"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

THUPENCK, A. P.

THUPENCK, A. P. -- "Investigation of the Technological Process of Handling Apertures in Cast Iron with Reamers Fitted with Hard Alloys." Min Higher Education USSR. Kiev Order of Lenin Polytechnic Inst. Chair of the Technology of Machine Building. (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No 1, 1956

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

Trubeakov, V. Service of silica brick in open-hearth furnaces of the Petrovskii plant (at Dnieprpetrovsk). *Ogneupory*, 3 [7] 492-98 (1935).—The longer life of silica brick in the roofs of open-hearth furnaces in 1934 as compared with 1933 was due principally to improvements in running the furnace. The repairs undertaken in this furnace and the physical and chemical changes in silica brick from its roof are described.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBENKOV, V.

Credit for foreign trade operations in the U.S.S.R. [with summary in English. p.32]. Vnesh.torg.26 no.11:14-18 N '56. (MLRA 10:2)
(Russia--Commerce) (Credit)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

THUBENKOV, V.

Soviet-Afghan foreign exchange and economic relations. Den. i kred. 13 no.11:38-40 N '55. (MLRA 9:2)

(Russia--Foreign economic relations--Afghanistan)(Afganistan--Foreign economic relations--Russia)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBENKOV, Vasiliy Il'ich; BYSTROV, F.P., prof., red.; BOROZDIN, B., red.; TELEGINA, T., tekhn. red.

[Foreign exchange operations in the U.S.S.R.] Valiutno-obmennye operatsii v SSSR. Predisl. i obshchaia red. F.P. Bystrova. Moskva, Gosfinizdat, 1963. 72 p. (MIRA 16:6)
(Foreign exchange)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBENOK, A.D., kand.tekhn.nauk

Relation between smoothness and precision in reaming. Trakt. i sel'-khozmash. 31 no. 5:44 My '61. (MIRA 14:5)

(Metal cutting)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBENOK, A.D., kand.tekhn.nauk

Finish machining of holes with hard alloy reamers. Mashinostroitel' no.12:30 D '61. (MIRA 14:12)

(Reamers)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

KARTAVOV, Sergey Alekseyevich, prof.; LEVCHENKO, Andrey Matveyevich, kand. tekhn. nauk; RUDNIK, Sergey Sergeyevich, doktor tekhn. nauk; BOVSUNOVSKIY, Yakov Ivanovich, kand. tekhn. nauk; BAZHENOV, Ivan Ivanovich, kand. tekhn. nauk; KOVALENKO, Vladimir Vladimirovich, kand. tekhn. nauk; LOMACHENKO, Zinaida Nikolayevna, kand. tekhn. nauk; MIL'SHTEYN, Mark Zel'manovich, kand. tekhn. nauk; RADCHENKO, Yuliya Gavrilovna, kand. tekhn. nauk; REZNICHENKO, Mikhail Petrovich, kand. tekhn. nauk; TRUBENOK, Aleksandr Davidovich, kand. tekhn. nauk; KHRISTICH, Zakhar Dem'yanovich, kand. tekhn. nauk; SHNAYDERMAN, Isay Yakovlevich, kand. tekhn. nauk; GOLUBOV, N.P., kand. tekhn. nauk, retsenzent; DUMANSKAYA, V.A., kand. tekhn. nauk, retsenzent; MAKSIMOV, G.D., kand. tekhn. nauk, retsenzent; YAKOVENKO, G.A., kand. tekhn. nauk, retsenzent

[Technology of the manufacture of machinery] Tekhnologiia mashinostroeniia. [By] S.A.Kartavov i dr. Kiev, Tekhnika, 1965. 526 p. (MIRA 18:7)

1. Kafedra tekhnologii mashinostroyeniya Kiyevskogo politekhnicheskogo instituta (for all except Golubov, Maksimov, Yakovenko).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKAYA, A.P.

Water balance of Solonetz soils in the Baraba during their reclamation. Trudy Biol. inst. Sib. otd. AN SSSR no.12:147-150 '64. (MIRA 18:7)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKAYA, A.P.

Effect of cultivation on the change in water-physical properties of Solonetz in Baraba. Trudy Biol. inst. Sib. otd. AN SSSR no.9: 63-79 '62 (MIRA 17:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKAYA, M.K.

Problems in forensic medicine at the Odessa Society of Physicians. Sud.-med.ekspert. 5 no.3:29-30 Jl-S '62. (MIRA 15:9)

1. Kafedra sudebnoy meditsiny (zav. - prof. S.V.Shershavkin) Odesskogo meditsinskogo instituta imeni N.I.Pirogova.
(ODESSA--MEDICAL JURISPRUDENCE)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

MEL'CHAKOVA, N.V.; TRUBETSKAYA, N.I.; PESHKOVA, V.M.

Determination of zirconium in the presence of hafnium by the differential spectrophotometric metho with arsenazo III. Vest. Mosk. un. Ser. 2 Khim. 19 no.2:45-49 Mr-Ap'64

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKIY, G.F. (L'vov)

Spirogyra, a beneficial alga. Priroda 52 no.7:118 Jl '63. (MIRA 16:8)

(Spirogyra)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

SHEVCHIK, V.N.; TRUBETSKOV, D.I.

Theory of a backward-wave tube with peroidic focusing of the electron stream. Radiotekh. i elektron. 5 no.10:1734-1736 O '60.
(MIRA 13:10)

(Traveling-wave tubes) (Microwaves)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

SHEVCHIK, V.N.; SHVEDOV, G.N.; SOBOLEVA, A.V.; Prinimala uchastiye TRUBETSKOV, D.I., aspirant; VINNIKOVA, I.A., red.; ZENIN, ~~V.V., tekhn. red.~~

[Oscillatory and wave effects in electron currents at super-high frequencies]Volnovye i kolebatel'nye iavleniia v elektronnykh potokakh na sverkhvysokikh chastotakh. Saratov, Izd-vo Saratovskogo univ., 1962. 334 p. (MIRA 15:10)
(Microwaves) (Electromagnetic waves) (Microwave tubes)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

39698
S/142/62/005/002/001/019
E192/E382

9,3130

AUTHORS: Shevchik, V.N. and Trubetskov, D.I.

TITLE: Discrete interaction of two electron streams

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 5, no. 2, 1962, 143 - 157

TEXT: A system consisting of two electron streams which are velocity-modulated at the input and separated by a metallic boundary furnished with apertures is considered. Analysis of the concrete interaction of the beams is based on the methods used by Shevchik and Zharkov (Radiotekhnika i elektro[illegible], v.2, no.2, 1957, 237) and Shevchik and Mayofis (Izv. vuzov. SSSR - Radiotekhnika, v. 2, no. 3, 1959, 367) so that the influence of nonsynchronous harmonics can be taken into account. The electron streams have different steady-state velocities v_{01} and v_{02} and $v_{01} > v_{02}$. The streams interact with each other only during their passage above the same slot of the metal boundary, so that the field of the space charge of the first (second) stream through which passes the second (first) stream

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changes periodically along the coordinate Z with a period ℓ. The interaction of the beams in this system can therefore be regarded as discrete (Fig. 2). The change of the space-charge field from slot to slot is described by the factor $e^{-i\beta z}$, where β is an unknown propagation constant. The potential at the k-th slot, acting on the second stream, is written in the form:

$$M_2 \Delta V_k^{(2)} = M_2 \Delta V_1 e^{-j(k-1)\beta\ell + j\omega t_k} \qquad (1)$$

where $\omega t_k = \omega t_1 + \sum_{m=1}^{k-1} \Theta_m^{(2)}$ is the input phase of the electrons in the k-th gap, ωt_1 is the initial input phase of the electrons, $\Theta_m^{(2)} = \omega\ell/v_m^{(2)}$ is the perturbed transit angle of the second beam during the m-th period and ΔV_1 is the potential amplitude of the first slot which corresponds to the amplitude of the

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

external modulating potential. The quantity M in Eq. (1) is referred to as the "modulation efficiency parameter":

$$M_{1(2)} = \frac{\sin \frac{\omega d}{2 v_{01(2)}}}{\frac{\omega d}{2 v_{01(2)}}}$$

where $\omega d/v_{01(2)}$ is the non-perturbed transit angle of the electrons of the first (second) stream. The scattering equation for a simple case of two slalom-focused electron beams is derived.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

S/142/62/005/002/001/019
E192/E382

Discrete interaction ....

With regard to the interaction of the spatial harmonics it is found that the whole operating range of the system can be divided into a set of interaction bands, where the signal can increase and stability bands where the increase of the signal is impossible. The case of two beams moving in opposite directions with identical velocities is also considered and it is found that the discrete interaction of two such beams leads to the appearance of the interaction bands and stability bands so that this case differs from that of the continuous interaction. While the propagation constants of the system were determined from the scattering equations, their amplitudes are determined from the initial conditions at the input of the system. Also, by considering the boundary conditions it is possible to derive general formulae for the amplitudes of the partial waves and for the gain of the system. The conditions of oscillations for two electron beams propagating in opposite directions are also determined. There are 6 figures.

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

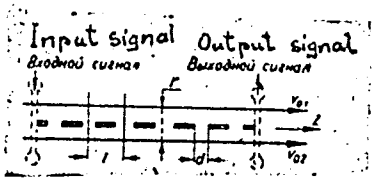
"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

Discrete interaction S/142/62/005/002/001/019
E192/E382

ASSOCIATION: Kafedra elektroniki Saratovskogo gos. universiteta im. N.G. Chernyshevskogo (Department of Electronics of Saratov State University im. N.G. Chernyshevskiy)

SUBMITTED: June 30, 1961

Fig. 2:



Card 5/5

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ZYURYUKIN, Yu.A.; TRUBETSKOV, D.I.; SHEVCHIK, V.N.

Effect of cyclotrone resonance on the operation of magnetron-type UHF beam devices. Izv. vys. ucheb. zav.; radiotekh. 6 no.2:117-126 Mr-Ap '63. (MIRA 16:6)

1. Rekomendovana kafedroy elektroniki Saratovskogo gosudarstvennogo universiteta imeni N.G. Chernyshevskogo.
(Electromagnetic waves) (Electron beams)
(Microwaves)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ANDRUSHKEVICH, V.S.; BUDNIKOVA, N.P.; GRIGOR'YEV, M.A.; ZHARKOV, Yu.D.; SINITSYN, N.I.; STAL'MAKHOV, V.S.; TRUBETSKOV, D.I.; SHVEDOV, G.N.; SHEVCHIK, V.N.; MOSKOVA, R.F., red.

[Electronic superhigh-frequency devices] Elektronnye pribory sverkhvysokikh chastot. Saratov, Izd-vo Saratovskogo univ., 1964. 187 p. (MIRA 18:4)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

L 04215-67 EWT(1) JM

ACC NR: AR6015865 SOURCE CODE: UR/0275/65/000/012/A023/A023

54

AUTHOR: Trubetskov, D. I.

B

TITLE: On the linear theory of traveling-wave tubes at finite values of the amplification parameter

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 12A157

REF SOURCE: Sb. Vopr. elektron. sverkhvysok. chastot. Vyp. 1. Saratov. Saratovsk. un-t, 1964, 95-106

TOPIC TAGS: traveling wave tube, linear approximation, electron flux

ABSTRACT: The problem of excitation of the transmission line by a nonrectilinear electron flux is solved in a linear approximation upon condition that the amplification parameter D has small but finite values. A dispersion equation is derived which is of the fourth order in relation to the propagation constant and a form similar to the type-O TWT equation obtained by Pierce. The analysis of this equation is performed by a method similar to the Pierce method. Expressions are obtained and graphs constructed for the dependence of the components of the propagation constants of different waves upon the nonsynchronization parameter b and upon D.

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L 04215-67

ACC NR: AR6015865

It is demonstrated that at the final values of D the region of values of b in which the build-up constant <O expands and shifts toward greater values of b. An estimate is made of the magnitude of reradiation. When D > 0.05, the magnitude of reradiation may reach 10—15% of the magnitude of direct radiation. [Translation of abstract] Bilbiography of 5 titles. G. M.

SUB CODE: 12,20

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

L 45824-66 EWT(1) JM

ACC NR: AR6015966 SOURCE CODE: UR/0275/65/000/011/A023/A023

AUTHOR: Noyanov, V. I.; Trubetskov, D. I.

TITLE: Effect of cold losses in the transmission line on the amplification factor of a type M TWT

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 11A144

REF SOURCE: Sb. Vopr. elektron. sverkhvysok. chastot. Vyp. I. Saratov, Saratovsk. un-t, 1964, 107-117

TOPIC TAGS: transmission line, dispersion equation, traveling wave tube, space charge

ABSTRACT: The amplification factor of a type M TWT is determined by solving a dispersion equation on the assumption of linear adiabatic theory without accounting for the effect of space charge. An asymptotic formula is given for the amplification factor assuming a damped partial wave. The results of calculations by this formula are given as a function of the parameters of asynchronism and "cold" losses. The asymptotic formula gives a rather close approximation in the region of permissible values for the parameter of asynchronism for a type M TWT. Analysis of the effect of "cold" losses shows that they may take on a value beyond which the damped wave predominates over the increasing wave and interaction between the two partial waves does not give amplification even under operating conditions close to synchronous. Bibliography of 4 titles. E. G. [Translation of abstract]

SUB CODE: 09

Card 1/1 JS UDC: 621.385.632

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

L 02242-67 EWT(1) JM

ACC NR: AR6013685 SOURCE CODE: UR/0058/65/000/010/H012/H012

45

AUTHOR: Sidel'nikov, V. A.; Trubetskov, D. I.

B

TITLE: Contribution to the linear theory of a traveling wave tube with a photocathode

SOURCE: Ref. zh. Fizika, Abs. 10Zh84

REF. SOURCE: Sb. Vopr. elektron. sverkhvysok. chastot. Vyp. 1. Saratov, Saratovsk. un-t, 1964, 149-158

TOPIC TAGS: traveling wave tube, photocathode

ABSTRACT: An attempt is made to analyze the operation of a traveling wave tube with photocathode when $a \neq b \neq QC \neq 0$. The analysis does not call for the assumption that C is small (a, b, QC, and C are the Pierce parameters). A linear traveling-wave tube theory is considered, corresponding to an electron-beam density-modulation depth $m \ll 1$. It is indicated that the presented analysis can be useful for a rapid estimate of the influence of different traveling wave tube parameters on its output power. The plots presented cover a wide range of variation of these parameters and can be used in engineering calculations. S. Dukor. [Translation of abstract]

SUB CODE: 09,12

Card 1/1

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TOPIC TAGS: electron beam tube, M type tube, cyclotron resonance

ABSTRACT: Formulas for a quantitative evaluation of the processes transpiring in an M-type cold-cathode cyclotron-resonance tube are presented. The dispersion equations for this tube are compared with those for TW and BW tubes. A formula is derived for the relation between the starting currents in an M-cyclotron-resonance tube and a BW tube. Orig. art. has: 7 formulas.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ABSTRACT. The field method used by F. Gould (J. Appl. Phys. [illegible] Microwave Tubes [illegible] N. Y. 1960) for analyzing M-type [illegible] complicated. The present paper develops equations for the fundamental processes in such tubes on the basis of the formulas of excitation of a transmission line by a [illegible] are presented in [illegible]

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ACCESSION NR AP5005347

methods The integro-differential [illegible]

ASSOCIATION: none

SUBMITTED: 17Dec63 ENCL: 00 SUB CODE: EC, NP

NO REF SOV: 008 OTHER: 007

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

L 2610-66 EWT(1)/EPA(w)-2/EWA(m)-2/EWA(h) IJP(c) AT

ACCESSION NR: AP5020135 UR/0109/65/010/008/1542/1544

621.385.632.2

44,55 44,55 49

AUTHOR: Sokolov, D. V. ; Trubetskov, D. I. B

TITLE: Effect of nonrectilinearity of static trajectories upon the operation of electron-beam magnetron-type devices 25

SOURCE: Radiotekhnika i elektronika, v. 10, no. 8, 1965, 1542-1544

TOPIC TAGS: magnetron

ABSTRACT: The effect of nonrectilinearity of static trajectories is calculated, within the framework of a linear nonadiabatic theory, using as a model an infinitely thin beam with a definite surface charge density. The method of successive approximations is used. The space charge and the attenuation distributed in the system are neglected. A set of two equations for r-f displacements and an equation of excitation of the transmission line by a nonrectilinear electron beam describe the phenomena in the model. It is found that, under ordinary synchronous conditions in the magnetron-type TW tube, the effect of nonrectilinearity of the static trajectories upon the interaction processes is negligible. Orig. art. has: 3 figures and 8 formulas.

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

L 2610-66

ACCESSION NR: AP5020135

ASSOCIATION: none

SUBMITTED: 12Nov64

ENCL: 00

SUB CODE: EC

NO REF SOV: 005

OTHER: 000

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ACC NR: AR7000948 SOURCE CODE: UR/0275/66/000/011/A019/A019

AUTHOR: Sokolov, D. V.; Trubetskov, D. I.

TITLE: Approximate linear theory of a magnetron-type traveling wave amplifier

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 11A130

REF SOURCE: Sb. Vopr. elektron. sverkhvysok. chastot. Vyp. 2. Saratov. Saratovsk, un-t, 1966, 35-75

TOPIC TAGS: traveling wave amplifier, traveling wave tube, magnetron, dispersion equation, linear theory, space charge, successive approximation, Laplace transform

ABSTRACT: An attempt has been made to create a linear theory of the magnetron-type traveling-wave tube based on the method of successive approximations. In a number of cases, a dispersion equation method is used. An account is given of: 1) a simplified theory of the traveling-wave magnetron tube; 2) elements of non-diabatic theory of the traveling-wave magnetron tube, taking the effect of space charge into consideration; and 3) the effect of nonrectilinearity of static trajectories on the amplification factor of the magnetron-type traveling-wave tube. A solution of

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ACC NR: AR7000948

the problem is presented by the method of successive approximations based on the Laplace transform. A bibliography of 25 titles is included. [Translation of abstract]

[NT]

SUB CODE: 09, 20/

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, K.M., kandidat tekhnicheskikh nauk; MEN'SHIKOV, R.I., kandidat tekhnicheskikh nauk; KORNFEL'D, V.N., kandidat tekhnicheskikh nauk.

Intensification of the scrap metal process by feeding oxygen into the flame jet. Sbor.trud.TSNIICHM no.13:56-108 '56. (MLRA 9:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii, Moskovskiy institut stali, TSentroenergochermet.
(Open-hearth process)
(Oxygen--Industrial applications)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, K.M., kandidat tekhnicheskikh nauk; STUPAR', S.N., inzhener.

Radioactive isotopes for investigating the steel desulfuration process. Sbor.trud.TSNIICHM no.13:127-141 '56. (MLRA 9:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.

(Zaporozh'ye--Steel--Metallurgy)
(Radioisotopes--Industrial applications)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

KOROLEV, A.I.; BLINOV, S.T.; LUBENETS, I.A.; KOBURNEYEV, I.M.; TURUBINER, A.L.; VASIL'YEV, S.V.; CHERNENKO, M.A.; BELOV, I.V.; TELESOV, S.A.; MAZOV, V.F.; MEDVEDEV, V.A.; MAL'KOV, V.G.; BUL'SKIY, M.T.; TRUBETSKOV, K.M.; SHNEYEROV, Ya.A.; SLADKOSHTEIEV, V.T.; PALANT, V.I.; KUROCHKIN, B.N.; ZHDANOV , A.M.; BELIKOV, K.N.; SABIYEV, M.P.; GARBUZ, G.A.; PODGORETSKIY, A.A.; ALFEROV, K.S.; NOVOLODSKIY, P.I.; MOROZOV, A.N.; VASIL'YEV, A.N.; MARAKHOVSKIY, I.S.; MALAKH, A.V.; VERKHOVTSEV, E.V.; AGAPOV, V.F.; VECHER, N.A.; PASTUKHOV, A.I.; BOROIULIN, A.I.; VAYNSHTEYN, O.Ya.; ZHIGULIN, V.I.; DIKSHTEYN, Ye.I.; KLIMASENKO, L.S.; KOTIN, A.S.; MOLOTKOV, N.A.; SIVERSKIY, M.V.; ZHIDETSKIY, D.P.; MIKHAYLETS, N.S.; SLEPKANEV, P.N.; ZAVODCHIKOV, N.G.; GUDEMCHUK, V.A.; NAZAROV, P.M.; SAVOS'KIN, M.Ye.; NIKOLAYEV, A.S.

Reports (brief annotations). Bul. TSNIICHM no.18/19:36-39 '57. (MIRA 11:4)

1. Magnitogorskiy metallurgicheskiy kombinat (for Korolev, Belikov, Agapov, Dikshteyn). 2. Kuznetskiy metallurgicheskiy kombinat (for Blinov, Vasil'yev, A.N., Boroĉulin, Klimasenko). 3. Chelyabinskiy metallurgicheskiy zavod (for Lubenets, Vaynshteyn). 4. Zavod im. Dzherzhinskogo (for Koburneyev). 5. Zavod "Zaporozhstal'" (for Turubiner, Mazov, Podgoretskiy, Marakhovskiy, Savos'kin). 6. Makeyevskiy metallurgicheskiy zavod (for Vasil'yev, S.V., Mal'kov, Zhidetskiy, Al'ferov). 7. Stal'proyekt (for Chernenko, Zhdanov, Zavodchikov). 8. VNIIT (for Belov). 9. Stalinskiy metallurgicheskiy zavod (for Telesov, Malakh).

(Continued on next card)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

KOROLEV, A.I.---(continued) Card 2.

10. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Medvedev, Novolodskiy, Vecher). 11. Zavod "Azovstal'" (for Bul'skiy, Slepkanev). 12. TSentral'nyy nauchno-issledovatel'skiy institit chernoy metallurgii (for Trubetskov). 13. Ukrainskiy institut metallov (for Shmeyerov, Sladkoshteyev, Kotin). 14. Zavod "Krasnyy Oktyabr'" (for Palant). 15. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki (for Kurochkin). 16. Zavod im. Voroshilova (for Sabiyev). 17. Chelyabinskiy politekhnicheskiy institut (for Morozov). 18. Giprostal' (for Garbuz). 19. Ural'skiy institut chernykh metallov (for Pastukhov). 20. Zavod im. Petrovskogo (for Zhigulin). 21. Ministerstvo chernoy metallurgii USSR (for Molotkov, Siverskiy). 22. Glavspetsstal' Ministerstva chernoy metallurgii SSSR (for Nikolayev).

(Open-hearth process)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

BARDIN, I.P., akademik; TRUBIN, K.G., doktor tekhnicheskikh nauk, professor; YEFIMOV, L.M., kandidat tekhnicheskikh nauk; TRUBETSKOV, K.M., kandidat tekhnicheskikh nauk; KORNFEL'D, V.N., kandidat tekhnicheskikh nauk; MEN'SHIKOV, R.I., kandidat tekhnicheskikh nauk; MAZOV, V.F., inzhener.

Use of oxygen in the open hearth, scrap-iron process. Stal' 16 no.6:493-505 Je '56. (MLRA 9:8)
(Open hearth process)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

SAVOSTIN, Dmitriy Zakharovich; TRUBETSKOV, K.M., red.; VENETSKIY, S.I., red. izd-va; KARASEV, A.I., tekhn. red.

[Open-hearth steelmaking process; practices of the Kuznets Metallurgical Combine] Martenovskoe proizvodstvo stali; opyt raboty KMK. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 288 p. (MIRA 14:10)
(Open-hearth process)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

[illegible], [illegible], kand.tekhn.nauk; [illegible], Ye.A., inzh.; LO[illegible], [illegible], inzh.

Use of compressed air for blowing open-hearth furnace baths. Biul. TSIICHM no.5:6-1[illegible] '61. (MIRA 14:10)
(Open-hearth furnaces)
(Compressed air)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, K.M., kand.tekhn.nauk; KORNFEL'D, V.N., kand.tekhn.nauk
GREKOV, Ye.A., inzh.; VOYTOV, A.O., inzh.; SHTEYNBERG, L.S., inzh.;
LOMTATIDZE, G.A., inzh.

Investigating the melting of the open-hearth furnace charge with various methods of using oxygen [with summary in English]. Stal' 21 no.3:214-222 Mr '61. (MIRA 14:6)
(Open-hearth furnaces) (Oxygen--Industrial applications)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

S/193/62/000/012/001/004
A004/A101

AUTHOR: Trubetskov, K. M., Candidate of Technical Sciences

TITLE: The use of oxygen in open-hearth steel production

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 12, 1962, 13 - 19

TEXT: The author gives a brief survey on the development of using oxygen in the open-hearth practice and then shows how the thermal process is intensified by blowing oxygen into the flame. Enriching the air by up to 25 - 28% oxygen increases the flame temperature by 370 - 420°K. Comments are given on the smelting duration, preparation of the charge, fuel and oxygen consumption of large and medium furnaces, and the author presents figures showing the good results that have been obtained with blowing oxygen into the flame. Another method of adding oxygen in open-hearth steel production is described viz. the direct oxidation of the liquid metal pool in the open-hearth furnace. The oxygen is blown through water-cooled tuyères in the open-hearth furnace crown, and adding the oxygen to the metal pool causes a considerable oxidation of the iron of the

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metal. Another version of oxygen application for direct oxidation is the preliminary treatment of the liquid cast iron prior to pouring it into the open-hearth furnace, which is aimed at reducing the silicon, manganese, sulfur and, partially, the carbon content of the cast iron and increasing its temperature. There are 3 figures and 2 tables.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

YUPKO, L.D.; TRUBETSKOV, K.M.; GURSKIY, G.L.; TEREKHOV, I.A.; GUSEV, V.F.; VOYTOV, A.O.

Accelerating open-hearth furnace smelting with an increased use of oxygen. Stal' 23 no.1:15-19 ja '63. (MIRA 16:2)

1. Zavod "Zaporozhstal'", TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii i TSentroenergochermet.
(Open-hearth process) (Oxygen--Industrial applications)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, K.M.; GURSKIY, G.L.

Increasing the output of open-hearth furnaces. Metallurg 9 no.10:20-22 O '64 (MIRA 18:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii imeni I.P. Bardina i zavod "Zaporozhstal'".

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, K.N., kand. tekhn. nauk; [illegible] I.; [illegible] N.; [illegible] V.

New developments in [illegible] (MIRA 17:10)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

GURSKIY, G.L.; TRUBETSKOV, K.M.

Increasing the output of open-hearth furnaces. Metallurg 8 no. 11:13-17 N '63. (MIRA 16:12)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOY, K.N., gornyy inzh.

All-Union Conference on the Improvement of the Equipment and the Technology of Mining Minerals by the Open Pit Method. (MIRA 18:2)
Gor. zhur. no.11:76 N '64.

1. Institut gornogo dela im. A.A. Skochinskogo.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L., kand.tekhn.nauk; GUZOV, E., inzh.

Remote control of electric locomotives. Radio no.2:27 F '63. (MIRA 16:2)

(Remote control) (Electric locomotives)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V., kand. tekhn. nauk; DEMENT'YEV, A.P., inzh.

Cross-cut transistorized station for remote control of electric locomotives. Sbor. nauch. trud. KGRI no.13:128-130 '62. (MIRA 16:8)

(Mine railroads—Signaling)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ACC NR: AP6021792 (A, N) SOURCE CODE: UR/0413/66/000/012/0057/0057

INVENTORS: Gavrilov, I. V.; Sviridenko, N. N.; Trubetskov, L. V.

ORG: none

TITLE: A device for the grid protection of an ion converter. Class 21, No. 182793

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 57

TOPIC TAGS: ionization detector, electron tube grid, electronic circuit

ABSTRACT: This Author Certificate presents a device for the grid protection of an ion converter with automatic repetitive triggering. The device contains thyristors and includes sensing elements of the arcing back- and overload-sensing gauges using magnetic elements. The design increases the reliability and response time of the device. Of its three thyristors, one is connected through separating diodes between the converter grids and the negative terminal of the bias voltage source (see Fig. 1). Two other thyristors are connected by anodes to the converter grids through separating diodes and grid resistances. These two thyristors are connected by the cathodes to the zero output of the grid control system. A stabilitron tube is included in the cathode circuit of the first thyristor. Two delay elements (RC circuits) are connected between the anode and cathode of the stabilitron tube. The effective resistances of the RC circuits are regulated and are shunted by diodes. The diodes are connected by the anodes to the cathodes of the stabilitron tube and the thyristors. These diodes

UDC: 621.316.9:621.314.58

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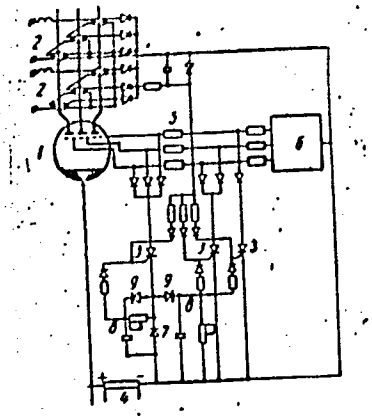
"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

ACC NR: AP6021792

Fig. 1. 1 - ion converter; 2 - sensing element; 3 - thyristors; 4 - bias voltage source; 5 - grid resistances; 6 - grid control system; 7 - stabilitron tube; 8 - delay elements; 9 - diodes



are connected by cathodes to the common points of the capacitors and resistances of the RC circuits. The control electrode of the first thyristor is connected through a diode and resistance to the common point of one RC circuit. The control electrodes of the other two thyristors are connected to the common point of the other circuits. Orig. art. has: 1 figure.

SUB CODE: 09, 14/ SUBM DATE: 28Apr65

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V., kand. tekhn. nauk; SVIRIDENKO, E.A., inzh.

Automatic control of mine drainage with amplifying elements.
Izv. vys. ucheb. zav.; gor. zhur. 6 no.10:58-64 '63.
(MIRA 17:2)

1. Krivorozhskiy gornorudnyy institut.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V., dotsent, kand. tekhn. nauk; [illegible]EGEYEV, A.S., kand. tekhn. nauk

Electronic device for automating drainage equipment with a low-voltage drive. Sbor. nauch. trud. MGMI no.10:254-269 '61. (MIRA 17:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOY, L.V., dotsent, kand. tekhn. nauk

Research on the strength of ballast in underground mining. Sbor. nauch. trud. [illegible] (MIRA 17:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V.

Bridge track circuit for the haulage conditions in Krivoy Rog Basin mines. Sbor. nauch. trud. KGRI no.19:68-69 '62. (MIRA 16:5)

(Krivoy Rog Basin--Mine railroads)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V., kand. tekhn. nauk; DEMENT'YEV, A.P., inzh.

Determination of the resistance of the power networks of high-frequency a.c. mine locomotives. Sbor. nauch. trud. KGRI no.13:139-144 '62. (MIRA 16:8)

(Mine railroads--Signaling)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V., dotsent; RUD', B.N., assistent

Shaft remote signaling system. Sbor. nauch. trud. KGRI no.13: 127-128 '62. (MIRA 16:8)

(Remote control) (Mine hoisting)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V., gornyy inzh.; DEMENT'YEV, A.P., gornyy inzh.

Remote control of electric locomotives at loading points.
Gor. zhur. no. 12:42-43 D '61. (MIRA 15:2)

1. Krivorozhskiy gornorudnyy institut.
(Mine railroads)
(Remote control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V.

Remote control of electric locomotives at loading points. Sbor. nauch. trud. KGRI no.19:53-56 '62. (MIRA 16:5)

(Mine railroads) (Remote control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V.

Control room of a remote control system for STS in mines. Sbor. nauch. trud. KGRI no.19:52-53 '62. (MIRA 16:5)

(Automatic control)
(Mine railroads--Signaling--Centralized traffic control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V.; DEMENT'YEV, A.P.

Braking systems in remote control of electric locomotives. Sbor. nauch. trud. KGRI no.19, 59-62, 1962. (MIRA 16:5)

(Mine railroads--Brakes) (Remote control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V.; GUZOV, E.S.

Introduction of apparatus for the remote control of electric locomotives at loading points in Gigant Mine. Sbor. nauch. trud. KGRI no.19:62-65 '62. (MIRA 16:5)

(Krivoy Rog Basin--Mine railroads) (Remote control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V.; SVIRIDENKO, E.A.

Using magnetic amplifiers to automatically control pumps. Sbor. nauch. trud. KGRI no.19:56-59 '62. (MIRA 16:5)

(Magnetic amplifiers) (Automatic control)
(Mine pumps)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V.; SHULIN, N.I.

Practice of using track circuits for STS in mines. Sbor. nauch. trud. KGRI no.19:65-67 '62. (MIRA 16:5)

(Mine railroads--Signaling--Centralized traffic control)
(Automatic control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, L.V., kand. tekhn. nauk

Area for using normally open (standard) track circuits. Sbor. nauch. trud. KGRI no.13:130-137 '62. (MIRA 16:8)

(Mine railroads—Signaling—Centralized traffic control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBIN, Konstantin Georgiyevich; OYKS, Grigoriy Naumovich, prof., doktor tekhn. nauk; CHERNENKO, Mikhail Avksent'yevich; LUR'YE, Il'ya Naumovich; TRUBETSKOV, Mikhail Mikhaylovich [deceased]; VESELKOV, N.G., red.; VAGIN, A.A., red. izd-va; MIKHAYLOVA, V.V., tekhn. red.

[Metallurgy of steel: the open-hearth process; design and equipment of open-hearth furnaces and plants] Metallurgiia stali: martenovskii protsess; konstruktsii i oborudovanie martenovskikh pechei i tsekhov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 448 p. (MIRA 14:8)
(Open-hearth furnaces--Design and construction)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOVA, O.M., ZHIRNOVA, N.G.

Diurnal rhythm of nitrogen transport from the root system to the aerial organs of the sunflower. Nauch. dokl. vys. shkoly; biol. nauki no.3:165-169 '60. (MIRA 13:8)

1. Rekomendovana kafedroy fiziologii rasteniy Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonsova.
(Plants, Motion of fluids in) (Nitrogen)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

SABININ, Dmitriy Anatol'yevich, prof.; CHAYLAKHYAN, M.Kh., prof., otv. red.; KUPSANOV, A.L., akademik, red.; GENKEL', P.A., red., BLAGOVESHCHENSKIY, A.V., prof., red.; TRUBETSKOVA, O.M., kand. biol. nauk, red.; SHTERNBERG, M.B., red. izd-va; SUSHKOVA, L.A., tekhn. red.; KASHINA, P.S., tekhn. red.

[Physiology of plant development]Fiziologiia razvitia rastenii. Moskva, Izd-vo Akad. nauk SSSR, 1963. 194 p. (MIRA 16:2)

1. Cheln-korrespondent Akademii nauk Armyanskoy SSR (for Chaylakhyan).
2. Chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR (for Genkel').

(Plant physiology)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

S/137/62/000/001/152/237
A006/A101

AUTHORS: Bernshteyn, M.L., Trubetskova, R.I.

TITLE: The effect of admixture of some elements on the properties of nickel-chrome austenite alloy

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 42, abstract 1I296 (V sb. "Stal'", Moscow, Metallurgizdat, 1961, 462 - 468)

TEXT: The authors studied the effect of microadmixtures (in %) of B 0.005, Nb 0.5, Ca 0.1, Zr 0.2, Ce 0.01, on the structure and properties of a Н36ХТЮ (N36KhTYu) type alloy. It was established that the admixtures refined the crystallites in the cast metal, reduced the zone of columnar crystals (in particular Ce) increased surface tension (in the order of increase: Ce, Zr, Ca, B) raised the temperature of maximum ductility (in particular B), increased the deformation resistance (in particular Zr and Ca). The admixtures affect the aging process due to lesser diffusion into an additionally alloyed solid solution, and also due to the changes in the composition and nature of carbide phases when adding Nb, whose effect is the greatest. The authors established the effect of admixtures on in-

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S/137/62/000/001/152/237
A006/A101

The effect of admixture of some elements ...

ternal friction, measured by the method of torsion oscillations during continuous heating up to 800°C. Admixtures (in particular Zr and Ce), increase creep resistance at the first stage.

Ye. Bukhman

[Abstracter's note: Complete translation]

Card 2/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

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SOV/137-59-4-8686

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 4, p 193 (USSR)

18.1150

AUTHORS: Gudtsov, N.T., Trubetskova, R.I., Bernshteyn, M.L.

TITLE: The Effect of Small Admixtures of Boron, Calcium, Niobium, Zirconium and Cerium on the Structure and Properties of High-Nickel Heat-Resistant Alloys

PERIODICAL: Sb. Mosk. in-t stali, 1958, Vol 38, pp 495 - 516

ABSTRACT: The authors investigated the effect of small admixtures of B (0.005%), Ca (0.1%), Nb (0.5%), Zr (0.2%) and Ce (0.01%) on the structure and properties of "N36KhTYu" type alloy. To investigate the effect of the crystallization rate of the metal, the ingots were cast into molds cooled with water, in air and in sand. Aging processes were investigated on forged specimens at 700 - 850°C after preliminary quench hardening at 1,200°C. It was stated that increased crystallization rate of the alloy, that did not contain admixtures, reduced considerably the extent of the zone of columnar crystals and led to a general refinement of crystallites. The same result is obtained by means of small admixtures of elements under any conditions of crystallization. The greatest effect on changes in the

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SOV/137-59-4-8686

The Effect of Small Admixtures of Boron, Calcium, Niobium, Zirconium and Cerium on the Structure and Properties of High-Nickel Heat-Resistant Alloys

macrostructure is exerted by Ce, followed by Zr, B, Nb and Ca. Aging entails increased hardness of all alloys. Alloys with small admixtures showed stronger solidification in aging, than an initial alloy without admixtures. Alloys with admixture of Nb, B and Zr showed the highest hardness at all investigated temperatures and times of aging. Raised proneness to aging and lower proneness to coagulation of particles of the strengthening phase in the alloy was confirmed by data obtained by measurements of electric resistance in continuous heating of alloys up to 1,200°C. Creeping tests of the alloys showed that small admixtures furthered increased heat resistance, obviously on account of their refining effect on the grain boundaries of the alloys.

V.M.

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VORSIN, Aleksandr Nikolayevich; DOIL'NITSYN, Yevgeniy Fedorovich; TRUBETSKOY, Anatoliy Iustinovich; SHCHERBAKOVA, Mira Yakovlevna; KLYAROVSKIY, V.M., otv.red.; SENCHENKOV, A.P., red.izd-va; RYLINA, Yu.V., tekhn.red.

[Radiofrequency mass spectrometer; theory, design and construction] Radiochastotnyi mass-spektrometr; teoriia, raschet i konstruirovanie. Moskva, Izd-vo Akad.nauk SSSR, 1959. 71 p. (MIRA 12:12)
(Mass spectrometry) (Radiofrequency spectroscopy)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOY, M.N. (Krasnoy...

Punched cards in mathematics classes. Mat. v shkole no.5:56-59 S-O '63. (MIRA 16:11)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, K.M., kand.tekhn.nauk

"Accelerating open-hearth furnace smelting by blowing compressed air into the bath" by M.IA.Medzhibozhskii. Reviewed by K.M.Trubetskov. Stal' 20 no.8:714 Ag '60. (MIRA 13:7)

(Open-hearth process)
(Medzhibozhskii, M.IA)

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PROCESSES AND PROPERTIES INDEX

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9

Service of silica brick in open hearth furnaces of the Petrovskii plant (at Dnepropetrovsk). V. Frolenkov. *Ogneupory* 3, 492-8(1935).—Silica brick in the roofs of open-hearth furnaces were more durable in 1934 than in 1933 (up to 366 meltings against 248 in a 100-ton furnace). This is due principally to improvements in the work of the furnace. The repairs undertaken in this furnace and phys. and chem. changes in silica brick from its roof are described. E. R. Stefanowsky

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

Trubenkov, V. PRODUCTION OF STEEL CASTING NOZZLES WITH HIGH-ALUMINA CONTENT. *Огнеупоры*, 3 [6] 414–19 (1935).—By adding grog from clay high in Al_2O_3 to the clay usually used, the alumina content of the charge was increased to 39.95 to 40.25% as compared to the usual 34.92%. The nozzles were fired at 1435°C. The high-aluminate nozzles had a mechanical strength of 190.0 to 201.7 kg./cm.² against 187.9 with the usual clay. They gave better service.

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R

Lande, P. A., and Trubenkov, V. S. ANDALUSITE PLUGS IN THE CASTING OF STEEL. *Kachestvennaya Stal*, 6 (1) 37-42 (1938). The authors describe the method of preparing andalusite plugs for casting 15, 30, and 225 tons of fused open hearth and electric furnace steels. The composition of andalusite used as raw material was as follows: SiO_2 41.9 to 51, $Al_2O_3 + TiO_2$ 42.5 to 47.5, and Fe_2O_3 2.1 to [illegible]. Sov-Yar clay No. 6 was used as binding material. The composition of the plugs after firing was Al_2O_3 47% and lye 2% with a high content of Fe_2O_3. Deformation under load began at 1430°C., and deterioration occurred at 1580°C. Andalusite plugs prepared in the laboratory and in industrial practice by the same process as that used for grog plugs are of high quality.

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PROCESSES AND PROPERTIES INDEX

5

The Use of Andalusite Stoppers in the Tapping of Steel. P. A. Laude and V. S. Trubenkov. (Kachestvennaya Stal, 1938, No. 1, pp. 37–42). (In Russian). The experimental production of andalusite plugs for use in the tapping of 15-, 30- and 225-ton heats from open-hearth and electric furnaces is described. The material used contained on the average 47% of alumina, up to 2% of alkali-metal oxides and up to 5% of ferric oxide, the remainder being silica. The mean softening point was 1750° C. A clay with silica 13·49%, alumina plus titania 33·33% and ferric oxide 1·24% (loss on ignition 9·43%), was used as a binder. Various compositions of andalusite (uncalcined) and clay mixtures were tried, and very satisfactory results were also obtained with an andalusite-fireclay-clay mixture. The andalusite refractories were fired at 1380° C. for 100 hr. Microscopical examination of the fired products showed that transformation to mullite had taken place at the edges of the andalusite grains. Experience with stoppers made from andalusite refractories, which is summarised in the form of a table, shows that their behaviour during the tapping of steel was very satisfactory.

METALLURGICAL LITERATURE CLASSIFICATION

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19

Andalusite plugs in the casting of steel. P. A. Land and V. S. Trubenkov. *Kacheslvennaya Stal* 6, No. 1, 37-42(1938); *Chimie & industrie* 40, 1107. Andalusite contg. 47% Al_2O_3 and up to 2% alkalies and having an increased Fe content is suitable for the manuf. of refractory plugs for open-hearth and elec. furnaces. The usual firing temp. of grog (1390-1410°) is also suitable for firing this material though it does not produce a perfectly fritted and mullitized product. A P C

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

1. POLYAKOV, M., TRUBENKOV, V.

2. USSR (600)

4. Foreign Exchange

7. The State Bank and the U.S.S.R.'s international settlements. Fin. i kred. SSSR no. 2, 1952.

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

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBENKOV, V.

Russia - Commerce

Development of economic relations between the U. S. S. R. and the countries of the people's democracies, Den. i kred., No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBENKOV, V.

30 years of the money and credit system of the Mongolian People's Republic. Den. i kred. 12 no.4:36-40 O'54. (MLRA 8:2)
(Mongolia--Banks and banking)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUHENKOV, V.

Credit and payment relations between the U.S.S.R. and Finland. Den. i kred. 13 no.8:22-25 Ag'55. (MLRA 8:11)
(Finland--Commerce--Russia)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBENKOV, V. S.

Lendle, P. A., and Trubenkov, V. S. ANDALUSITE PLUGS IN THE CASTING OF STEEL. *Kachestvennaya Stal*, 6 [1] 37-42 (1938). The authors describe the method of preparing andalusite plugs for casting 45, 80, and 225 tons of fused open-hearth and electric-furnace steels. The composition of andalusite used as raw material was as follows: SiO_2 41.0 to 51, Al_2O_3 + TiO_2 42.5 to 47.5, and Fe_2O_3 2.1 to 4.03%. The plugs were fired at 1380° to 1410°C. Chasov-Yar clay No. 6 was used as binding material. The composition of the plugs after firing was Al_2O_3 47% and lye 2% with a high content of Fe_2O_3. Deformation under load began at 1430°C., and deterioration occurred at 1580°C. Andalusite plugs prepared in the laboratory and in industrial practice by the same process as that used for grog plugs are of high quality.

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TRUBETSKIY, V.

Rabota Uzkokoleinykh Lesovoznykh Parovozov Zimoiu (Operation of Narrow-Gauge Lumber-Carrying Railroads with Steam-Driven Locomotives During Winter Months) (Paper edition)

SO: Four Continent Book List, April 1954

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKIY, V. A., Professor

"Locomotives of Industrial Railroad Transportation" Vest. Ak Nauk SSSR, No. 9, 1944.

BR-52059019.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

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E073/E482

9,4231

AUTHORS: Shevchik, V.N. and Trubetskov, D.I.

TITLE: Contribution to the Theory of Backward Wave Tubes With a Periodically Focused Electron Beam

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.10, pp.1734-1736

TEXT: In backward wave tubes, which are based on utilizing alternating electrostatic focusing of the electron beam, the free movement of the electrons is nonuniform, as a result of which the conditions of synchronism between the electron beam and the electromagnetic wave is periodically disturbed. Since with the exception of qualitative statements made by Yu.B.Samorodov and I.P.Ni (Ref.3) such systems have not been analysed; an attempt is made to evolve a linear theory of backward wave tuhes with alternating electrostatic focusing of the electron beam. Analysis of the processes which take place in the system is carried out by approximating the given field, since this simplified method proved useful in earlier work on this theory (Ref.1). The equation of motion of the electrons in the system under investigation can be written in the following simplified manner:

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$$\ddot{x} = \eta \Delta V_0 \Omega_0 e^{j\Omega x} + \frac{1}{T} \eta B_1 e^{j(\omega t - \beta x)}. \quad (1)$$

This equation is valid for a thin layer of electrons lying along the surface of the slow-wave structure. For taking into consideration the weakening of the field by the periodic slow-wave structure with increasing distance from the surface, it is necessary to introduce into the first term of the right-hand side of Eq.(1) a coefficient which is determined by the geometry of the slow-wave structure and the configuration of the electron beam. However, this correction does not change the final theoretical conclusions and, therefore, only Eq.(1) is considered in this paper. Eq.(1) is solved by the method of successive approximations. It is concluded that the periodic changes in the velocity of the electrons do not have a great influence on the operation of backward tubes with periodic focusing of the electron beam. There are 4 Soviet references.

SUBMITTED: November 16, 1959

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ACCESSION NR: AP3000326 S/0142/63/006/002/0117/0126

44

AUTHOR: Zyuryukin, Yu. A.; Trubetskov, D. I.; Shevchik, V. N.

TITLE: Effect of cyclotron resonance of the operation of superhigh-frequency magnetron-type beam tubes

SOURCE: Izv. VUZ: Radiotekhnika, v. 6, no. 2, 1963, 117-126

TOPIC TAGS: cyclotron resonance, M-type TW tube, M-type backward-wave tube, superhigh-frequency tubes

ABSTRACT: By using the method of successive approximations, the problem is solved of the interaction between a traveling electromagnetic wave and an electron stream that flows in the crossed electrostatic and magnetostatic fields; an allowance is made for cyclotron rotations of electrons. It is pointed out that, near the cyclotron resonance, the electromagnetic wave can be absorbed and amplified, depending on the structure of the high-frequency field that the cyclotron resonance engenders. Operating conditions in the M-type TW tube and backward wave tube are examined; limits of applicability of the theoretical

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ACCESSION NR: AP3000326

analysis of such tubes based on the adiabatic approximation are found. Similar results are obtained with the method of dispersion equation. Orig. art. has: 25 equations and 5 figures.

ASSOCIATION: Saratov gos. universitet im. N. G. Cherny*shevskogo (Saratov State University)

SUBMITTED: 09July62 DATE ACQ: 13Jun63 ENCL: 00

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5(2)

SOV/67-58-6-2/22

AUTHORS: Sel'kin, G. S., Engineer, Trubetskov, K. M., Candidate of Technical Sciences, Grekov, Ye. A., Engineer, Zadalya, N. I., Engineer, Voytov, A. O., Engineer, Mitrofanov, A. A., Candidate of Technical Sciences

TITLE: Direct Oxidation of the Martin Tank by an Oxygen-Water Mixture (Pryamoye okisleniye martenovskoy vanny kislorodo-vodyanoy smes'yu)

PERIODICAL: Kislorod, 1958, Nr 6, pp 3 - 7 (USSR)

ABSTRACT: In the production of steel from cast iron, the latter was submitted to oxygen blowing in the melting tank, for the purpose of carbon burning. This process was accompanied by very high temperatures. Iron evaporated and formed a large amount of melt dust, which impair the refractory furnace lining and caused its premature destruction. By blowing with an oxygen-water mixture it was intended to reduce dust formation (30-35 m^3 oxygen, 40 l water; later on during the course of process, 30 l water). The investigations were carried out with two Martin furnaces of the "Zaporozhstal'" factory. Academician I. P. Bardin supervised the work. The

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Direct Oxidation of the Martin Tank by an Oxygen-Water Mixture SOV/67-58-6-2/22

use of oxygen-water blast in the melting and tapping of low-carbon-content steel processing increased the furnace efficiency by 7-7.5%. The fuel consumption decreased by 7%, as compared to melting with oxygen blast. The quantity of liquid steel is somewhat less than that obtained by pure oxygen blast which is due to the ore consumption for the melt being a little lower. The best moment to begin blowing is about 80 minutes after the cast iron has begun flowing in, and the process is ended when the carbon content is higher by 0.02% than before deoxidation. In the melting of steels with a medium carbon content, the furnace efficiency was increased by 5-6%, whereas fuel consumption was lower by 2-3%. The hydrogen content in the boiling metal does not exceed the admissible quantity. The use of an oxygen-water mixture for blast has proved an efficient means for diminishing melt dust. Moreover, all impurities are thus separated. There are 3 figures, 2 tables, and 6 references, 4 of which are Soviet.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

TRUBETSKOV, K. M., kand. tekhn. nauk

Using oxygen in the open-hearth process. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. no.12:13-19 '62. (MIRA 16:1)

(Open-hearth process)
(Oxygen—Industrial applications)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

SOV/137-58-7-14365

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 60 (USSR)

AUTHOR: Trubetskov, K.M.

TITLE: The Use of Oxygen in Open-hearth Steel Production (Primeneniye kisloroda v martenovskom proizvodstve)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii, 1957, Vol 18, pp 302-314

ABSTRACT: A general account is given on the accumulated experience of the use of O_2 at various plants in the USSR.

G.S.

1. Steel--Production 2. Open hearth furnaces--Performance
3. Oxygen--Applications

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756810011-1

137-58-6-11681

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 65 (USSR)

AUTHORS: Trubin, K.G., Trubetskov, K.M., Orlov, V.I.

TITLE: Use of Oxygen in the Open-hearth Scrap-and-ore Process (Primeneniye kisloroda v martenovskom skraprudnom protsesse)

PERIODICAL: V sb.: Primeneniye kisloroda v metallurgii. Moscow, Metallurgizdat, 1957, pp 68-94

ABSTRACT: A detailed investigation at the Zaporozhstal' plant with open-hearth furnaces (200-t batch) having magnesite-chromite roofs has resulted in the recommendation that a heat regime be employed in which the air is enriched by O_2 by as much as 25%. When this is done, the output of the furnace rises by 26% and the unit nominal consumption of fuel diminishes by 17%. A further increase in the enrichment of the air to 30% carries with it a continuous increase in the productivity of the furnace of up to 46.0%. The duration of the heat is cut chiefly by saving on the melt-down and working periods. Here O_2 serves not only to intensify fuel combustion, but to increase heat gain from completion of the combustion of the CO, thus causing the open-hearth furnace to approximate the surface-blown

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Use of Oxygen in the Open-hearth Scrap-and-ore Process

Bessemer process. During the working period there is an increase in the heat of the metal, which attains 60-80°C/hr. There is a corresponding rise in rate of addition of Fe ore, with an increase in rate of decarburization to 0.88%/hr. At increased flow, the temperature conditions of the brickwork do not go beyond the bounds of the set standards, and the efficiency of the furnace proper rises to 0.413. The use of O_2 for direct oxidation of impurities is most efficient at high initial [C]. Thus, when oxygen is blown in during the melt-down and working periods, the output of the furnace rises by 39% when the total unit consumption of O_2 is increased to 12 m^3/t. Oxygen blow into a bath with 0.5-0.6% C reduces the heat by 45-55 min. The quality of the steel remains virtually unchanged with the various methods of intensifying the heat.

1. Open hearth furnaces--Performance 2. Oxygen--Applications Yu.N.
3. Metals--Processing

Card 2/2

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