welding

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 9, pp. 87-88

TEXT: A conference on power sources for arc welding was convened in May 1960 at Vsesoyuznyy nauchno-issledovatel'skiy institut elektrosvarochnogo oborudovaniya (All-Union Scientific Research Institute of Welding Equipment). Reports of VNIIESO, NIAT, TsNIILELEKTROM, VZESO, the SKB of the Lithuanian Sovnarkhoz and other organizations were read and discussed. Progress in design and production of direct current feed sources for arc welding was noted in the conference decisions, i.e., new research and design organizations and new plants, and more intensive work with D.C. sources at Institut elektrosvar-ki im. Ye.O. Patona (Electric Welding Institute im. Ye.O. Paton), NIAT, TsNIILELEKTROM and other institutes. Yet it was stressed that the practical application of highly effective new equipment is often delayed for too long

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a time; series output of automotive welders (the most common being the 300 amp type) with the internal combustion engine is still not organized; the control equipment for the welding generators is obsolete, or generators are even supplied without any control equipment. The decisions included the following points: Standardization of the systems and components of various types of generating equipment must be speeded up so as to make possible the start of series output after not more than 1 to 1.5 years' preparation; the semiconductor valves must be improved and their nomenclature increased to include valves for higher currents for welding rectifiers; the Moscow City Sovnarkhoz must be approached to organize series output of selenium rectifiers of better quality and in sufficient quantities; the Gosplan of the USSR must be asked to organize the production of modern control equipment; special engineering offices for welding technology must be organized at VNIIESO and at the SKB of electric welding equipment of the Lithuanian Sovnarkhoz; the VNIIESO must be asked to work out recommendations for the application of the existing D.C. welding transformers for automated shielded arc welding. Further development trends were marked: increasing the D.C. sources nomenclature for new welding processes; developing high-power D.C. sources for

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automatic welding (with fusing gas shielded electrode, submerged arc, etc.); particular attention must be drawn to the operation quality and efficiency of equipment; the maximum possible economy of ferrous and nonferrous metals must be considered in new designs.

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A161/A133

AUTHOR: Luk'yanenko, A.M.

TITLE: At the Coordination Council for Welding

PERIODICAL: Avtomaticheskaya svarka, no. 1, 1961, 78-79

TEXT: The Institut metallurgii im.A.A.Baykova (Metallurgical Institute im. A.A.Baykov) convened a coordinating conference on the application of ultrasonics in welding, in accordance with a decision of the Koordinatsionnyy sovet po svarke (Coordination Council for Welding). The conference took place on September 7-8, 1960; 23 delegates from 12 organizations participated. The agenda was the following. 1) Plan for the coordination of the work on the stability of the quality of joints with ultrasonic welding. 2) Inspection methods to check the stability of the mechanical strength of joints. 3) Future applications of ultrasonics in fusion welding. The conference approved a plan of coordinated work to ensure a steady quality of joints in ultrasonic welding which provides for: 1) Development of inspection methods

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A161/A133

At the Coordination Council for Welding

to check the steady quality of joints; 2) Inspection of the stability of mechanical strength in aluminum joints, and in materials that are difficult to weld by other methods (stainless steel with aluminum, titanium, zirconium, and others); 3) Determination of the peculiarities of the formation of joints to elucidate the optimum process conditions; 4) Improvement of equipment; 5) Development of instruments for measurements of the basic parameters in ultrasonic welding processes; 6) Development of a method for checking and automatic quality control of the joints in the process of their formation; 7) Investigation of auxiliary heating in ultrasonic welding processes; 8) Investigation of new systems to feed the ultrasonic waves to the spot of welding. The IMET im.A.A.Baykov AS USSR, MEI, MVTU, LIIVT, MATI, IMASH AS LatvSSR, Institut akustiki AN SSSR (Institute of Acoustics AS USSR), TsNIICHM and other organizations will take part in the work. The conference approved a method for checking the strength stability of test specimens. Investigations were stated to be necessary for the selection of a material for links transmitting the ultrasound to the workpiece. This method should ensure a maximum stability of acoustic properties during operation and cause minimum power losses. The application of ultrasonics to control the crystallization in fusion welding was discussed, and the conference passed the following re-

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solution: a) To continue experiments in this field; b) It is important to determine the expedient application for ultrasonic welding. It is desirable to arrange the experiments so as to help to solve this problem and to provide fundamental data for the technology of sounding the joint during welding. c) The problem of ultrasonics application in electro-slag or bath-slag welding had been studied most extensively. Oscillation transmission through filler wire suggested by the IMET AS USSR may prove effective. d) It is desirable to convene a small-scale conference after new data have been obtained. The desire was expressed to convene the following regular coordination conference on the application of ultrasonics in welding by the end of 1961. ✓

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A161/A133

AUTHOR: Luk'yanenko, A.M.

TITLE: In the coordination council for welding

PERIODICAL: Avtomaticheskaya svarka, no. 3, 1961, 104 - 106

TEXT: Information is presented on three coordination conferences: 1) A conference on the standardization of welding electrodes for mass production. electrode tests and appraisal was convened on October 14, 1960, at TsNIITMASH. Delegates from 10 scientific research institutes, 4 sovnarkhozes and 19 enterprises were present. The conference decision after discussion of reports included 6 points: 1) Positive experience of the Leningrad Sovnarkhoz in the specialization of the electrode production and reduced electrode nomenclature. 2) Electrodes produced by some of the USSR plants are not inferior to the best foreign electrodes in respect to the mechanical properties of weld metal, but their technological properties are frequently inferior to the foreign electrodes. 3) The electrode specifications must be revised urgently and coordinated with the (GOST) 9466-60) standard. 4) Particular attention should be paid to the electrode properties causing health hazard. 5) An electrode commission must be organized ✓

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S/125/61/300/003/015/016
A161/A135

In the coordination council for welding

at the coordination council for welding. 6) The state standards for electrode coating components must be revised and complemented with specifications for rutile, hematite, mica meal, potassium silicate, powder iron, etc. II) A coordination conference on the welding of heat-resistant and refractory steel and alloys, also in October 1960 at TsNIITMASH, heard reports and information on the results of work done in 1960 and took decisions including the following. 1) Important investigations have been conducted but the strength equality problems have not been completely solved. Intensive research and experiment work is to be continued. More work must be done in the welding technology for joining different steel types, welding pipelines on site, and the development of nonoxidizing electrodes. 2) Systematic research is necessary of the welding of nickel-free austenitic Cr-Mn steel. 3) Welding experiments with new steel types and alloys are delayed by the slow supply of test welding wire and base metal. These problems must be urgently solved and the experiment plant of TsNIChERMET must start the production of new wire types. 4) A conference will be convened at TsNIChERMET during the first quarter of 1961 to coordinate the work on welding new heat-resistant steel and alloys, and a similar conference will be convened at NIIKhIMASH on welding of new austenite-ferrite steel. III) A conference at the Institut elektrosvariki im. Ye.O. Patona (Electric Welding Institute im Ye.O. Paton) on No-

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In the coordination council for welding

vember 17, 1960, discussed and approved thematic plans for research and test work for 1961; 122 plans of research institutes, higher education schools and industry plants were considered. B.Ye. Paton, Academician of AS UkrSSR, Chairman of the coordination council, reported on the work done by the council in 1960 and tasks for 1961, and analyzed the thematic plans submitted for 1961. The conference discussed the report and the conclusions of the work commissions, and noted in decisions that the paramount problems of the list approved by the GNTK SSSR (GNTK of the USSR) for 1959 - 1965 are included into the thematic plans. The themes include strict economy of nonferrous metals, welding of steel with a low nickel content and of nickel-free stainless steel; development of a new production method of two-layer and three-layer steel billets for rolling using the electro-slag welding process; mechanization and automation of build-up welding in all industries, and development of new methods of wear-resistant, corrosion-proof and heat-resistant coating with vacuum, induction heating and electron beam heating; automatic and mechanized weld checks including investigations of the methods of producing visible images of defects. The importance of modern universal and special butt welding machines, spot welding machines and other was stressed, and work mentioned that has been done in the production of ribbed pipes, special multielectrode welders, welders for cast iron pipes, and others. Fields

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In the coordination council for welding

were listed in which the work done was not sufficient, e.g., heat resistance of welded joints; elimination of hot cracking of heat-affected metal and purely austenitic welds, new weldable medium-alloy steel; modernization and improvement of equipment for mechanical build-up welding; new shielding gases; economy of metal in frame structures; technological convenience and dependability of joints; brazing; work safety. The council recommended to include these problems in the plans of the Electric Welding Institute, NIIKhIMMASH, TsNIITMASH, VNIIESO, NIAT and other institutes. Duplication of work was eliminated and sufficiently studied topics deleted from the plans. Some organizations failed to submit their plans or submitted them too late, or not in accordance with the requirements. The coordination council suggested, therefore, that all organizations submit their plans in future not later than in July, and in a similar form. Fifteen thematic conferences are planned to convene during 1961 to coordinate the thematic plans of organizations working on similar or interrelated problems. The coordination council has worked out recommendations for organizations and industry plants concerning the further development of welding. [Abstracter's note: Essentially complete translation.] ✓

Card 4/4

L 24438-66 EWT(d)/EWT(m)/EWP(f)/T-2 WE

ACC NR: AP6006396 (A)

SOURCE CODE: UR/0413/66/000/002/0141/0141

AUTHORS: Baykov, B. P.; Bordukov, V. T.; Deych, R. S.; Luk'yanchenko, B. S. 27
B

ORG: none

TITLE: Equipment for supercharging internal combustion engines. Class 46, No. 178243 /announced by Central Scientific Research Diesel Institute (Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy inatitut) / 23

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 141

TOPIC TAGS: internal combustion engine component, supercharger

ABSTRACT: This Author Certificate presents equipment for supercharging internal combustion engines, containing two turbines operating in the exhaust gases from the engine. One turbine drives the supercharger compressor and the other drives a blower which draws air through the engine condenser (see Fig. 1). To increase the efficiency of the engine at partial cycles, the turbines are inserted in series along the gas passage.

Card 1/2

UDK: 621.43.068.9--713.1 621.43.052--713.1

L 24438-66

ACC NR: AP6006396

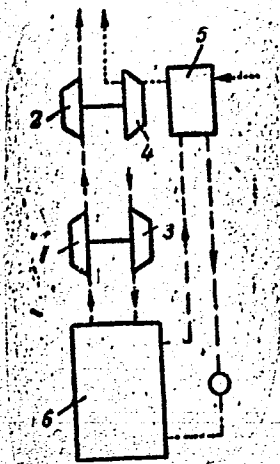


Fig. 1. 1 - Gas turbine of turbocompressor; 2 - gas turbine of turboblower;
3 - supercharger compressor; 4 - blower; 5 - condenser; 6 - engine.

Orig. art. has: 1 diagram.

SUB CODE: 21/ SUBM DATE: 16Nov64

Card 2/2 *dda*

LUK'YANENKO, A.Z.; GURSKIY, G.L.

Jig-boring device. Av.prom. 26 no.8:80-82 Ag '57. (MIRA 15:4)
(Drilling and boring machinery)

COUNTRY : USSR
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104711
AUTHOR : Luk'yanenko, D. Ye.
INST. : Ukrainian Scientific Research Institute of Vegetables *)
TITLE : The Influence of Fertilizers on the Yield of Muskmelons
in the Forest Steppe of Ukraine.
ORIG. PUB. : Nauchn. tr. Ukr. na-i. in-t ovoshchevoǎstva i kartofelya,
1957, 4, 37-43
ABSTRACT : In 1951-1953, in the experiments at Volkovskaya Experi-
mental Base of the Institute, application under fall-
plowed land of 20 tons of manure and manure together with
mineral fertilizers at the rate of N45, P20,60, K20 45
kilograms/ha. in the conditions of Ukrainian forest steppe,
contributed to a considerable increase in the yield of
muskmelons. Placement into planting holes 3 tons of hu-
mus and 15 kilograms of P2O5 (Pc) at seeding time, led to
an increase in the gross yield of from 4.7 (1951) to 57%
(1952). Mineral fertilizers alone, under fall-plowed land
*) Growing and Potatoes.

Card: 1/3

COUNTRY : M
CATEGORY :
ABS. JOUR. : RZhBiol., No. 1958, No.
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : in the amount of N_{45} , P_{20} , 60 , K_{20} 45 considerably low-
ered the yield, and with the amount of each component
smaller by 15 kilograms, produced a negative result in
1951, and a negligible increase in 1952. Placement of
 P_c (15 kg of P_{2O_5}) alone in the planting holes, resulted
in the lowering of the yield. The author explains the
negative effect of mineral fertilizers by the poor toler-
ance of muskmelon to acid environment, and ammonium sul-
fate and P_c do acidify the soil. On degraded chernozems,

Card: 2/3

59

COUNTRY :		M
CATEGORY :		
ABS, JOUR. :	RZhBiol., No.23 1958, No. 104711	
AUTHOR :		
INST. :		
TITLE :		
ORIG. PUB. :		
ABSTRACT :	the added acidification is especially noticeable with the increased amounts of fertilizers and with abundant precipitation in the first half of the vegetation period. -- M. V. branishnikov	

Card: 3/3

LUK'YANENKO, I. inzhener; SIZOV, V., inzhener.

Contribution by efficiency workers of the Leninsk mine. Mast.ugl. 5
no.9:20-22 S '56. (MLRA 9:10)
(Kuznetsk Basin--Coal mining machinery)

ЛУК'ЯНЕНКО, И.

ЛУК'ЯНЕНКО, И.

Corrections in the rate of pay for engineers and technicians in
coal mines. Sots.trud no.2:131-132 F '57. (MLRA 10:5)

1. Pomoshchnik glavnogo inzhenera po organizatsii truda i zarabotnoy
platy shakhty no.46 goroda shakhty.
(Coal mines and mining) (Wages)

ЛУК'ЯНЕНКО, І.

ЛУК'ЯНЕНКО, І.

Bonuses for coal miners. Sots. trud no.12:134-135 D '57.(MIRA 11:1)

1. Pomoshchnik glavnogo inzhenera po organizatsii truda shakhty No.46 tresta "Artemantratsit".
(Coal mines and mining--Production standards)

LUK'YANENKO, I. A.

LUK'YANENKO, I. A.: "The effect of irrigation on the harvest yields and seed properties of potatoes in Dnepropetrovsk Oblast." Min Higher Education USSR. Khar'kov Order of Labor Red Banner Agricultural Inst imeni V. V. Pokuchayev. Khar'kov, 1956. (Dissertation for the Degree of Candidate in Agricultural Science.)

'Knizhnaya letopis', No. 30, 1956. Moscow.

LUK'YANENKO, I. A.

MERESHKO, L. S.; LUK'YANENKO, I. A.

New location of *Sisymbrium wolgensse* M.B. in Dnepropetrovsk
Province. Ukr. bot. zhur. 14 no.1:57-59 '57. (MLRA 10:5)

1. Dnipropetrovs'kiy sil's'kogospodars'kiy institut, kafedra
botaniki.

(Dnepropetrovsk Province--*Sisymbrium*)

LUK'YANENKO, Ivan Nikandrovich [Luk'ianenko, I.N.]; MOSKOVCHENKO,
Viktor Ivanovich; SHELUD'KO, Ivan Mikhaylovich, dots. kand.
tekhn. nauk; GONCHAR, A.S. [Honchar, A.S.], red.; BOYKO, V.P.
[Boiko, V.P.], tekhn. red.

[Kilns and drying apparatus used in the ceramic industry;
examples of designs] Pechi ta susharky keramichnoi pro-
myslovosti; pryklady rozrakhunkiv. Kyiv, Derzh. vyd-vo
lit-ry z budivnytstva i arkhitekt. URSS, 1961. 198 p.
(MIRA 15:3)

(Ceramic industries) (Kilns) (Drying apparatus)

LUK'YANENKO, I.V.

Anticoagulant therapy of vascular diseases of the brain.
[with summary in French]. Zhur.nevr, i psich. 58 no.2:190-193 '58.
(MIRA 11:5)

1. Klinicheskoye otdeleniye nervnykh bolezney (zav. -prof.
Ya.M. Korganov) I gorodskoy bol'nitsy (glavnyy vrach A.V. Goreshtnyak),
Rostov-na-Donu.

(BRAIN, blood supply,
dis., bishydroxycoumarin ther. (Pol) (Rus))
(BISHYDROXYCOUMARIN, ther. use
cerebral vasc. dis. (Pol) (Rus))

LUK'YANENKO, I.V. (Rostov-na-Donu)

Resistance and permeability of the blood vessels in anticoagulant
treatment. Vrach. delo no.1:146-148 Ja '62. (HIRA 15-2)

1. Otdeleniye nervnykh bolezney i gorodskoy bol'nitsy (zav. -
prof. Ya.N.Korganov), Rostov-na-Donu.
(BLOOD VESSELS) (ANTICOAGULANTS (MEDICINE))

137-58-5-11132

LUK'YANENKO, L. P.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 318 (USSR)

AUTHORS: Mal'tsev, V. F., Luk'yanenko, L. P.

TITLE: A Photocolorimetric Method for Determination of Large Amounts of Silicon Contained in High-alloy Steels and in Fluxes Employed in Electric Welding (Fotokolorimetricheskiy metod opredeleniya bol'shikh sodержaniy kremniya v vysokolegirovannykh stalyakh i flyusakh, primenyayemykh pri elektrosvarke)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii. Ukr. resp. pravl., 1956, Vol 4, pp 111-114

ABSTRACT: 0.1 g of steel is dissolved in 10 cc of a mixture of HNO₃ and HCl (1:1). The solutions is placed into a Pt dish together with 35 cc of a 10% NaOH solution; after heating the dish for three minutes and allowing it to cool, 15 cc of HNO₃ are added and the entire solution is transferred into a 200-cc flask. 1 cc of the solution is placed into a 50-cc flask to which 20 cc of 0.125-N H₂SO₄ and 2.5 cc of 5% ammonium molybdate are added. After an interval of 3 minutes, 7.5 cc of 8-N H₂SO₄ are added, followed, after a one-minute interval, by 10 cc of a 4% solution of Mohr's salt and a sufficient quantity of water to raise the level

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137-58-5-11132

A Photocolorimetric Method (cont.)

of the solution to a predetermined mark. Two minutes after Mohr's salt is added, the solution is placed into a 20-cc vessel; where it is analyzed colorimetrically under a red light filter. In order to determine SiO_2 in fluxes, 0.1 g of the material is fused in a Pt crucible with 4 g of K_2CO_3 and 2.5 g of borax for a period of 15-20 minutes at a temperature of 900-950°C. The melt is then leached with a mixture of 350 cc of water plus 10 cc of HNO_3 and 50 cc of a saturated solution of $\text{H}_2\text{C}_2\text{O}_4$. After transferring the solution into a 500-cc flask, 17 cc of 0.15-N H_2SO_4 and 5 cc of 5% ammonium molybdate are added; three minutes later 15 cc of 8-N H_2SO_4 , 5 cc of CuSO_4 , and 20 cc of a 7% solution of thiourea are added; the solution is then placed into 10-cc flasks where it is analyzed colorimetrically under a red light filter. At an SiO_2 content of 20-40%, the absolute error amounts to 0.5%.

K. K.

1. Silicon--Determination
2. Steel--Analysis
3. Welding fluxes--Analysis
4. Colorimetry--Applications

Card 2/2

MAL'TSEV, V.F.; LUK'YANENKO, L.P.

Determination of silicon dioxide in electric welding fluxes by
means of photometric colorimetry. Zav. lab. 24 no.5:537-538 '58.
(MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy trubnyy institut.
(Silica--Analysis) (Colorimetry) (Flux (Metallurgy)--Analysis)

S/593/60/000/000/006/001
D204/D302

AUTHORS: Mal'tsev, F.V., Candidate of Chemical Sciences, and
Luk'yanenko, I.P.

TITLE: Comparative assessment of the electrolytic methods of
separating carbides from stainless steels, in electroly-
tes containing thiosulphate and thiourea

SOURCE: Soveshchaniye po khimicheskomu kontrolyu proizvodstva v
metallurgicheskoy i metalloobrabatyvayushchey promyshlen-
nosti. Dnepropetrovsk, 1958. Khimicheskiy kontrol' proiz-
vodstva v metallurgicheskoy i metalloobrabatyvayushchey
promyshlennosti; [doklady soveshchaniya] [Dnepropetrovsk]
1960, 277 - 280

TEXT: The authors compared the separation of the carbide phase
from IX18H9T (IKh18N9T) steel by anodic solution in, a) an electro-
lyte due to N.M. Popova and A.F. Platonova (1 N KCl in 0.2 N HCl
and 0.5 % $\text{Na}_2\text{S}_2\text{O}_3$), and b) a similar electrolyte in which the thio-
sulphate was replaced by 1 % of thiourea. Using (a), the Ti and Ni

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Comparative assessment of the ...

S/593/60/000/000/006/007
D204/D302

contents of the Ti carbide deposit varied between 0.19 - 0.23 and 1.2 - 1.5 % respectively. Using (b), the corresponding figures were 0.11 - 0.12 and 0.032 - 0.060 %. No such differences were observed when carbide separations from a steel not containing Ni were carried out. In a second series of tests polarity was periodically reversed during the process, in such a way that the specimens (IKhN9T steel) remained at the positive pole twice as long as on the negative. Using the tiosulphate electrolyte under these conditions, Ti and Ni in the carbide were found to be 0.13 and 0.76 % respectively (less contamination with Ni), whilst the corresponding values when using the thiourea electrolyte remained relatively unchanged (0.12 and 0.018 %). Further work on the processes taking place on the surface of the specimens during the electrolytic process is thought worthwhile and the use of thiourea in place of thiosulphate is recommended. There are 1 figure and 2 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy trubnyy institut
(All-Union Scientific Research Institute of Tubes)

Card 2/2

MAL'TSEV, V.F.; LUK'YANENKO, L.P.; KUKUY, D.M.

Rapid photocolometric determination of aluminum in
copper-zinc alloys. Zav.lab. 27 no.7:807-808 '61.
(MIRA 14:7)

1. Ukrainskiy nauchno-issledovatel'skiy trubnyy institut.
(Aluminum--Analysis) (Copper-zinc alloys)

S/137/62/000/009/017/033
A006/A101

AUTHORS: Dolinskaya, L. A., Rizol', A. I., Mal'tsev, V. F., Nekrasova, S. Z.,
Andreyeva, Ye. M., Iuk'yanenko, L. P.

TITLE: Investigation of phenomena occurring in cold-drawn stainless pipes
during heating

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1962, 73, abstract 9I449
(In collection: "Proiz-vo trub", no. 6, Khar'kov, Metallurgizdat,
1962, 127 - 133)

TEXT: The authors studied the effect of holding time upon temperature
limits of the recrystallization range in the treatment of cold drawn 1X18H9T
(1Kh18N9T) stainless steel pipes. Branches of these pipes were heated in a la-
boratory Silit furnace at 600 - 1,200°C, every 50°C, at a rate of 600 - 800 de-
gree/min. Heating was performed with 3 hours 10 min holding, then the specimens
were air-cooled. During the investigation of heat treated specimens, the authors
determined microstructure, H_v , mechanical properties at 350°C, the content of
bound Tl, the number of interference spots (pricks) on the lines of radiographs,

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S/137/62/000/009/017/033
AC05/A101

Investigation of phenomena occurring in...

and stresses of the II order. Changes in the stresses of II order were determined from the width of interference lines. X-raying of a rotating specimen was carried out on a YPC -5 M (URS-50I) ionization unit. In heating to 750°C the first recrystallization grains appear in the pipe structure. The temperature of 750°C may be considered as the onset of recrystallization of the specimen. Heating of deformed steel is accompanied by its softening manifested in a reduction of σ_b , σ_s , and hardness, with simultaneous increase of δ and removal of stresses of the II order. Softening of steel begins before the appearance of new grains, whilst the deformed structure is preserved (phenomenon of recovery). It is completed at 800 - 850°C. When heating to over 1,100°C, a decrease of the mechanical properties of the steel is observed, which is caused by intensive grain growth. The determination of bound Ti contained in the specimens, depending on the heating temperature, has shown that there are maximum amounts of bound Ti in the steel at temperatures corresponding to maximum hardness (950°C in the case of 3-hour holding and 1,050°C in the case of heating without holding). If the steel is heated over temperatures corresponding to hardness maxima, Ti carbides are dissolved.

T. Romyantseva

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/005/144/150
A052/A101

AUTHORS: Luk'yanenko, L. P., Mal'tsev, V. F., Diomidova, L. A.

TITLE: Comparative evaluation of electrolytic and acid methods of titanium carbide isolation out of 1X18H9T (1Kh18N9T) steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 5, abstract 5K27
(V sb. "Proiz-vo trub". Khar'kov, Metallurgizdat, no. 6, 1962, 164-166)

TEXT: To isolate carbides out of 1Kh18N9T steel cylindrical samples were cut out, heat treated and converted into chips. An 1g portion of chips was dissolved in 120 ml solution of HCl and H₂SO₄ of 3, 4, 6 and 8-normal concentration at a slow boiling. Electrolytic dissolving was done in an electrolyte of the following composition: 74 g KCl, 10g thiocarbamide and 19 ml HCl per 1 l water; it lasted 4 hours at a current density of 0.02 a/cm². The isolated Ti carbides were baked, fused with K pyrosulfate, the fusions were leached in H₂SO₄, the solutions were put in a 100 ml retort and water was added to the mark. Using the color reaction of Ti with H₂O₂, the Ti content in solutions was determined by means of ФЭК -М (FEK-M). It has been found that the Ti carbide

Card 1/2

Comparative evaluation of electrolytic ...

S/137/62/000/005/144/150
A052/A101

isolation by dissolving chips in an acid can be applied only to determine the relative Ti carbide content in steel, since the curves obtained both with this and the electrolytic method have the same character. For dissolving chips it is better to use 8-normal H_2SO_4 .

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

MAL'TSEV, V.F.; LUK'YANENKO, L.P.

Photometric determination of manganese in high-alloy steels and alloys. Zhur. anal. khim. 20 no.3:394-396 '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tehnologicheskiy institut trubnoy promyshlennosti, Denpropetrovsk.

LUK'YANENKO, N. M.

Cand Agr Sci - (diss) "Formation, shaping, and maturing of winter wheat grain as a function of condition of cultivation and variety." Khar'kov, 1961. 15 pp; (Ministry of Agriculture Ukrainian SSR, Khar'kov Order of Labor Red Banner Agr Inst imeni V. V. Dokuchayev); 200 copies; free; (KL, 7-61 sup, 252)

NIKULINA, N.K.; LUK'YANENKO, N.M.; NEYPERT, Yu.N.

In Tatarstan. Zashch.rast.ot vred.i bol. 7 no.6:5-8 Je '62.
(MIRA 15:12)

1. Glavnyy agronom Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh produktov RSFSR (for Nikulina).
2. Sekretar' partiynoy organizatsii Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh produktov Tatarskoy ASSR (for Luk'yanenko).
3. Korrespondent zhurnalal "Zashchita rasteniy ot vreditel'ey i bolezney" (for Neypert).
(Tatar A.S.S.R.—Plants, Protection of)

LUK'YANENKO, N. S.

Simplify and lower construction costs of flush pipes. Gor. khoz. Mosk.
31 no.3r33 Mr '57. (MIRA 10:4)
(Sewer pipe) (Plumbing)

LUK'YANENKO, P., akademik, laureat Leninskoy premii, deputat
Verkhovnogo Soveta SSSR

What the scientists are working on at present. Grazhd. av. 20
no.1:10 Ja '63. (MIRA 16:4)

(Kuban--Wheat--Varieties)

LUK'YANENKO, P., akademik; DRAGALIN, P.; SIMAKIN, A.; DUBONOSOV, T.

Fertilize the entire area under winter wheat. Zemledelie
26 no.1:23-26 Ja'64. (MIRA 17:5)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni Lenina (for Luk'yanenko).
2. Krasnodarskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva (for Dragalin).
3. Kubanskiy sel'skokhozyaystvennyy institut (for Simakin).
4. Krasnodarskoye krayevoye upravleniye proizvodstva i zagotovok sel'skokhozyaystvennykh produktov (for Dubonosov).

LIUK'YANENKO, P.P., akademik (Krasnodar); CHERNENKO, S.F., prof. (Michurinsk);
LITOVCHENKO, G.R., knad. sel'skokhozyaystvennykh nauk; KOREN'KOV, V.A.;
SELIVANOV, A.I., prof.; CHERNIGOVSKIY, V.N.; DUBROVSKIY, A.A.;
BAKHTADZE, K.Ye., akademik (Stantsiya Chakva)

Great strides of Soviet science. IUn. nat. no.11:3, 27, 31, 33, 35-36
0 '62. (MIRA 16:5)

1. Chleny-korrespondenty Vsesoyuznoy akademii sel'skokhozyaystvennykh
nauk imeni Lenina (for Koren'kov, Slivanov). 2. Deystvitel'nyy
chlen Akademii nauk SSSR (for Chernigovskiy), 3. Rukovoditel'
laboratorii Vsesoyuznogo nauchno-issledovatel'skogo instituta
mekhanizatsii sel'skogo khozyaystva (for Dubrovskiy).
(Science news)

LUK'YANENKO, P. P.

"Results of Work in Selecting Rust-Resistant Varieties of Winter Wheat", *Selektsiya i senehovodstvo*, No. 11, 1936.

LUK'YANENKO. P. P.

FA 1/49T66

USSR/Medicine--Wheat
Medicine--Environment

Mar/Apr 48

"Variation of the Nature of the Types of Winter and Summer Wheat by Means of Variation of the Conditions During the Vernalization Stage,"
P. P. Luk'yanenko, Laureate of the Stalin Prize, Cand Agr Sci, State Selection Sta, Krasnodar, 11 pp

"Agrobiologiya" No 2

High spring temperatures greatly affect vernal stage of Voroshilov wheat if this high temperature period is during vernalization period. Some types of wheat, if subjected to low temperature, 1/49T66

USSR/Medicine--Wheat (Cont'd)

Mar/Apr 48

temperatures during vernalization, showed greater resistance to freezing. Describes effective method for classification of various types for purposes of selection.

1/49T66

LUK'YANENKO, P. P.

"Selection and Area Allocation of Varieties of Winter Wheat for Different
Rotation Forerunners," Agrobiologiya, No.3, pp. 37-44, 1955

Krasnodar State Plant-Breeding Station

Translation 2030158

USSR / Cultivated Plants. Cereal Crops.

M-3

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58522

Author : Luk'yanenko, P. P.

Inst : Not given

Title : Application of Michurin's Methods in the Selection and
Seed Growing of Winter Wheat in the Kuban'

Orig Pub : Michurinsk. sb. Krasnodar, "Sov. Kuban'", 1957, 129-141

Abstract : No abstract given

Card 1/1

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M

Country : USSR
Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 11, 1958, 48843

Author : Luk'yanenko, P.P.
Inst : Krasnodar Sci. Res. Inst. of Agriculture
Title : Winter Wheat Bezostaya 4.

Orig Pub: Byul. nauchno-tekhn. inform. Krasnodarsk. n.-i.
in-ta s.kh. 1957, vyp. 1, 18-22

Abstract: This variety was brought out by the Krasnodar Selection Station. It is distinguished by better resistance to damping off, high winter resistance and productivity, higher physical and milling and bread-baking qualities than Novoukrainka 84. Under poor agrotechnical conditions Bezostaya is inferior to Novoukrainka 84. An improved elite variant of

Card : 1/2

M-10

Country : USSR

Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 11, 1958, 48843

the Bezostaya 4 variety, the Bezostaya 4/1 strain, was obtained which is more productive, adaptable, and resistant to damping off. Its yield surpasses both the original variety and the Novoukrainka under all agrotechnical conditions. -- A.F. Khlystova

Card : 2/2

USSR/Cultivated Plants - Grains.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82265

Author : Luk'yanenko, P.P.

Inst :

Title : A New Variety of Winter Wheat

Orig Pub : Vestn. s.-kh. nauki, 1957, No 3, 113-117

Abstract : Krasnodarskaya selection station produced a variety of winter wheat Skorospelka 3 by means of crossing winter wheat Konred x Ful'koster 266287 with spring wheat Klin 33 (Argentine). It was adopted in districts of Krasnodarskiy and Stavropol'skiy krays and Groznenskaya Oblast' Skorospelka has a tendency to produce new forms which deviate considerably from the basic type. As the result of selection from among these sports, F₁₅ produced an improved form Skorospelka 3b which differs considerably from the original variety in the morphological type of the plants, yield, fast maturing and the quality of the

Card 1/2

- 12 -

COUNTRY : USSR
CATEGORY : Cultivated Plants. Cereals. M
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104616
AUTHOR : Luk'yanenko, P. P.
INST. : Krasnodar Scientific Research Institute of Agriculture.
TITLE : Placement of Winter Wheat in Field Crop Rotations.

ORIG. PUB. : Zemledeliye, 1957, No. 7, 21-26

ABSTRACT : Data of Krasnodar Scientific Research Institute of Agriculture. In Kuban', the foundation of correct crop rotation should be the bed and the turned bed of perennial grasses (alfalfa, esparcet, and red clover). Introduction of perennial grasses contributes to the securing of high and stable yields of winter wheat and corn.

Card: 1/1

14

COUNTRY : USSR M
CATEGORY : Cultivated Plants. Grains.
ABST. JOUR. : RZBiol., No. 21, 1958, No. 95906
AUTHOR : Luk'yanenko, P.P.
INST. : All-Union Acad. of Agric. Sciences
TITLE : Basic Results of Winter Wheat Selection

ORIG. PUB. : Dokl. VASKHNIL, 1957, No.11, 6-12

ABSTRACT : A detailed evaluation is given according to yield, maturing times, flour and bread-baking properties of new varieties of winter wheat raised at the Krasdarsk Scientific Research Institute of Agriculture. The new Kubanskaya 60 variety exceeds its parental forms (Novoukrainska 84 and Odesskaya 3) in productivity. This variety unites the high flour and bread-baking qualities of Novoukrainka 84 with the winter hardiness of Odesskaya 3. There are

CARD: 1/2

COUNTRY : M
CATEGORY :

ABS. JOUR. : RZBiol., No. 21, 1958 No95906

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : forms in the selection nurseries which are highly resistant to rust, making it possible in recent years to develop for the moist southern portion of the region (kray) varieties, at least 20-25% more productive than those distributed currently, simultaneously having high flour-milling and bread-baking qualities.--O.V. Yakushkina.

CARD: 2/2

LUK'YANENKO, P.P., akademik.

New winter wheat varieties resistant to lodging. Dokl. Akad. sel'-
khoz. 22 no.3:3-6 '57. (Wheat--Varieties) (MLBA 10:6)

LUK'YANENKO, P.P., akademik

Principal results of work in breeding winter wheat. Dokl. Akad.
sel'khoz. 22 no.11:6-12 '57. (MIRA 11:4)

1. Krasnodarskiy nauchno-issledovatel'skiy institut sel'skogo
khozyaystva.
(Kuban--Wheat--Varieties)

LUK'YANENKO, P.P., akademik

Methods for breeding frost-resisting varieties of winter wheat
for the steppe region of the Northern
Caucasus. Agrobiologiya no.2:169-176 Mr-Apr '62. (MIRA 15:4)

1. Krasnodarskiy nauchno-issledovatel'skiy institut sel'skogo
khozyaystva.
(Caucasus, Northern—Wheat—Frost resistance)

LUK'YANENKO, P. P.

Developing winter wheat varieties for intensive farming.
Zemledelie 24 no.12:14-23 D '62. (MIRA 16:1)

1. Krasnodarskiy nauchno-issledovatel'skiy institut sel'skogo
khozyaystva. Deystvitel'nyy chlen-akademik Vsesoyuznoy akademii
sel'skokhozyaystvennykh nauk imeni Lenina.

(Wheat--Varieties)

LUKY-ANENKO, P. P.,

"Method of Crossing Geographically Remote Forms in Winter Wheat Breeding."

report submitted for the 11th Intl. Congress of Genetics, the Hague, Netherlands,
2-10 Sep 63

LUK'YANENKO, P.P.

Crossing uncastrated wheat by pollination with mixtures of wheat and rye pollen. Agrobiclogiia no.4:483-491 . J1-Ag '64.

(MIRA 17:12)

1. Krasnodarskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva.

LUK'YANENKO, P.P., akademik

Methods of wheat breeding. Agrobiologia no.2:163-
173 Mr-Apr '65. (MIRA 18:11)

1. Krasnodarskiy nauchno-issledovatel'skiy institut
sel'skogo khozyaystva, Krasnodar.

LUK'YANENKO, P.P., akademik

Strain renovation time for winter wheat in the Northern
Caucasus. Agrobiologiya no.3:326-334 My-Je '65.

(MIRA 18:11)

1. Krasnodarskiy nauchno-issledovatel'skiy institut
sel'skogo khozyaystva.

L UK'YANENKO, V.A., assistant

Technique of traction of the mandible in a surgical treatment of ankylosis of the temporomandibular joint. Stomatologiya 42 no. 2:31-34 Mr-Apr '63. (MIRA 17:2)

1. Iz kafedry khirurgicheskoy stomatologii (zaveduyushchiy prof. G.I.Semenchenko) Odesskogo meditsinskogo instituta imeni N.I.Pirogova.

LUK'YANENKO, V.A., assistant (Odessa)

Treatment of ankylosis of the temporomandibular joint. Probl.
chel.-lits. khir. no.1:69-72 '65. (MIRA 18:10)

LUK'YANENKO, V.A., assistant

Surgical treatment of ankylosis of the temporomandibular joint.
Trudy Nauch.-issl.inst.stom. no.10:25-33 '62. (MIRA 15:10)
(TEMPOROMANDIBULAR JOINT--ANKYLOSIS)

LUK'YANENKO, Viktor Grigor'yevich; OSVYATINSKIY, Valentin Nikolayevich;
SOKOVA, Mariya Ivanovna; TITOV, Vladimir Yevgen'yevich; NOVIK,
A.M., red.; MATUSEVICH, S.M., tekhn. red.

[Comparative tables for antifriction bearings] Sravnitel'nye
tablitsy podshipnikov kachenii. Kiev, Gostekhzdat USSR,
1962. 146 p. (MIRA 15:7)
(Bearings (Machinery))—Tables, calculations, etc.)

LUK'YANENKO, V.I., kand. med. nauk

Pathogenesis of traumatic osteomyelitis of the mandible of
gunshot origin. Stomatologiya 43 no.1:44-50 Ja-F'64
(MIRA 17:4)

1. Kafedra chelyustno-litsevoy khirurgii i stomatologii (na-
chal'nik - prof. M.V. Mukhin) Voenno-meditsinskoy ordena
Lenina akademii imeni S.M. Kirova.

LUK'YANENKO, V.I.

Materials for the study of the neural regulation of the complement function of the blood. Biul. eksp. biol. i med. 52 no.11:92-94 N '61. (MIRA 15:3)

1. Iz otdela immunobiologii (zav. - deystvitel'nyy chlen AMN SSSR N.N. Zhukov-Verezhnikov) Instituta eksperimental'noy biologii (dir. - prof. I.N. Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nyy chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym. (NERVOUS SYSTEM) (COMPLEMENTS (IMMUNITY)) (URETHANES)

LUK'YANENKO, V.I.

Clinical observations of the use of intrasosseous osteosynthesis in the treatment of fractures of the mandible. Stomatologiya 36 no.3: 31-33 My-Je '57. (MLRA 10:9)

1. Iz kafedry chelyustno-litsevoy khirurgii i stomatologii (nach. - prof. M.V.Mukhin) Voenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova
(JAWS--SURGERY)

EXCERPTA MEDICA Sec 9 Vol 13/7 Surgery July 59

3787. COMPARATIVE EVALUATION OF CERTAIN METHODS OF OSTEOSYNTHESIS IN FRACTURES OF THE MANDIBLE; INDICATIONS (Russian text) - Lukyanenko V. I. - STOMATOL. 1958, 3 (15-21) Tables 2
Illus. 11

The type and extent of the fracture should determine which method of osteosynthesis is most efficient. Intra-osseous fixation of fragments by means of a metal pin is most effective in linear fractures of the body and angle of the mandible, in comminuted fractures not exceeding 2-2.5 cm. in length, and also in linear transverse fractures of the ramus in young people. Bone suture and extra-osseous suture are most effective in linear fractures and in comminuted fractures in the region of the ramus, angle and condyloid process, when there is no great damage to the bone. Kirschner wires can be recommended in linear fractures of the body, angle and ramus without major damage to the bone. Fixation of fragments in adults can in the majority of cases be done by means of a thick (1.5-2 m.) wire, or by 2 or 3 thin wires. Fixation of fragments by means of periosteal clips is useful in comminuted fractures involving major damage to the bone (over 3-4 cm.). It may be sometimes advisable to apply simultaneously various surgical and orthopaedic methods of osteosynthesis. (IX, 19*)

LUK'YANENKO, V.I.

Conditioned reflex regulation of immunological reactions, Zhur. mikro-
biol. epid. i immun. 30 no.10:53-59 0 '59. (MIRA 13:2)

1. Iz kafedry fiziologii vysshey nervnoy deyatel'nosti Moskovskogo
gosudarstvennogo universiteta i Sukhumskey mediko-biologicheskoy stan-
tsii AMN SSSR.

(REFLEX CONDITIONED)
(IMMUNITY)