"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

S/137/61/000/012/076/149
A006/A101

AUTHORS: Privalov, I.I., Nagovitsyn, D.F., Lebedev, A.A., Rakevich, K.A., Kondrat'yev, S.N.

TITLE: The effect of the weight and reduction of an ingot on the number of macro-inclusions

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 3-4, abstract 12D21 ("Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t chern. metallov", 1960, no. 8, 22 - 32)

TEXT: Non-metallic inclusions in steel are composed of sulfides and oxy-silicates (aluminum oxides Al_2O_3 and silicates SiO_2) which occur in the steel as macro-inclusions and impair its quality. Macro-inclusions are distributed over the height basically in a gradually decreasing amount from the bottom to the top section, where the number of macro-inclusions increases again. The depth of occurrence of the macro-inclusions in a 2.5 ton ingot is on the average 4.75-9.75 mm from the lateral surface, and 15.5 - 21.3 mm in a 3.5 ton ingot; it is 2 - 5.25 mm in blooms of 440 mm size, obtained from a 6.7 ton ingot. The displacement of inclusions for different cases of rolling is discussed. Thus, when

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rolling the ingots on a blooming mill, the macro-inclusions are shifted towards the bloom surface. During the rolling of pipes, sheets and other articles directly from the ingot, macro-inclusions are shifted from the peripheral layers to those adjoining the butt surface. When rolling wheels directly from a 3.5 ton ingot, the macro-inclusions do not reach the peripheral layers during the shift. Tables and diagrams are given showing the occurrence depth of macro-inclusions in ingots of different weight.

I. Getiya

[Abstracter's note: Complete translation]

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, Ivan Ivanovich; TSVETKOV, A.T., red.; BRUDNO, K.F., tekhn.red.

[Introduction to the theory of functions of complex variables] Vvedenie v teoriiu funktsii kompleksnogo peremennogo. Izd.10. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1960. 444 p. (MIRA 13:11)

(Functions of complex variables)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, Ivan Ivanovich; UGAROVA, N.A., red.; BRUDNO, K.F., tekhn.red.

[Analytic geometry] Analiticheskaia geometriia. Izd.25., stereotipnoe. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1960. 299 p. (MIRA 13:10)

(Geometry, Analytic)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, L.M., inzhener.

Reducing the time spent in shipyards for repairs. Sudostroenie 23 no.4:49-50 Ap '57. (MLRA 10:5)
(Ships--Maintenance and repair)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, Leonid Mikhaylovich; KONONOV, K.I., otv.red.; VINTF'EL'D, L.G., red.; KONTOROVICH, A.I., tekhn.red.; LEVOCHKINA, L.I., tekhn.red.

[Documentation for the repair and modernization of ships] Dokumentatsiia dlia remonta i modernizatsii sudov. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1959. 97 p. (MIRA 12:7)

(Ships--Maintenance and repair)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

ACC NR: AP6035741 (A,N) SOURCE CODE: UP/0413/66/000/019/0103/0103

INVENTOR: Yevtushenko, I. N.; Tolkachev, V. Yu.; Guglin, I. N.; Privalov, L. N.

ORG: none

TITLE: Decorder of parallel bipolar binary code for remote control systems. Class 42, No. 186769

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 103

TOPIC TAGS: digital decoder, telemetry equipment, telemetry receiver, BINARY CODE, MAGNETIC CORE.

ABSTRACT: A parallel bipolar binary code decoder which is based on magnetic cores and uses transistor/magnetic gating is described. Two-cycle transistor/magnetic gates have been added to control code reception in the decoder writing circuits. These are connected in series to the primary of a current control transformer: a code reception control unit is connected to the control transformer's secondary. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 12Nov64/

Card 1/1 UDC: 681.142:621.867:621.398

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

L 09333-67

ACC NR: AP6029523 SOURCE CODE: UR/0432/66/000/004/0059/0061

AUTHOR: Vasil'yev, V. M.; Yevtushenko, I. N.; Pelikh, Yu. V.; Privalov, L. N.; Tolkachev, V. Yu. (Candidate of technical sciences)

ORG: None

TITLE: An arrangement for remote-controlled selection

SOURCE: Mekhanizatsiya i avtomatizatsiya upravleniya, no. 4, 1966, 59-61

TOPIC TAGS: computer circuit, computer control system, computer center, data processing, signal coding, telemetry

ABSTRACT: A description of a telecontrolled selector system devised by the Zaporozhskiy Branch of the Institute of Automation is presented. It is designed for selection of sampled signals of telemetering and coding types. The system consists of a main control center connected by many communication lines to various branch centers as shown in a diagram. The branch decoding selectors are controlled from the center by means of binary codes. The collected data are transmitted from the branches through the intermediate storage to the central storage memory matrices. The central selector circuit composed of ferrite-diode elements is fed from a pulse source of 30 kc. The circuit arrangement is shown in a diagram including diodes, a dynamic flip-flop, a coincidence cell and a repeater. The control of gate pulses and their frequencies (rated at 468 cycles) is explained. The arrangement of the branch-center circuits is also diagrammatically illus-

Card 1/2 UDC: 621.398

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L 09333-67

ACC NR: AP6029523

trated. The basic element of this circuit is a decoding selector of magnetic type. Being also equipped with ferrite diodes, memory storage cells and other elements the circuit has an output that can reach a number of 512. The processes of collecting and transmitting data by means of flip-flops and blocking oscillators are discussed. The main control center is connected by means of multichannel telephone cables to 16 branch centers. The total capacity of the system is rated at 2048 binary signals. The arrangement was successfully applied to industrial processes at the Zaporozhskiy Refractory Materials Plant. Orig. art. has: 3 diagrams.

SUB CODE: 09/ SUBM DATE: None/ ORIG REF: 004

Card 2/2 mlr

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.

We are forging the keys of happiness. Izobr.i rats. no.5:2-3 My '60. (MIRA 14:2)

1. Chlen Prezidiuma Verkhovnogo Soveta SSSR, nachal'nik martenovskogo tsekha Kusnetskogo metallurgicheskogo kombinata.
(Russia--Economic policy)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M., Geroy Sotsialisticheskogo Truda

We expect great achievements. Izobr. i rats. no.8:6-8 Ag '59.
(MIRA 13:1)

1.Zamestitel' nachal'nika pervogo martenovskogo tsekha Kuznetskogo metallugicheskogo kombinata.
(Kuznetsk Basin--Steel industry)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M., staleplavil'shchik, Geroy Sotsialisticheskogo Truda, Chlen Prezidiuma Verkhovnogo Soveta SSSR

To be a master worker with the highest qualifications. Prof-tekh. obr. 18 no.4:1-2 Ap '61. (MIRA 14:4)
(Foremen)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.; Geroy Sotsialisticheskogo Truda

Innovations are national property. Izobr.i rats. no.12:5 D '61. (MIRA 14:12)

1. Nachal'nik martenovskogo tsekha Kuznetskogo metallurgicheskogo kombinata.
(Technological innovations)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M. M.

Kak my jarim stal' tol'ko otlichogo kachestva. (How we produce steel of only high quality) Moskva, Izo-vo Pravda, 1950. 21 p. diagrs. At head of title: Vsesoyuznoye Obshchestvo po Rasprostraneniyu politicheskikh i Nauchnykh Znaniy. A lecture covering development and efficiency in steel production of the Kuznetskiy and Magnitogorsk Combines, combat for a high quality steel smelting and fulfillment of the Stalin Five-Year Plans.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M. M.

More high-grade steel Moskva Profizdat, 1952. 93 p. Novatory sotsialisticheskogo proizvodstva. (54-35325)

TN704.R9P67

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, Mikhail Moiseyevich, laureat Stalinskoy premiy, starshiy master martenovskogo tsekha; ISLANKINA, T.F. redaktor; DMITRIYEVA, R.V. tekhnicheskiy redaktor.

[Prolonging the serviceability of open-hearth furnaces] Udlinenie sroka sluzhby martenovskikh pechei. Moskva, Izd-vo "Znanie," 1955. 22 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.4, no.21) (MLRA 8:9)
(Open-hearth furnaces)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, Mikhail Moiseyevich; KHMELEVA, V.I., redaktor.

[A great honor] Bol'shaia chest'. Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1955. 158 p. (MLRA 8:7)
(Steelworkers)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.M.

Repairing the bottom of large open-hearth furnaces. Metallurg no.2:30-33 F '56. (MIRA 9:9)

1.Starshiy master martenovskogo tsekha no.1 Kuznetskogo metallurgicheskogo kombinata.
(Magnitogorsk--Open-hearth furnaces)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.M.

18 4E2c

Repairs of Hearths of Open Hearth Furnaces of Large Capacity. M. M. Privalov. (Metallurg, 1956 (2), 30-33) (In

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.

The productivity of steelworkers and the quality of steel. Sots.trud. no.3:88-90 Mr '56. (MLRA 9:7)

1.Starshiy master pervogo martenovskogo tsekha Kuznetskogo metallurgicheskogo kombinata, deputat Verkhovnogo Soveta SSSR.
(Steel industry)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.M.; ORMAN, M.Ye.

All-Union conference on semikilled and capped steel.
Stal' 25 no.4:327-328 Ap '65. (MIRA 18:11)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

MEDZHIBOZHSKIY, M. Ya.; PRIVALOV, M. M.; GUROV, A. K.; MOKRUSHIN, V. V.

Peculiarities of the technology and quality of the steel produced by various alternates of blowing compressed air into the flame and the bath of large-capacity open-hearth furnaces. Izv. vys. ucheb. zav.; chern. met. 5 no.12:41-55 '62. (MIRA 16:1)

1. Sibirskiy metallurgicheskiy institut.

(Open-hearth process--Quality control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

MEDZHIBOZHSKIY, M.Ya.; PRIVALOV, M.M.; GUROV, A.K.; MOKRUSHIN, V.V.; GRITSKOV, V.S.; Prinimali uchastiye: TSYMBAL, V.P.; BYCHKOV, P.M.; KURGUZKIN, V.P.; VALOV, M.Ye.; SHCHEKOLKIN, M.S.

Making a combined use of compressed air in a high-capacity open-hearth furnace. Stal' 22 no.10:894-900 O'62. (MIRA 15:10)
(Open-hearth furnaces) (Compressed air)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

MEDZHIBOZHSKIY, M.Ya.; PRIVALOV, M.M.; GUROV, A.K.; MOKRUSHIN, V.V.; GRITSKOV, V.S.

Efficiency of the various variants for injecting compressed air into the fuel spray and the bath of large open-hearth furnaces. Izv. vys. ucheb. zav.; chern. met. 5 no.8:35-43 '62.

(MIRA 15:9)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy kombinat.

(Open-hearth furnaces) (Compressed air)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

S/148/62/000/012/001/008
E071/E151

AUTHORS: Medzhibozhskiy, M.Ya., Privalov, M.M., Gurov, A.K., and Mokrushin, V.V.

TITLE: Features of the technology and quality of steel for different variants of air injection into the flame and the bath of a large open hearth furnace

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, no.12, 1962, 41-55

TEXT: The investigation was carried out on a 400 ton open hearth furnace operating with 60-62% hot metal charge and fired with a mixture of coke oven gas and producer gas. The experimental method, and the technical, thermal and economic criteria of operation, have been described previously (Izv. VUZ, Chernaya metallurgiya, no.8, 1962). It is concluded that: the injection of compressed air into the flame and the bath led to improvements as measured by all the criteria. Blowing the bath had the following effects: a) the dephosphorisation of the metal was completed during the melting period; b) the desulphurisation of steel is considerably speeded up; c) the rate of carbon elimination

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increases by a factor of 1.5 - 2.0 and during the actual blowing period by a factor of 2.0 - 2.2; d) the rate of increase of the metal temperature is accelerated by 70% and amounts to 114 °C/hour; e) slag formation is accelerated, resulting in the early formation of a homogeneous slag. The rate of carbon elimination is most strongly influenced by the excess of oxygen in the furnace gases at the burner intake. An increase of the flow rate and pressure of the injected air is effective if it is accompanied by an increase in the excess oxygen in the furnace atmosphere. A clear relationship between the rate of carbon elimination and the excess of oxygen in the furnace atmosphere permits the use of air injection into the bath for the automatic control of refining. The use of air injection into the bath does not cause a deterioration in steel quality in comparison with steel produced by other methods of air injection or with steel produced by conventional methods. It is particularly important that in the course of the heat as well as in the finished steel, the content of nitrogen and oxygen in the metal both during the heat and in the finished steel shall remain the same as in heats with air

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Features of the technology and ... S/148/62/000/012/001/008
E071/E151

injection to the flame only, or in heats carried out by the conventional methods.
There are 6 figures and 6 tables.

ASSOCIATION: Sibirskiy metallurgicheskiy institut (Siberian Metallurgical Institute)

SUBMITTED: December 27, 1961

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.M.

Forward and only forward. Metallurg 7 no.4:33-35 Ap '62. (MIRA 15:3)

1. Nachal'nik staleplavil'nogo tsekha No.1 Kuznetskogo metallurgicheskogo kombinata.
(Novokuznetsk--Open-hearth furnaces)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, Mikhail Moiseyevich, staleplavil'shchik, Geory Sotsialisticheskogo Truda, kand. v chleny TSentral'nogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza; MIKHAYLOVA, V., red.; KUVYRKOVA, L., tekhn. red.

[Pride of the working man] Gordost' rabochego cheloveka. Moskva, Molodaia gvardiia, 1962. 174 p. (MIRA 15:6)

1. Kuznetskiy metallurgicheskiy kombinat (for Privalov).
(Kuznetsk Basin--Iron and steelworkers)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, M.M.

Open-hearth furnace practices at the Chelyabinsk and Transcaucasian Metallurgical Plants. Metallurg no.1:22-24 Ja '56. (MIRA 9:9)

1.Starshiy master martenovskogo tsekha No.1 Kuznetskogo metallurgicheskogo kombinata.
(Chelyabinsk--Open-hearth process)(Transcaucasia--Open-hearth process)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, N.

Let's improve the supervision of commerce. Sov. torg. 36 no.4: 6-8 Ap '63. (MIRA 16:5)

1. Zamestitel' nachal'nika upravleniya torgovli Dnepropetrovskogo promyshlennogo oblastnogo ispolnitel'nogo komiteta.
(Retail trade--Auditing and inspection)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, yu.N.

The big camp. IUn.nat.no.9:38-39 D '56. (MLRA 10:2)

1. Evenkiyskiy natsional'nyy okrug.
(Evenki National Area--Reindeer)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

RUSAKOV, M.I.; PRIVALOV, N.A., inzh.

Device for pulling couplings on asbestos cement pipes. Rats.i izobr.predl.v stroi. no.13:84-85 '59. (MIRA 13:6)

1. Po materialam Glavneftemontazha Ministerstva stroitel'stva RSFSR, Moskva, Bol'shaya Sadovaya ul., d.8-a.
(Pipe, Asbestos-cement)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, N.N.; KRYLOV, V.A.; GURV I[illegible] inzhener, redaktor; BEG[illegible] D. [illegible] redaktor, VOLKO[illegible] V.S., tekhnicheskiy redaktor.

[Assembling mechanical equipment of blast furnace [illegible] mekhanicheskogo oborudovaniia domennykh tsekhov. Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekture, 1956. 295 p. (MIRA 9:5)
(Blast furnaces)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

Romanov, V. V.

YAKOVLEV, V.N., inzh.; PRIVALOV, N.N., inzh., retsenzent; TSYGULEV, A.A., red.; KARGANOV, V.G., red.graficheskikh materialov; UVAROVA, A.F., tekhn.red.

[Handbooks for mechanics and fitters] Spravochnik slesaria-montazhnika. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 548 p. (MIRA 11:1)

(Machinery--Erecting work)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

YAKUBOVSKIY, F.B., red.; BELYAYEV, B.I., red.; VOLNYANSKIY, A.K., red.; KAMINSKIY, D.N., red.; KOL'TSOV, A.G., red.; KUREK, N.M., red.; OVSYANKIN, V.I., red.; PRIVALOV, N.N., red.; KHRAMUSHIN, A.M., red.; ERISTOV, V.S., red.; UDOD, V.Ya., red.izd-va; TEMKINA, Ye.L., tekhn.red.

[Papers and reports of the section on industrial construction, assembling and specialized work of the All-Union Conference on Construction] Doklady i soobshcheniia. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1958. 438 p. (MIRA 12:7)

1. Vsesoyuznoye soveshchaniye po stroitel'stvu. Moscow, 1958. Sektsiya promyshlennogo stroitel'stva, montazhnykh i spetsializirovannykh rabot.

(Building)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, N.N.

Improve methods of constructing blast furnaces. Nov.tekh.mont.i spets.rab. v stroi. 21 no.5:1-3 My '59. (MIRA 12:7)

1. Zamestitel' Ministra stroitel'stva RSFSR.
(Blast frunaces)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, N.N.

Speed up the introduction of rolling mills. Nov.tekh. mont.i spets.rab.v strei. 21 no.12:1-5 D '59. (MIRA 13:3)

1. Zamestitel' ministra stroitel'stva RSFSR.
(Rolling-mills)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, Nikolay Nikolayevich; KRYLOV, Vladimir Aleksandrovich, inzh.; GURVITS, A.I., inzh., nauchnyy red.; YUDINA, L.A., red. izd-va; OSENKO, L.M., tekhn. red.

[Assembly of the mechanical equipment of blast furnace plants] Montazh mekhanicheskogo oborudovaniia domennykh tsekhov. Izd.2., perer. i dop. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 333 p. (MIRA 15:2)
(Blast furnaces—Design and construction)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

L 2137-66 EWT(d)/EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWP(l) MJW/JD

ACC NR: AP5023088 SOURCE CODE: UR/0125/65/000/009/0077/0078

AUTHOR: Privalov, N. T. (Engineer); Tulin, N. A. (Engineer); Medovar, B. I. (Doctor of technical sciences); Maksimovich, B. I. (Candidate of technical sciences)

ORG: none

TITLE: Quality and production cost of DI-1 and EI961 steels melted in open-arc, vacuum-arc, or electroslag furnaces

SOURCE: Avtomaticheskaya svarka, no. 9, 1965, 77-78

TOPIC TAGS: steel, heat resistant steel, steel melting, arc melting, vacuum arc melting, electroslag melting/20Kh15N3MA steel, 13Kh12N2VMFA steel

ABSTRACT: The quality and production cost of DI-1 (20Kh15N3MA) and EI961 (13Kh12N2VMFA) heat-resistant steels melted in open-arc, vacuum-arc, or electroslag furnaces have been compared. It was found that vacuum-arc and electroslag-melted ingots have a dense, uniform structure without the segregations and other defects observed in metal produced in open-arc furnaces. Electroslag melting reduces sulfur content. Not much difference was found in the chemical composition and mechanical properties of steels melted by different methods. The production cost of electroslag-melted and vacuum-arc steels was 38—45% and 248—275% higher, respectively, than that of conventionally melted steels. The quality of electroslag-melted steels is

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not inferior and in some respects is even superior to that of vacuum-arc melted steel. Thus, it is more economical to use electroslag melting for DI-1 and EI961 steels. [ND]

Orig. art. has: 2 tables.

SUB CODE: MM/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4123

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L 12847-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JT

ACCESSION NR: AP3001468 S/0133/63/000/005/0426/0429 66 58

AUTHOR: Privalov, N. T.; Yartsev, M. A.; Tulin, N. A.

TITLE: Improved technique in producing steel DI-1 14

SOURCE: Stal', no. 5, 1963, 426-429

TOPIC TAGS: steel DI-1, steel 20Kh15N3MA, steel Kh17N2, Cr, C, reduction of defective product

ABSTRACT: A new technique in production of stainless steel DI-1(whose composition is similar to that of steel 20Kh15N3MA) was introduced after numerous experiments. This new type of steel replaces the former stainless steel Kh17N2 and has a number of advantages. The procedure of making steel Kh17N2 was applied for steel DI-1 but proved to be unsatisfactory. In later experiments the proper chromium content in the furnace charge was found to be below 9%; the blowing through with oxygen was accomplished at 0.09-0.11% of carbon content; the temperatures of 1590-1610C at the beginning and the end of refining and 1570-1590C in pouring were found correct for securing satisfactory macrostructure; the soaking time during the process of refining was 70-90 minutes. This

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L 12847-63

ACCESSION NR: AP3001468

procedure reduced the amount of defective metal produced at the mill by the ratio of 11, while the rejection of the product by the customer was halved. "The melts were made with assistance of engineers I. D. Donets, D. B. Royak, N. F. Bastrikov, Yu. P. Anisimov, F. I. Shved, I. I. Khmelev, A. A. Kluden'kikh, and M. Ye. Anisimov." Orig art. has: 4 figures and 4 tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 10Jun63 ENCL: 00

SUB CODE: 00 NO REF SOV: 008 OTHER: 001

Card 2/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

1-5C

L 35031-65 EWT(m)/EWP(b)/EWP(t) JD S/0286/65/000/005/0034/0034 35 34 B

ACCESSION NR: AP5008155

AUTHOR: Paton, B. Ye.; Dudko, D. A.; Medovar, B. I.; Latash, Yu. V.; Maksimovich, B. I.; Shevchenko, A. I.; Stu[illegible], L. M.; Gonchar[illegible]ko, V. P.; Grigor'yev, [illegible]; Petu[illegible]hov, G. K.; Chudin, N. I.; [illegible], I. A.; Yartsev, M. A.; Keys, N. V.; Tulin, N. A.; Kapel'nitskiy, V. G.; Privalov, N. T.; Pis'[illegible]nov, V. S.; Kholedov, Yu. A.; Bystrov, S. N.; [illegible]; Donets, I. D.; Silayev, A. Ya.

TITLE: Method of electroslag casting of ingots. Class 18, No. 168743

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 34

TOPIC TAGS: ingot casting, ingot electroslag casting, electroslag melting, steel melting, alloy melting, metal melting

ABSTRACT: This Author Certificate introduces a method of electroslag casting of ingots in an open or protective atmosphere or in vacuum, in which slag is first melted in a mold with a nonconsumable or consumable electrode arc or plasma jet. To improve the metal quality and the ingot surface and to raise the yield, the molten metal or, if needed, the slag is poured into the mold through a hollow consumable or nonconsumable electrode (see Fig. 1 of the Enclosure). Orig. art. has: 1 figure. [ND]

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

L 35031-65

ACCESSION NR: AP5008155

ASSOCIATION: Chelyabinskiy metallurgicheskiy zavod (Chelyabinsk Metallurgical Plant)

SUBMITTED: 06Feb63 ENCL: 01 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3215

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, N.T.; YARTSEV, M.A.; TULIN, N.A.

Improving the technology of producing DI-1 steel. Stal' 23 no.5:426-429 My '63. (MIRA 16:5)
(Steel, Stainless--Electrometallurgy)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

L 21654-66 EWT(m)/EWP(t) JD

ACC NR: AR6011592 SOURCE CODE: UR/0137/65/000/012/B019/B019

AUTHOR: Velin, N. V.; Privalov, N. T.; Kalyazhnov, V. A.

ORG: none

46

B

TITLE: Current-regulator operation in a furnace for flux remelting 15

SOURCE: Ref. zh. Metallurgiya, Abs. 12B130

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 44, 1965, 19-21

TOPIC TAGS: metal melting, potentiometer, electric transformer, automatic regulation, slag

TRANSLATION: The Laboratory of Production Automation at the Chelyabinsk Steel Plant has proposed a current regulator for flux remelting. The unit is used for stabilizing electric melting conditions, improving quality of the metal and increasing product yield. Input from current transformer is fed through a booster transformer to one of the arms of an electric potentiometer. A calibrator is set in the other arm of the potentiometer. Output from potentiometer is fed to the low-resistance coil of an amplidyne. The use of this regulator has increased amplification factor of the system, accelerated amplidyne response and improved sensitivity of the regulator (zone of insensitivity is 8.5%) as well as eliminated agitation for dilution of the slag bath in automatic equipment. The regulator is simpler and more reliable in operation than those

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L 21654-66

ACC NR: AR6011592

based on semiconductors and electric amplifiers. V. Sidorov [JPRS]

SUB CODE: 13, 09

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, P.L.; KAFIANI, K.A.; MONASELIDZE, I.R.

Study of thermal [illegible] denaturation with the aid of adiabatic microcalorimetry. Dokl. AN SSSR 156 no. 4:951-953 Je '64. (MIRA 17:6)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR i Institut fiziki AN GrozSSR. Predstavleno akademikom V.A. Engel'gardtom.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, P.L.; KAFIANI, K.A.; MONASELIDZE, D.R.

Calorimetric study of DNA thermal denaturation. Biofizika 10 no.3:393-398 '65. (MIRA 18:11)

1. Institut fiziki AN GruzSSR, Tbilisi. Submitted Oct. 26, 1963.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, P.L.; MONASELIDZE, D.R.; MREVLISHVILI, G.M.; MAGALDADZE, V.A.

Heat of "intramolecular fusion" of macromolecules. Zhur.eksp. i teor.fiz. 47 no.6:2073-2079 D '64. (MIRA 18:2)

1. Institut fiziki AN Gruzinskoy SSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, P.L.

State and role of water in biological systems [with summary in English]. Biofizika 3 no.6:738-743 '58. (MIRA 12:1)
(WATER,
chem. & biol. role (Rus))

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

BURDZHANADZE, T.V.; PRIVALOV, P.L.; TAVKHELIDZE, N.N.

Thermal properties of gelatin solutions. Vysokom.soed. 4 no.9:1419-1424 S '62. (MIRA 15:11)

1. Institut fiziki AN Gruzinskoy SSR.
(Gelatin—Thermal properties)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, P.L.; MONASELIDZE, D.R.

Calorimetric study of the thermal denaturation of egg albumen. Trudy Inst. fiz. AN Gruz. SSR 9:201-209 '63. (MIRA 17:7)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

BURDZHANADZE, T.V.; PRIVALOV, P.L.; TAVKHELIDZE, N.N.

Vacuum adiabatic calorimeter with automatically regulated heat screens for studying the thermal properties of macromolecular solutions. Soob. AN Gruz. SSR 31 no. 2: 277-281 Ag '63. (MIRA 17:7)

1. Institut fiziki AN GruzSSR, Tbilisi. Predstavlen akademikom E.L.Andronikashvili.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, P.L.; MONASELIDZE, D.R.

Studies on heat denaturation of serum albumin. Biofizika 8 no.4: 420-426 '63. (MIRA 17:10)

1. Institut fiziki AN GruzSSR, Tbilisi.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

L 18285-65 EWT(m) Pa-4 RM

ACCESSION NR: AP5001829 S/0056/64/047/006/2073/2079

B

AUTHOR: Privalov, P.L.; Monaselidze, D. R.; Mrevlishvili, G. M.; Magaldadze, V.A.

TITLE: Heat of "intramolecular melting" of macromolecules

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 6, 1964, 2073-2079

TOPIC TAGS: macromolecule, nucleinic acid, albumen, desoxyribonucleic acid, collagen, melting heat, microcalorimetry, transconformation

ABSTRACT: The authors report that they have measured, for the first time, the heat absorbed during the transconformation of nucleinic acids and proteins. Such measurements were indered in the past by the great difficulty of recording weak thermal effects in macromolecule solutions which had to be highly diluted (to reduce the interaction) and which were available in very limited amounts. The measurements were made with an automatic adiabatic differential microcalorimeter, specially developed at Institut fiziki AN GSSR. The equipment and procedure are described in some detail, and involve essentially the measurement of unbalanced thermocouple current which flows when one of two identical ampoules, containing

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the compound, absorbs heat. The microcalorimeter and the twin ampoules are shown in Fig. 1 of the enclosure. Measurements were made of the heat absorbed during the thermal transconformation of DNA (640 mg of 0.107% solution, amounting to 0.685 mg of the compound) and 630 mg of 0.15% procollagen solution, amounting to 0.97 mg of the albumen. The heat absorbed by the DNA and by the procollagen was $(8.15 \pm 0.35) \times 10^{-3}$ and $(6.95 \pm 0.20) \times 10^{-3}$ cal, equivalent to 11.9 ± 0.6 and 7.15 ± 0.25 cal/g, respectively. The results are compared with theoretical estimates based on the value of the transconformational change in enthalpy, and differences in the structure of the DNA and procollagen are discussed. "The authors thank Professor E. L. Andronikashvili for interest and support and K. A. Kafiani for supplying the DNA compound." Orig. art. has: 4 figures and 1 formula.

ASSOCIATION: Institut fiziki AN GSSR (Institute of Physics AN GSSR)

SUBMITTED: 02Jul64 ENCL: 01

SUB CODE: LS, TD NR REF SOV: 003 OTHER: 012

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ENCLOSURE: 01

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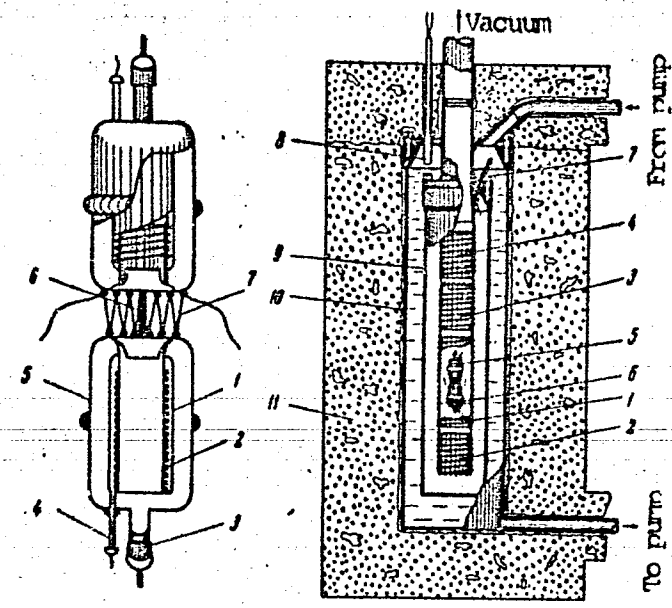

Fig. 1. Details of microcalorimeter.

Left: Double ampoule. 1 - Heating-element jacket, 2 - heater wire, 3 - neck with sealed stopper, 4 - heater lead, 5 - ampoule housing, 6 - connecting rod, 7 - thermopiles.

Right: Heat shielding of microcalorimeter. 1 - Central heat screen 2 - lower end heat screen, 3 - upper end heat screen, 4 - uper heat screen, 5 - double ampoule, 6 - silver ri , 7 - heat pickup of water jacket, 8 - platinum resistance thermometer, 9 - vacuum jacket, 10 - water jacket, 11 - foamed plastic

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

PRIVALOV, S.F.; [illegible], N.I.

Theory of the ideal random silver. Izv. vys. ucheb. zav.; tekh. teks. prom. no.3:53-61 '64. (MIRA 1[illegible]:10)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti imeni S.M. Kirova.

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77442
SOV/133-60-1-3/30

AUTHORS: Privalov, S. I. (Candidate of Technical Sciences), Timofeyev, V. N. (Candidate of Technical Sciences), and Bokovikov, B. A. (Engineer)

TITLE: Investigation of Reduction Process in Ore Bed

PERIODICAL: Stal', 1960, Nr 1, pp 5-14 (USSR)

ABSTRACT: The article discusses an experimental investigation (on the fire model) of the reduction process in the immobile ore bed, and a development of speed characteristics for analytical calculations of the process under conditions of a "counter flow" of ore and gas. The work was undertaken in connection with growing intensification and coming automation of blast furnace work. The authors mention the work of B. I. Kitayev (B. I. Kitayev, Yu. G. Yaroshenko, et al., The Development of Heat Exchange and Reduction Processes in the Counter Flow, Transactions of UPI imeni Kirov, 1951; B. I. Kitayev, Stal', 1954, Nr 8) who was the

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first to consider the development of the reduction process along the height of blast furnace by analogy with heat exchange processes in connection with similarity of the phenomena of damping of the temperature and concentration potential of gas. The early American experiment with the Mesabi Range ores (W. Wetherill, C. Furnas, Industrial and Engineering Chemistry, 1934, 26, Nr 9); the mathematical analysis of A. P. Yem, who worked under the direction of S. T. Rostovtsev on the kinetics of the process of reduction of ore grains by hydrogen; the work of A. N. Ramm and Yu. P. Svintsov (A. N. Ramm and Yu. P. Svintsov, Study of Reduction of Iron Ores by Gases Under the Conditions of Counter Flow of Ore and Gases, Transactions LPI imeni Kalinina, issue 179, 1955) and of B. Stal' khano (Study of the Process of Reduction in the Lump of Iron Ore, Domez, 1931, Nr 6, A review) are referred to. The authors derive an equation for the summary coefficient of the speed of process K_{Σ}:

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$$K_{\Sigma} = \frac{V_{\Gamma}}{2(1+K)fFH} \ln \frac{CO' - K CO_2'}{CO'' - K CO_2''}, \quad (7)$$

where K_{Σ} = a summary coefficient of speed of reduction representing an average speed (cm^3/sec) of removal of oxygen through one cm^2 of external surface of ore lumps; V_{Γ} = amount of gas passing through the layer (cm^3/sec); K = averaged constant of equilibrium of reduction reactions; f = external surface of ore lumps in unit of layer volume (cm^2/cm^3); F = cross section of layer (cm^2); CO', CO_2', CO'', CO''_2 = concentrations in incoming gas; H = total height of layer in cm. In 1954 the All-Union Scientific Research Institute of Metallurgical Technology (VNIIMT) built an experimental installation with fire model of the immobile ore bed for study of the dynamics of reduction processes. In 1958 VNIIMT built a second experimental installation

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(with fire model) of the "counter flow" of ore and gas for evaluation of the effect of charge movement and for the development of reduction calculation methods in the "counter flow" (see Fig. 13).

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Investigation of Reduction Process in Ore Bed

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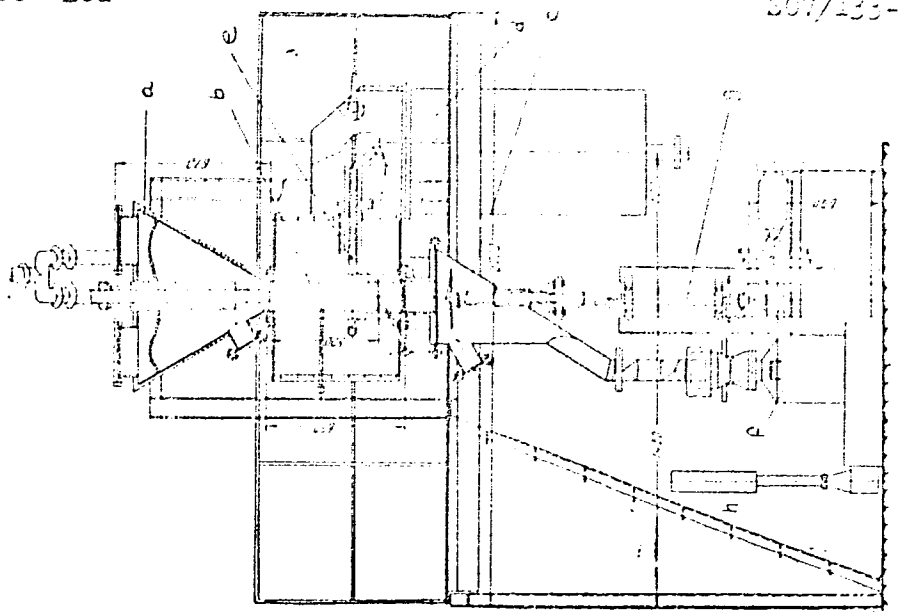

Card 5/11 Fig. 13. See card 6/11 for Caption

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Investigation of Reduction Process in Ore Bed

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See Card 7/11 for Fig. 13.

Fig. 13. Experimental installation for investigation of ore reduction in counter flow: (a) ore hopper, 150 kg capacity; (b) diameter of furnace stack, 130 mm; height of reduction zone, 500 mm; volumetric velocity of gas, m^3/m^2 sec = 0.76; productivity of installation (by ore), 20 kg/hr; (c) rotary table; (d) gas preheater; (e) six tuyeres; (f) receiving containers; (g) power drive; (h) scales.

The experimental installation for study of the reduction process in the layer; the results of experiments; the methods of calculation of reduction process in the counter flow; and the experimental study of reduction process in counter flow are described. The calculations (at given changes of temperature and the speed of gas along the height of ore layer, i.e., with known K_1 and K_2) showed the relationship between the degree of

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ore reduction and accumulation of CO_2 and height of the layer (see Fig. 12). The solution was worked out by B. A. Bokovikov with participation of V. M. Malkin.

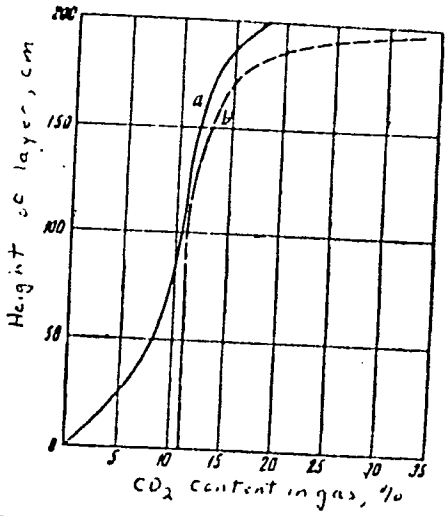

Fig. 12. Accumulation of CO_2 along height of ore layer during counter flow process (pellets, 25 mm diameter; gas velocity, 0.75 m/sec; 33% CO; temperature 900° C. (a) actual concentration of CO_2; (b) equilibrium concentration of CO_2.

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Investigation of Reduction Process in Ore Bed

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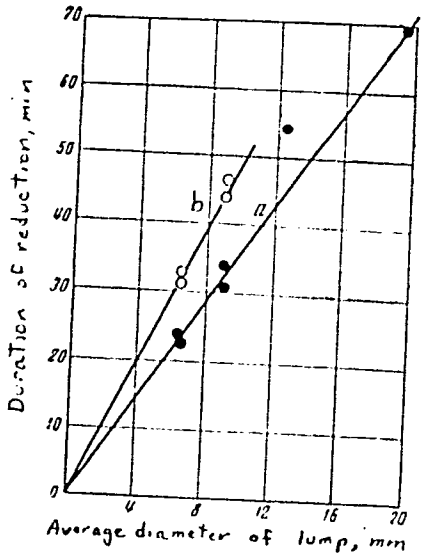

Fig. 7. Relationship between duration of reduction up to 50% (a); up to 60% (b) at 850° C, and average diameter of pellets.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001343030010-6

Investigation of Reduction Process in Ore Bed

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SOV/133-60-1-3/30

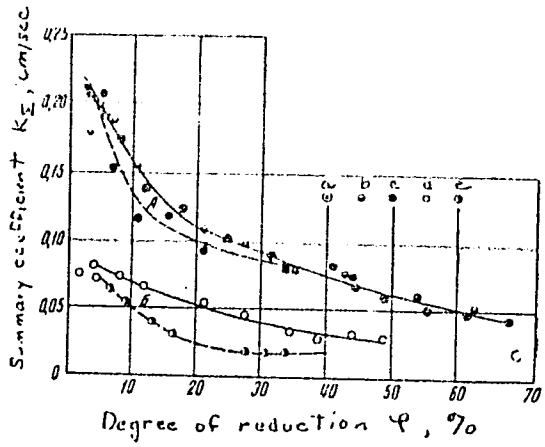

Fig. 8. Relationship between summary coefficient K_Σ and degree of reduction at 850° C, and various initial concentrations of CO_2 (A) or FeO content in pellets (B). (a) (1.65% CO_2); (b) (3.60% CO_2); (c) (5.6% CO_2) (d) 6.0% FeO); (3) (14.39% FeO).

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The authors arrived at the following conclusions: (1) They showed the possibility of a quantitative evaluation of summary speed of reduction process in the layer by the averaged characteristics of accumulation of gas products, obtained experimentally under conditions close to industrial conditions (see Fig. 7). (2) The developed method of experimental study of ore reduction in the immobile layer permits analytical calculation of the process in counter flow, with the determination of its intensity, the required height of the layer, and other characteristics of reduction work of gas in the ore bed (see Fig. (8), (3) An experimental check of calculated data of reduction in the counter flow of ore and gas confirmed the high intensity of reduction in the layer at moderate temperatures and showed that the error of calculations does not exceed 10%. (4) A further investigation of the reduction process at higher temperatures is required (taking into account the reaction of reducing carbon dioxide by carbon of the coke).

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There are 12 figures; 1 table; and 6 references, 5 Soviet, 1 U.S. The U.S. reference is: W. Wetherill, C. Furnas, Industrial and Engineering Chemistry, 1934, Vol 26, Nr 9.

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LAZAREV, B.L.; BOKOVIKOV, B.A.; BABUSHKIN, N.M.; TIMOFEYEV, V.N.; CHERVOTKIN, V.V.; PRIVALOV, S.I.

Heat exchange and reduction in the stack of a furnace operating on 100% fluxed sinter. Stal' 25 no.6:487-492 Je '65. (MIRA 18:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat i Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki.

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KHOKHLOV, D.G., kand. tekhn. nauk; PRIVALOV, S.I., kand. tekhn. nauk; GROMILIN, F.M., inzh.; KUZNETSOV, R.F., inzh.

Investigating the process of roasting fluxed pellets in shaft furnaces. Stal' 23 no.10:879-883 O '63. (MIRA 16:11)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta mekhanicheskoy obrabotki poleznykh iskopayemykh i Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki.

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Synthesis of gas suitable for cementation operations. S. I. Privalov, M. K. Chukavin, V. P. Zueva and N. P. Ogarkov. *Vestnik Metallopromy.* 19, No. 1, 85-91(1939). Gas suitable for cementation of steel was prepd. by synthesizing CH_4 from CO, CO_2 and H_2 in the presence of a catalyst comprising pumice stone impregnated with a soln. of $Ni(NO_3)_2$ contg. 15% powd. Cr_2O_3 and reduced with H_2 at 350°. The life of the catalyst was indefinite provided the temp. did not exceed 500-600° and its surface remained clean. The temp. in the retort was maintained at 400°. If the starting gas has 4-5 times as much H_2 as $CO + CO_2$ the resulting gas did not have to be scrubbed of the CO_2.

B. Z. Kamich

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