ANTONOV, I.A., kand.tekhn.nauk; ASINOVSKAYA, G.A., inzh.

Introducing automatic control of gas flame brazing of tubular joints. Trudy VNIIAvtogen no.7:104-122 '60. (MIRA 13:7)

(Brazing--Equipment and supplies)
(Automatic control)

21928

S/193/61/000/004/003/007
A004/A101

1.1110 also 1573

AUTHOR: Antonov, I. A.

TITLE: New developments in gas-flame machining

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 4, 1961, 18 - 23

TEXT: The author gives a comprehensive survey on the up-today level of flame machining enumerating a great number of devices, machines and installations used for this purpose. He emphasizes the leading role in this field played by the Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov (All-Union Scientific Research Institute of Oxyacetylene Welding and Cutting of Metals) (VNIIAvtogen). The greatest emphasis in metallurgy is put at present on the mechanization and automation of gas-cutting operations. A number of installations are being designed for the deseaming and scarfing of billets and slabs, removing defective surface layers of metal at a speed of 30 - 50 m/min simultaneously on all four sides of the billet or slab. In mechanical engineering various blanks are cut from rolled sheet and plate material with a high degree of accuracy. For operation on assembly sites the VNIIavtogen has developed a new type of single-torch portable machine which, in 1961, will be produced in two versions, the ПЭЛ

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New developments in gas-flame machining

(PEL) type with electric drive and the ПВЛ (PVL) type with pneumatic drive. The АСП (ASP) and АСШ (ASSh) machines are intended for contour cutting of parts. Replacing the obsolete single-torch ASP machine, the СГУ (SGU) cutter is fitted with two torches and with electric drive to regulate the distance between the torch and the metal being cut. The machine can be equipped with a magnetic copying tracer or a photoelectric cell for following 1:1 scale drawings. The high-efficiency automated МДМ-2 (MDM-2) and "Odessa" machines are capable of cutting sheet material up to 2.5 and 3 m wide. They are fitted with six torches and a copying device working according to drawings at scales of 1:5 and 1:10. The latest models are fitted with devices for the automatic "floating" of the torches and torch flame ignition. The special-purpose six-torch ПР-2.5 (PR-2.5) and ПР-3.5 (PR-3.5) laying-out machines are intended for the multi-torch cutting of sheets up to 2.5 and 3.5 m width respectively. The oxygen-flux cutting of stainless steel is widely employed at the plants of chemical and food machine construction and boiler construction. The latest УРХС-4 (URKhS-4) installation operates with "external" flux supply, which makes it possible to increase the cutting speed 1.5 - 2 times and halve the powder consumption. A new method of "nonburr" cutting is employed at compressor and shipbuilding plants and does away with deburring after the cutting. Although the technology of this process has not yet been thoroughly investigated it has been

New developments in gas-flame machining

found that, using a special torch tip design, it is possible to cut metal of more than 25 mm thickness without any preheating flame. The author states that new gas-cutting machines with program control are being developed by the Institute which make it possible to effect the whole cutting cycle automatically without intervention of the operator. The author mentions the processes of arc cutting with tungsten electrode in an argon-hydrogen mixture, penetrating arc cutting for the laying-out of light-alloy sheets and gas-arc cutting of sheets of aluminum alloys, stainless steel and high-melting materials as being of special interest. Foundry heads, gating systems and shaped parts of aluminum alloys up to 70 mm thick are cut with the semi-automatic УДР-2 (UDR-2) machines, while aluminum up to 25 - 30 mm thick is cut with the РДМ (RDM) torch connected to a d-c source. The gas-cutting СГУ (SGU) machine is intended for the gas-electric cutting of aluminum alloys, while the УДР-1 (UDR-1) apparatus is used for rectilinear laying-out of sheet material. The following torches are fabricated for gas-arc cutting: ИМЭТ-105 (IMET-105), ИМЭТ-106 (IMET-106), КПН-60 (KPN-60). The air-arc cutting process is used for the reconditioning of casting rejects, removal of defective welds and for the cutting of stainless steel of small thickness (up to 20 mm). The СВ12ГС (SV12GS) welding metal is successfully used for operation with gases substituting for acetylene. For the gas welding of brass the gas-flux method is recommended,

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A004/A101

New developments in gas-flame machining

whereby the gaseous boron-containing flux is injected into the flame. The industrial production of the КГФ (KGF) apparatus and the gaseous БМ-1 (BM-1) flux has been started. Machines for the automatic hardfacing of steel and cast iron parts with sintered metal and non-ferrous metals are being developed to an increased extent. The УФН(UFN) -machine is intended for the building-up of brass surfaces on steel fittings. This machine alone makes the plants of the RSFSR save some 480 tons brass annually. Investigations have been carried out to automate the gas-flame brazing process. Some oxyacetylene plants have introduced the СГП (SGP) automatic for the brazing of gas-welding apparatus parts. Heating operations for the hardening of gear teeth with modules exceeding 8 mm are carried out by the successively advancing method on the УЗШ(UZSh) or АЗШ (AZSh) installations, while gears with modules lower than 8 mm are heated by the rapid-rotation method on the УГЗ (UGZ) machine. Improved metal spray guns of the МГИ (MGI) and ЭМ-9 (EM-9) type are being produced which are fitted with a more compact and economical rotor motor instead of an air turbine. A new field of application for gas-flame operations is the spraying of plastics to apply insulation coatings of polyethylene, polyvinyl butyral, and polystyrene. The УПН(UPN) installation is intended for the gas-flame spraying of these plastics. There are 2 figures.

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ANTONOV, I.A., kand.tekhn.nauk; ASINOVSKAYA, G.A., inzh.

Principles of introducing automatic control of brass facing flat ring surfaces with gaseous flux. Trudy VNIIAvtogen no.8: 3-26 '62. (MIRA 15:6)
(Gas welding and cutting) (Metal cladding)
(Automatic control)

LYUBAVSKIY, K.V., doktor tekhn.nauk; ANTONOV, I.A., kand.tekhn.nauk

The 17th Congress of the International Welding Institute. Svar.proizv. no.11:43 N '64. (MIRA 18:2)

ANT[illegible] [illegible] A., kand. tekh. nauk; A[illegible] YA, G.A., inzh.

Investigating the basic parameters of automatic gas welding under flux of brass pipe. Trudy VNII[illegible] no.10:58-70 '64.

(MIRA 17:10)

ARTYUKHOVSKAYA, S.A.; TESMENITSKIY, D.I.; ASTNOVSKAYA, G.A.; BOYKO, M.I.; KOLTUNOV, P.S.; NEKRASOV, Yu.L.; KOROVIN, A.I.; NECHAYEV, V.D.; NINBURG, A.K.; SHASHKOV, A.N.; EDEL'SON, A.M.; ANTONOV, I.A., kand. tekhn. nauk, red.

[Using acetylene substitute gases for flame metalworking.] Primenenie gazov-zamenitelei atsetilena pri gazoplamennoi obrabotke metallov. Moskva, Mashinostroenie, 1964. 150p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotke metallov. Spravochnye materialy po gazoplamennoi obrabotke metallov, no.23). (MIRA 17:9)

ANTONOV, I.A., kand.tekhn.nauk; VASIL'YEV, K.V., kand.tekhn.nauk; SEGALOVA, O.I., inzh.

Standardization of equipment for gas-electric oxygenless cutting. Svarochnoe proizv. no.5:40-41 My '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennogo mashinostroyeniya.

ANTONOV, I.A.

Main problems in over-all mechanization of the medical instruments industry. Med.prom. 10 no.3:10-13 Jl-S '56. (MLRA 9:11)

1. Glavnoye upravleniye mediko-instrumental'noy promyshlennosti.
(MEDICAL INSTRUMENTS AND APPARATUS)
(INSTRUMENT INDUSTRY)

ANTONOV, I.A.

Medical instruments industry during 40 years of Soviet control. Med. prom. 11 no.10:13-18 O '57. (MIRA 11:1)
(MEDICAL INSTRUMENTS AND APPARATUS)

ANTONOV, I.A.

Principal courses in the development of the medical instruments industry during the next seven years. Med.prom. 12, no.7:3-5 Jl '58
(MEDICAL INSTRUMENTS AND APPARATUS) (MIRA 11:8)

ANTONOV, I.A.

Some problems in the development of the medical supplies industry. Med.prom. 13 no.7:8-12 Jl '59. (MIRA 12:10)
(MEDICAL INSTRUMENTS AND APPARATUS)

ANTONOV, I.F., insh.

"Automatic control of tractors and self-propelled agricultural machinery" by F.M.Rusinov and L.O.Popov. Reviewed by I.F.Antonov. Trakt. i sel'khozmash. 30 no.6:42-43 Je '60. (MIRA 13:11)
(Tractors) (Agricultural machinery)
(Rusinov, F.M.) (Popov, L.O.)

ANTONOV, I.G.; VAKHTEL', M.I.; SHCHEGOL'KOVA, A.I.

The VMS-32 pipe cutting machine. [Suggested by: I.G. Antonov, M.I. Vakhtel', A.I. Shchegol'kova]. Mats. i izobr. predl. v strel. ao. 142:3-5 '56. (MLRA 10:4)

(Pipe cutting)

ANTONOV, I. I.

ANTONOV, I. I. — "Variation in the Amount of Circulating Blood During the Formation of Ganglia Under Experimental Conditions." Acad Sci Latvian SSR, Inst of Experimental Medicine, 1953 (Dissertation for the Degree of Candidate of Medical Sciences)

So: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

ACCESSION NR: AT4042647 S/0000/63/000/000/0026/0030

AUTHOR: Antonov, I. I.

TITLE: The influence of various partial pressures of oxygen and surrounding temperature on temperature correlationships and their regulation in the organism

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy* konferentsii. Moscow, 1963, 26-30

TOPIC TAGS: oxygen partial pressure, thermoregulatory function, central nervous system, hypoxemia, hyperoxemia, hypothermia

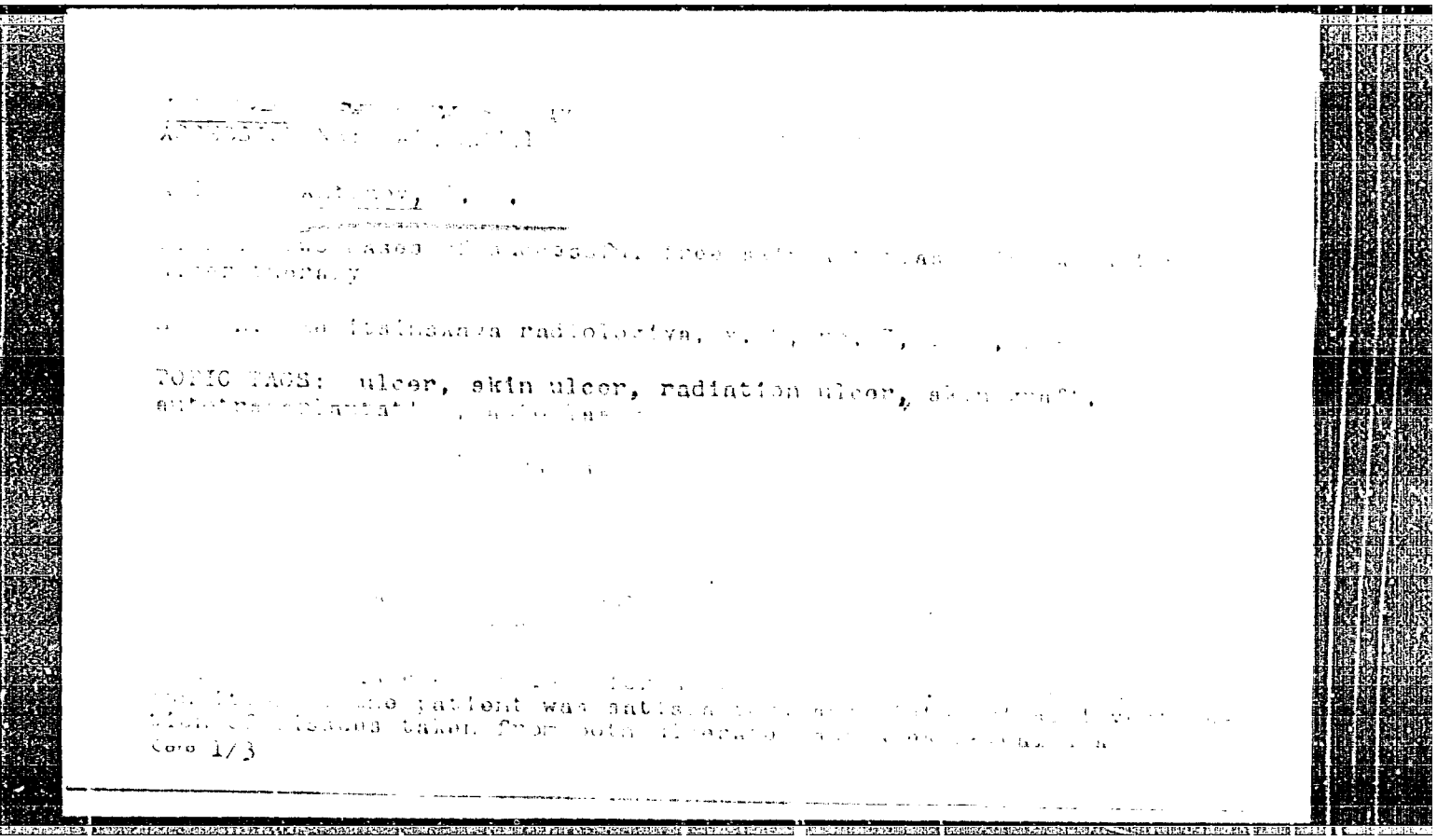
ABSTRACT: Investigations were conducted to determine the thermoregulatory function of the central nervous system. Data obtained from 200 experiments in two series showed that temperature variation in some internal organs and tissues exposed to a 20°C temperature medium and partial pressure of oxygen differed sharply. During hypoxemia there was a complete distortion of normal temperature relationships between the surface and deep layers of the brain. These were associated with a general lowering of brain temperature. Similar results were observed

Card 1/3

ACCESSION NR: AT4042647

under the toxic conditions of high oxygen pressures, especially during hyperoxemic convulsions. Ligature of common carotid arteries indicated that heat is transported by the blood from surface to deep layers of the brain. Less temperature variation was observed under these same conditions in liver, kidney, muscle, and skin suggesting that general hypothermia and disruption of normal temperature relationships between organs and tissues during hypoxemia and hyperoxemia are associated with the disruption of the thermoregulatory function of the central nervous system. Further analysis showed that removal of the cerebral cortex leads to a decreasing ability on the part of the organism to adapt to surplus oxygen. The author concludes that a change in the partial pressure of oxygen exerts a negative influence on the thermoregulatory function of the organism resulting in hypothermia and subsequent disruption of the normal temperature relationship between organs and tissues. External temperature exerts a positive influence on thermoregulation and stability of the organism against the deleterious effects of the partial pressure of oxygen. The adaptation of the organism in general, and of the thermoregulatory function in particular to the partial pressure of oxygen, is accomplished by the cerebral hemisphere and higher regions of the central nervous system.

Card 2/3



TOPIC TAGS: ulcer, skin ulcer, radiation ulcer,

Card 1/3

15019-65
ACCESSION NR: AP4042741

degeneration of left hip cells into planocellular cancer. [illegible] resections of both ulcers were made and [illegible] with [illegible] autografts. [illegible]

[illegible] Saratovskiy nauchno-issledovatel'skiy [illegible]

Card 2/3

ACCESSION NR: AP4042741

SUBMITTED: 01Nov63 ENCL: 00 SUB CODE: LS

NR REF SOV: 000 OTHER: 000

Card 3/3

ANTONOV, I.I.

Free dermatoplasty in the treatment of cancer of the skin of the lower extremities (two cases). Vop. onk. 10 no.5:108-109 '64.
(MIRA 18:8)

1. Iz Saratovskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir. - dotsent Ya.N.Rodin). Adres avtora: Saratov, ulitsa Chernyshevskogo, d.148, Institut travmatologii i ortopedii.

RODIN, Ya.N., dotsent; ANTONOV, I.I., kand. med. nauk

Surgical treatment of ununited fractures and pseudarthroses of the tubular bones. Ortop., travm. i protez. 26 no.1:24-29 Ja '65. (MIRA 18:5)

1. Iz Saratovskogo instituta travmatologii i ortopedii (dir. - dotsent Ya.N. Rodin). Adres avtorov: Saratov, ul. Chernyshevskogo, dom 148, Institut travmatologii i ortopedii.

ACC NR: AT6036478 SOURCE CODE: UR/0000/66/000/000/0031/0032

AUTHOR: Antonov, I. I.

ORG: none

TITLE: The thermoregulatory function of the central nervous system under conditions of hypoxemia and hyperoxemia [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 31-32

TOPIC TAGS: hypoxia, hyperoxia, biologic metabolism, thermoregulation, central nervous system

ABSTRACT:

The thermoregulatory function was experimentally studied in 52 decorticated and 35 decerebrated animals at various pO_2 and ambient temperatures (-10°, 17° to 20°, and 40° C).

It was found that decortication increases resistance to high (5 at) and low (equivalent altitude, 8000 m) pO_2 to about 4 times that of intact animals, and changes rate and amount of temperature drop in organs and tissues.

Card 1/3

L 09082-67
ACC NR: AT6036478

It is concluded that decortication eliminates or distorts adaptative changes in heat exchange and decreases temperature reactions to changed pO_2. Decortication increases the resistance of animals to high and low pO_2 regardless of the external temperature. Decerebration decreases the thermoreflex activity on which the adaptation of the organism to altered pO_2 is based. /W.A. No. 22; ATD Report 66-116/

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3 LS

SOSYANTS, V.G., dotsent, obshchiy red.; IVANOV, I.T., kand.tekhn.nauk, red.; KLOPATOV, K.K., insh., red.; ZHUKOV, A.I., prof., doktor tekhn.nauk, red.; GULYAYEV, N.F., kand.tekhn.nauk, red.; DUBOV, Yu.B., insh., red.; ANTONOV, I.K., kand.tekhn.nauk, red.; YEFREMOV, I.S., prof., doktor tekhn.nauk, red.; DYUSKIN, V.K., doktor tekhn.nauk, red.; VINOGRADOV, K.A., kand.sel'skokhoz.nauk, red.; BOTOVA, Yu.P., red. izd-va; SALAZKOV, N.P., tekhn.red.

[Materials of the Scientific and Technical Conference on Problems in Introducing Achievements of Science and Technology in Municipal Economy] Materialy Nauchno-tekhnicheskogo soveshchaniia po voprosam vnedreniia dostizhenii nauki i tekhniki v gorodskoe khoziaistvo. Moskva, Izd-vo kommun.khoz.RSFSR, No.6. [Roads and municipal electric transportation] Gorodskoi transport i dorogi. Pod obshchei red. V.G. Sosiantsa. 1959. 197 p. (MIRA 13:2)

1. Nauchno-tekhnicheskoye soveshchaniye po voprosam vnedreniya dostizheniy nauki i tekhniki v gorodskoye khozyaystvo. 2. Rukovoditel' sektora gorodskogo transporta Akademii kommunal'nogo khozyaystva (for Sosyants).

(Local transit) (Road construction)

DIMENTBERG, Fedor Menas'yevich; ARTOLOV, I.I., red.

[Calculus of screws and its applications in mechanics] Vintovoe ischislenie i ego prilozheniia v mekhanike. Moskva, Nauka, 1965. 199 p. (MIRA 19:1)

ACC NR: AT6010821 SOURCE CODE: UR/0000/65/000/000/0134/0141

AUTHOR: Antonov, I. L.

ORG: none

TITLE: Random search method for rotating rotor balancing

SOURCE: Moscow. Institut mashinovedeniya. Kolebaniya i prochnost' pri peremennykh napryazheniyakh (Vibrations and stability under variable stresses). Moscow, Izd-vo Nauka, 1965, 134-141

TOPIC TAGS: rotor, random process, random search technique, vibration, electric rotating equipment part

ABSTRACT: A random search method for balancing rotating rotors is developed. It assumes k adjustable unbalances to balance a given rotor by sensing the vibrations at the supports. One of the unbalances is chosen at random and stepped (by a constant amount) in one or the other direction. If the support vibrations decrease, the same unbalance is stepped again in the same direction, if the vibrations increase, then a new unbalance is chosen at random, etc. The theory of this random search technique is developed to find the number of steps and average time required to converge within one step of the optimum unbalance locations. The average time (in number of steps) is derived as

$$T \leq t_{av}^{*} < T + 2(N_1 - k)$$

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ACC NR: AT6010821

(where

$$N_1(k) = \begin{vmatrix} \frac{1}{2} & -\frac{2}{2k} & 0 & 0 & 0 & \dots \\ -\frac{k-1}{2k} & \frac{1}{2} & -\frac{3}{2k} & 0 & 0 & \dots \\ 0 & -\frac{k-2}{2k} & \frac{1}{2} & -\frac{4}{2k} & 0 & \dots \\ \dots & \dots & \dots & \dots & \dots & \dots \\ -\frac{1}{k} & 0 & 0 & 0 \dots & 0 & -\frac{2}{2k} & \frac{1}{2} & -\frac{k}{2k} \\ 1 & 1 & 1 & 1 \dots & 1 & 1 & 1 \end{vmatrix} + 1$$

$\frac{k!}{(2k)^k}$

and T = minimum number of steps required for the unbalances to step from original to optimum positions). This method is general and can be used in other applications. Orig. art. has: 12 formulas and 1 figure.

SUB CODE: 20, 12, 13/ SUBM DATE: 05Aug65

Card 2/2 mlp

SOBOLEV, V.D., kand. tekhn. nauk; ANTONOV, I.M., inzh.; ATAYEV, A.Ye., inzh.

Development of methods for calculating the permeability of thyratron control grids. Trudy MEI 55:213-225 '65. (MIRA 18:10)

KOZLOV, F.A.; ANTONOV, I.N.

Dependence of the heat conductivity of sodium on the oxide concentration. Atom. energ. 19 no.4:391-392 O '65.
(MIRA 18:11)

On calculation of the width of the forbidden zone and some highly complex semiconductors. D. I. Belvtskiy.
D. P. Belotskiy

Physico-chemical investigations of some cross sections in the systems Cd-In-Sb; Cd-Zn-Sb; Zn-Sb-Bi; Cd-Sb-Bi. D. P. Belotskiy, M. S. Sundich, I. N. Antonov.

Report presented at the 3rd National Conference on Semiconductor Compounds, Kishinev, 16-21 Sept 1963

ANTONOV, I.P.

Diagnosis and treatment of epilepsy in cysticercosis of the brain. Dokl. AN BSSR 8 no.10:682-684 O '64. (MIRA 18:3)

1. Belorusskiy nauchno-issledovatel'skiy institut nevrologii, neyrokhirurgii i fizioterapii.

ACC NR: AP5026450 SOURCE CODE: UR/0089/65/019/004/0391/0392

AUTHOR: Kozlov, F. A.; Antonov, I. N.

ORG: none

TITLE: The dependence of sodium heat conductivity upon the concentration of oxides

SOURCE: Atomnaya energiya, v. 19, no. 4, 1965, 391-392

TOPIC TAGS: ~~nuclear reactor coolant, liquid metal cooled reactor~~ THERMAL CONDUCTION, SODIUM, OXIDE FORMATION, HEAT LOSS

ABSTRACT: The thermal conductivity of sodium was determined by using a stainless steel tube (d = 66 mm) with accumulated oxide deposits. The upper part of the experimental tube was electrically heated while the bottom was cooled by running water. Thus, a heat flow was created, heat losses were checked and the temperatures in various places were measured including the metal surface of the tube and the outside surface of the enveloping insulating cylinder H = 700mm, d = 250 mm. The maximum temperature of the insulating surface was 303 K. The experimental data on the sodium heat conductivity for various oxide concentrations were adjusted for a temperature of 328 K. The results showed that the sodium thermal conductivity decreased by more than 50% when the oxide concentration reached an amount of 60% (by weight). In

Card 1/2 UDC: 621.039.534.6

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ACC NR: AP5026450

one sample, in which the content of oxygen was 0.13 wt. %, the thermal conductivity was 123.6 w/m .deg C. The experiments proved that the thermal conductivity of a layer consisting of sodium and sodium oxide was less than that of pure sodium. The presence of oxide deposits on the heat exchange surface can, therefore, distort the results in calculating the heat transfer to liquid metals. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 31Oct64/ ORIG REF: 004/ OTH REF: 002

Card 2/2 JS

ANTONOV, I. P.

ANTONOV, I. P. - "The clinical aspects and serodiagnosis of grippal injuries to the nervous system". Minsk, 1955. Minsk State Medical Inst. (Dissertation for the degree of Candidate of Medical Sciences).

SO: Knizhnaya letopis' No. 46, 12 November 1955. Moscow

ANTONOV, I.P.; SIZONENKO, T.P.

Some data on the state of the hematoencephalic barrier in cerebral cysticercosis. Zhur. nevr. i psikh. 63 no.2:213-216 '63 (MIRA 16:11)

1.Kafedra nervnykh bolezney (zav. - prof. D.A.Markov) Belorusskogo instituta usovershenstvovaniya vrachey i Belorusskiy nauchno-issledovatel'skiy institut nevrologii, neyrokhirurgii i fizioterapii (dir. - dotsent I.P. Antonov), Minsk.

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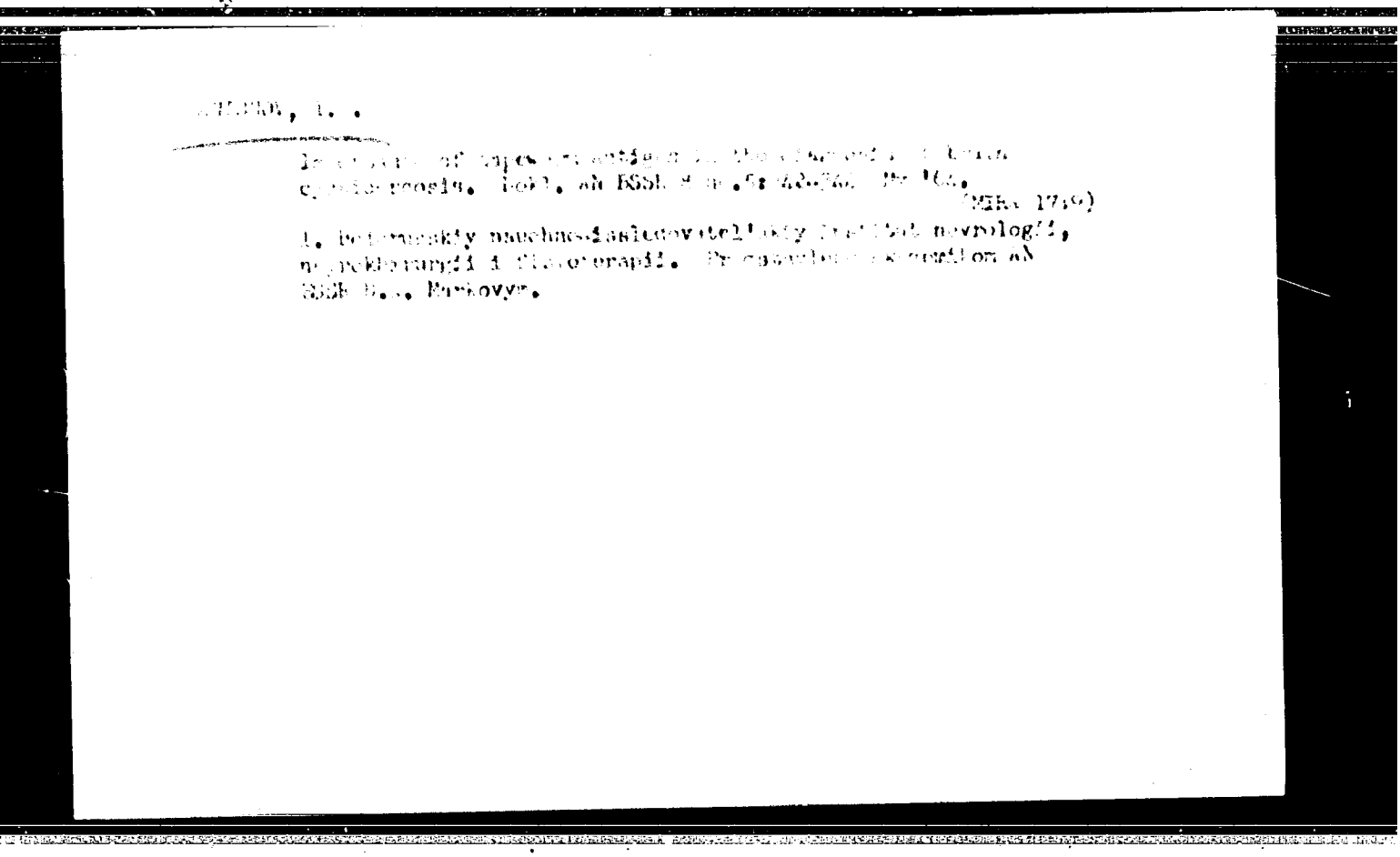
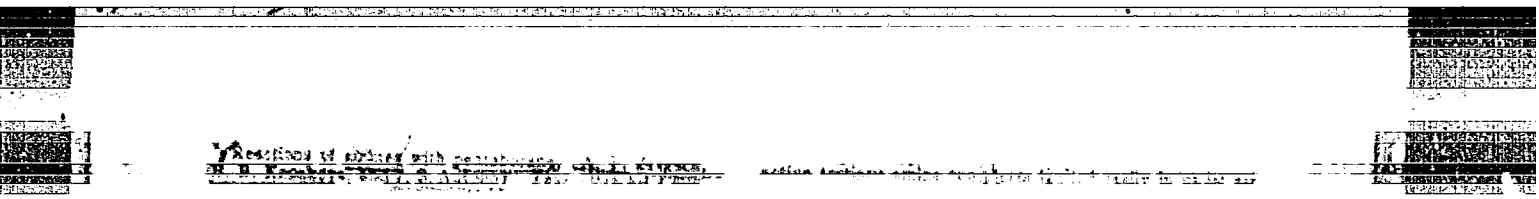


ZHIGACH, A.F., doktor khimicheskikh nauk, professor; ANTONOV, I.S., kandidat tekhnicheskikh nauk.

Use of hybrides in industry. Khim.prom.no.4:200-202 Je '56. (MLRA 9:10)
(Hydrides)



5(1)

AUTHORS: Zhigach, A. F., Antonov, I. S., Kazakova, Ye. B., Frayman, R. S.

SOV/64-59-2-7/23

TITLE: Continuous Method of Obtaining an Equimolecular Mixture of Ethyl-Aluminum Chlorides (Nepreryvnyy metod polucheniya ekvimolekulyarnoy smesi etil'alyuminiykhloridov)

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 2, pp 123-126 (USSR)

ABSTRACT: In contrast with other methods (Ref 1,a), in the present case the reaction between aluminum and ethylchloride (I) was carried out in a mixture of an equimolecular amount of alkyl aluminum halides with the latter serving as catalysts. The metal (or the aluminum alloy) is introduced into the mixture and reacts with a weak solution of (I) so that the process takes place continuously and without danger. In order to determine the influence exercised by various factors on the course of the reaction, experiments were made in glass ampoules which demonstrated (Table 1) that under the given conditions (5 hours, 50-55°) pure (I) reacts neither with aluminum nor with duralumin (DA). By increasing the addition to the catalyst the reaction is accelerated. In this connection the reaction with (DA) (containing 4% copper) takes place more

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rapidly than with Al. Investigations of the technological parameters of the processes showed that it is more favorable to carry out the reaction in the liquid phase than in the gas phase. The experiments with the liquid phase were made in a glass vessel (100 cm^3) (Fig 1) in the laboratory. The (DA) - splinters were introduced into an equimolecular mixture of bromides (6g) and (I) was introduced into the vessel from below. The reaction temperature was controlled by the velocity of passage of (I) and a heating jacket. The experimental results obtained were examined in a larger reaction column (700 cm^3) and compared to each other (Table 2). A reaction column of stainless steel (Fig 2) was used for further experiments in a plant (Fig 3). The reaction product obtained exhibited the following composition: 21,3% Al, 44,1% Cl, 29,0% C_2H_5. The coefficients of efficiency of the test plant are tabulated (Table 3). There are 3 figures, 3 tables, and 3 references.

Card 2/2

SOV/129-59-4-9/17

AUTHORS: Dr. Chem.Sc. Zhigach,A.F., Cand.Tech.Sci. Antonov,I.S., Engineers Pchelkina,M.A., Yukin,G.I., Dobrodeyev,A.S., and Matveyev,V.N.

TITLE: Surface Saturation of Steel with Boron from a Gaseous Medium (Poverkhnostnoye nasyshcheniye stali borom iz gazovoy sredy)

PERIODICAL: Metallovedeniye i Termicheskaya Obrabotka Metallov, 1959, Nr 4, pp 45-47 + 3 plates (USSR)

ABSTRACT: The authors of this paper investigated exhaustively the problem of borating of metallic surfaces by B_2H_6 for the purpose of determining optimal conditions of obtaining layers of high quality. The experiments and the experimental apparatus are briefly described. The possibility was established of borating from the gaseous phase, using as a circulation medium a mixture of B_2H_6 and hydrogen. The best results were obtained with the following regime: borating temperature 800 - 850°C; process duration 4 - 5 hours; ratio of the gas mixture $B_2H_6:H_2$ = 1:75; gas flow rate 75 - 100 litres/hour.

Card 1/2

SOV/129-59-4-9/17

Surface Saturation of Steel with Boron from a Gaseous Medium

Under such conditions a 200 micron thick borated layer of a high hardness is obtained. The microhardness of the layer at the surface reaches the value of 3000.

There are 9 figures and 6 references, 1 of which is Soviet, 1 German, 4 English.

Card 2/2

5.3700

77588
SOV/79-30-1-49/78

AUTHORS: Zhigach, A. F., Stryatskaya, V. N., Antonov, I. S., Makayeva, S. Z.

TITLE: Concerning the Mechanism of Diborane Reaction With Olefins

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 227-230 (USSR)

ABSTRACT: Diborane reacts with excess olefins, and forms, successively, alkyldiboranes (RB_2H_5; $R_2B_2H_4$; $R_3B_2H_3$; etc.) according to the reactions:

$$B_2H_6 \rightleftarrows 2BH_3 \text{ (IV)},$$
$$B_2H_6 + BH_3 \rightarrow B_3H_9 \text{ (V)},$$
$$B_2H_6 + C_nH_{2n} \rightarrow BH_3 + B_2H_5C_nH_{2n+1} \text{ (VI)},$$
$$B_2H_5C_nH_{2n+1} + BH_3 \rightarrow B_3H_8C_nH_{2n+1} \text{ (VII)},$$
$$B_3H_8C_nH_{2n+1} + C_nH_{2n} \rightarrow BH_3 + B_3H_7(C_nH_{2n+1})_2 \text{ (VIII)}$$
$$B_3H_7(C_nH_{2n+1})_2 + C_nH_{2n} \rightarrow BH_3 + 2B(C_nH_{2n+1})_3 \text{ (IX)}$$

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Concerning the Mechanism of Diborane Reaction With Olefins

77388
SOV/79-30-1-49/78

Theoretically, a B atom can join either of the C=C carbon atoms and form isomers. According to D. Hurd, diborane gave with olefins equal amounts of isomers (X) and (XI); for example:

$$B_2H_6 + 6\,(CH_3)_2C{=}CH_2 \rightarrow 2B\left[C(CH_3)_3\right]_3 \quad (X)$$

$$B_2H_6 + 6\,(CH_3)_2C{=}CH_2 \rightarrow 2B\left[(CH_3)_2CH{-}CH_2\right]_3 \quad (XI)$$

It was also reported (J. Am. Chem. Soc., 1956, Vol 78, p 5694; Chem. Eng. News, 1957, Vol 6, Nr 28) that the olefins, on reduction with sodium borohydride in the presence of $AlCl_3$, gave the corresponding primary alcohols. In view of the contradictory data on the order of diborane addition to olefins, the authors investigated the mechanism of this reaction. Propylene with diborane on heating to 230-250° C gave tripropylboron in 91%

Card 2/3

yield. Similarly, tributylboron and (tri-isobutyl) boron were obtained in 94% and 96% yields, respectively. The structure of the above was determined by oxidizing and hydrolyzing the alkylborons to the corresponding alcohols:

$$B(C_nH_{2n+1})_3 + 3H_2O_2 + KOH \rightarrow KBO_2 + 3C_nH_{2n+1}OH + 2H_2O$$

Primary alcohols (main products) were obtained from the three alkylborons; n-propanol, n-butanol, and n-isobutanol. This proved that diborane added to the double bond according to the reaction (XI), that is, contrary to Markownikow rule. There is 1 table; and 8 references, 5 U.S., 3 Soviet. The U.S references are: D. Hurd, J. Am. Chem. Soc., 1948, Vol 70, p 2053; R. Whatley, R. Pease, ibid., 1954, Vol 76, p 835; H. Brown, B. Subba, ibid., 1956, Vol 78, p 5694; H. Shyder, J. Kuck, J. Johnson, ibid., 1938, Vol 60, p 121; Chem. Eng. News, 1957, Vol 6, Nr 28.

SUBMITTED: January 24, 1959

YEGORNEKO, G.A.; VABEL', Ya.I.; ANTONOV, I.S.

Phase equilibria in the system $NaBH_4$ - NH_3. Zhur.neorg.khim. 7 no.10:2419-2425 O '62. (MIRA 15:10)
(Sodium borohydride) (Ammonia) (Phase rule and equilibrium)

ANTONOV, I.S.; KAZAKOVA, Ye.B.; KIGEL', R.A.

Determination of phosgene in technical boron trichloride. Zav.lab. 29 no.7:807 '63. (MIRA 16:8)
(Phosgene)

L 16183-65 EWT(m)/EPF(c)/EPR/EWP(j)/T/EWA(h) Pc-4/Pr-4/Pa-4/Peb RPL
ACCESSION NR AP4045843 WW/RM S/0064/64/000/009/0665/0667

AUTHOR Antonov, I. S., Lisitsyn, V. M., Stasinevich, D. S. Tsekhanskiy, Yu. V., Polyakova, N. Ya.

TITLE: A method of obtaining methylborate

SOURCE: Khimicheskaya promyshlennost', no. 9, 1964, 665-667

TOPIC TAGS: methylborate, methylborate manufacture, methylborate continuous synthesis, azeotropic mixture, methylborate extraction, mineral oil, methylborate yield

ABSTRACT: A new procedure, applicable to manufacturing conditions, for obtaining methyl borate is described. The arrangement of the equipment is figured. Synthesis is obtained under atmospheric pressure from boiling methanol under continuous addition of a 10-20% boric acid solution in methanol. Separation of the azeotropic mixture starts at 54C; this contains [illegible]% methylborate. Methylborate is isolated from the azeotropic mixture by extraction with dry mineral oil.

Card 1/2

L 1 183-65
ACCESSION NR: AP4046043

and evaporated at 200C. Continuous synthesis requires continuous feeding, separation of the azeotropic mixture and addition of warm steam, the latter being regulated automatically upon decrease of pressure in the synthesis column. The production of 1 ton methylborate required 0.62 tons boric acid and 1 ton methanol (theoretical requirements 0.594 and 0.927 tons resp.). Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00

SUB CODE: GC, MT, IC NO REF SOV: 000 OTHER: 006

Card 2/2

L 7700-66 EWP(e)/EWT(m)/EPF(c)/EWP(i)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD

ACC NR: AP5025863 SOURCE CODE: UR/0020/65/164/004/0809/0811

AUTHOR: Yegorenko, G. A.; Stasinevich, D. S.; Antonov, I. S.

ORG: none

TITLE: Thermal analysis of the sodium borohydride-hydrazine system

SOURCE: AN SSSR. Doklady, v. 164, no. 4, 1965, 809-811

TOPIC TAGS: hydrazine, sodium compound, boron compound, borohydride, hydrazine compound, phase diagram

ABSTRACT: Phase equilibria in the sodium borohydride-hydrazine system were studied in the range from -120 to 80C by the differential-thermal method, at concentrations from 0 to 85.6 wt. % $NaBH_4$. Both heating and cooling curves were plotted, and the results are shown in

Card 1/3

UDC: 546.271+546.171.5+541.123.2

ACC NR: AP5025863

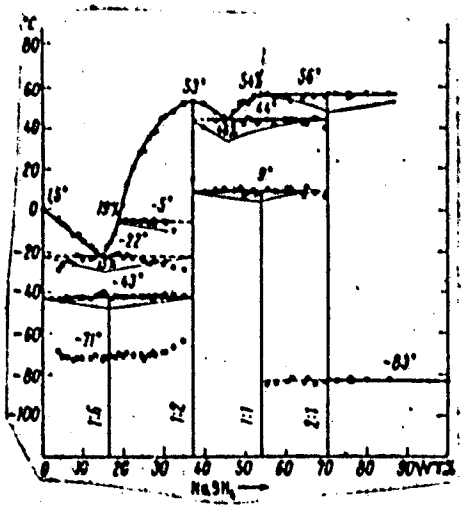

Fig. 1.
Phase diagram of the $NaBH_4$ - N_2H_4 system

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L 7760-66
ACC NR: AP5025863

Fig. 1. Four compounds were observed: $NaBH_4 \cdot 2N_2H_4$, $2NaBH_4 \cdot N_2H_4$, $NaBH_4 \cdot N_2H_4$, and $NaBH_4 \cdot 6N_2H_4$, and the corresponding thermal effects are discussed. The marked supercooling of mixtures of the system and the exothermic effect on the heating curves lead to the assumption that during cooling, the system as a whole tends toward a nonequilibrium crystallization; for this reason, in plotting the phase diagram, the authors determined the transition points from heating curves instead of cooling curves. The paper was presented by Academician I. I. Chernyayev 24 Mar 65. Orig. art. has: 1 figure.

SUB CODE: IC / SUBM DATE: 19Mar65 / ORIG REF: 004 / OTH REF: 007

nw
Card 3/3

L 10438-66 EWT(m)/EWP(b) JW/RM
ACC. NR. AP6000281 SOURCE CODE: UR/0078/65/010/009/1971/1975

AUTHOR: Gorbunov, A. I.; Solov'yeva, G. S.; Antonov, I. S.; Kharson, M. S.

ORG: none

TITLE: Solubility of diborane in diethylene glycol dimethyl ether

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 9, 1965, 1971-1975

TOPIC TAGS: ether, solubility, heat of vaporization, diborane, diethylene glycol, pressure, temperature dependence, high temperature effect, low temperature effect

ABSTRACT: The solubility of diborane in diethylene glycol dimethyl ether (DGDE) was determined at temperatures of -50, -20, 0, +20, +40, and +60C and partial pressures of diborane from 114 to 695mm Hg, and also at -20, 0, and +20C at pressures from 1 to 10 atm. The solutions were found to obey Henry's law under these conditions. An empirical equation is given for the temperature dependence of the Henry coefficients: for pressures up to 1 atm, $\log K = 6.86 - \frac{749.4}{T}$; for pressures up to 10 atm, $\log K = 6.66 - \frac{646.2}{T}$. The calculated heat of vaporization of diborane from its solutions in DGDE is 3 - 3.4 kcal/mole. It was found that the reaction of diborane with DGDE is autocatalytic and forms methane, the reaction rate being accelerated with rising pressure and temperature.

Card 1/2

UDC: 546.271

L 10438-66
ACC. NR. AP6000281

6

The vapor pressure (9,44,55) of DODE was determined in the range of 40 - 90C. M. K. Kapralova (44,55) kindly supplied the DODE samples. Orig. art. has: 4 figures, 3 tables, and 3 formulas.

SUB CODE: 07,20/ SUBM DATE: 14Mar64

jc

Card 2/2

L 14459-66 EWT(m)/EWP(j) WW/RM
ACC NR: AP6002965 (N) SOURCE CODE: UR/0286/65/000/024/0134/0134

INVENTOR: Antonov, I. S.; Galaktionova, N. A.; Pchelkina, M. A.

ORG: none

TITLE: A method for gas boronizing metal surfaces. Class 48, No. 177254

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 134

TOPIC TAGS: surface hardening, metal coating, boron, diborane

ABSTRACT: This Author's Certificate introduces a method for gas boronizing metal surfaces by high temperature treatment in a gas mixture based on diborane. A diboraneargon mixture is used to produce a layer which is tightly bound to the substrate and resistant to mechanical shocks.

SUB CODE: 11/13/ SUBM DATE: 11Oct63

Card 1/1

UDC: 621.785.5

ACC NR: AP6019051 (A) SOURCE CODE: UR/0078/66/011/002/0415/0419

AUTHOR: Yegorenko, G. A.; Stasinevich, D. S; Antonov, I. S.

ORG: none

TITLE: Phase diagram of the $NaBH_4$-NH_3 system

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 2, 1966, 415-419

TOPIC TAGS: phase diagram, thermal analysis, boron, ammonia, hydride, melting point

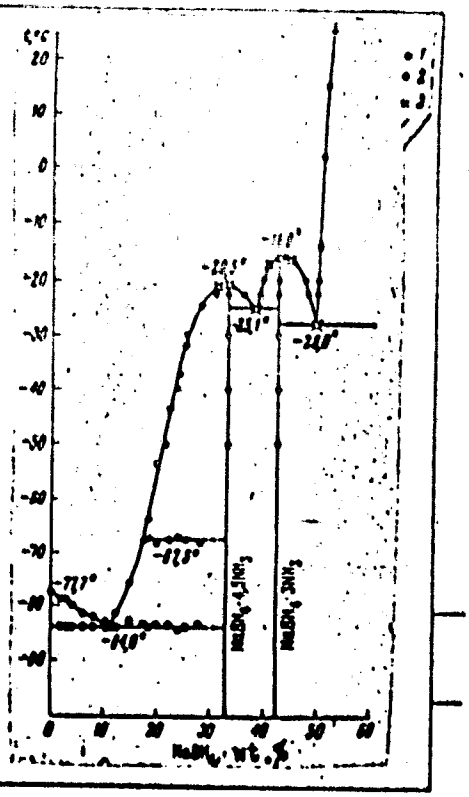
ABSTRACT: The present work is a continuation of an earlier investigation of the $NaBH_4$-NH_3 system by the author, with the difference that the temperature range in this case is -25.0 to -100C instead of 25.0 to -49.8C. An $NaBH_4$ of 99.5% purity was used. The saturation vapor pressure of desiccated, purified NH_3 at -49.8 and 40.0C was 310 and 539 mm Hg, respectively. Equilibria of the sodium borohydride -- ammonia system were investigated by the method of differential thermal analysis, and a phase diagram of the system was constructed (Figure 1). The time-temperature and the time-temperature gradient curves were recorded by EPP-09 and PSR-01 automatic potentiometers, especially adapted for this purpose, and by a chromel-copel thermocouple. The hot junctions of the thermocouple were placed in a Dewar vessel filled with melting ice. The standard used was $SiH(OC_2H_5)_3$, which freezes at -170C. The cooling rate was 1-2C per minute. A schematic diagram of the apparatus used to record the cooling curves is given. The amount

Card 1/2 UDC: 541.123.2+546.273'33'11+546.171.1

ACC NR: AT6019051

Figure 1. Phase diagram of $NaBH_4$-NH_3 system

o - data of cooling curves
• - tensimetric data
x - visual polythermic data



of the condensed ammonia was determined using the Mendeleyev-Clapeyron equation [not given] from the initial and end pressures of the ammonia in vacuum. The system in question, limited by a field of high concentration of ammonia, is characterised by the formation of $NaBH_4 \cdot 4.5NH_3$ with the melting point at -20.5C, which undergoes a polymorphic transformation at -67.5C. Orig. art. has: 4 fig. and 1 table.

SUB CODE: 07/ SUBM DATE: 20Jun64/ ORIG REF: 006/ OTH REF: 001

Card 2/2

Strength of Construction Elements

Dissertation: -- "Analysis of the Development of Methods for Testing Cars and Ways of Improving These Methods in the Future." Cand Tech Sci, Moscow Electromechanical Inst of Railroad Transport Engineers, Moscow, 1953. (Referativnyy Zhurnal -- Mekhanika, Moscow, Mar 54)

SO: SUM 213, 20 Sep 54

ANTONOV, Igor' Vasil'yevich; BABENKO, Vitaliy Il'ich; OSTRYAKOV, Konstantin Ignat'yevich; BOGDANDIROV, P.P., inzhener, redaktor; BOBROVA, Ye.N., tekhnicheskiy redaktor

[Progressive work organization of calcium coating shops] Peredovaia organizatsiia raboty kal'tsesalivochnogo tsekha. Moskva, Gos. transp.zhel-dor. izd-vo, 1956. 27 p. (MLRA 10:1)
(Bearings (Machinery))

S/139/61/000/004/011/023
E073/E535

AUTHORS: Vlasov, A Ya. and Antonov, I.V.

TITLE: Magnetic temperature hysteresis and magnetostriction temperature hysteresis of silicon-nickel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.4, 1961, 115-119

TEXT: Yo S Shur and his team and A.I.Drokin made a detailed study of the magnetic temperature hysteresis in nickel and iron containing 4% Si. The results which they obtained indicate that this type of hysteresis is also due to irreversible displacements of the domain boundaries. Studies of the dependence of the magnetic temperature hysteresis on the external mechanical stresses for nickel have shown that uniform stresses below the limit of elasticity always lead to a drop in the magnetic temperature hysteresis. The existence of a magnetostriction temperature hysteresis was first detected in nickel by Kirenskiy and one of the authors (A Ya.Vlasov Ref.6: Izv.AN SSSR, Ser.fiz., 16, No.6, 673, 1952). However, this phenomenon has still not been adequately investigated. Temperature hysteresis of magnetization

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is caused by both 180° and 90° displacements, but magnetostriction effects are connected only with 90° displacements. Therefore the temperature hysteresis of magnetostriction is caused only by 90° irreversible displacements of the boundaries. It is advisable to study magnetostriction temperature hysteresis simultaneously with the magnetic temperature hysteresis since they are observed under equal field conditions and obey qualitatively the same laws. Hitherto, such investigations have been carried out only on nickel by one of the authors (I.V.Antonov (Ref.7: Dissertation, Krasnoyarsk Pedagogic Institute, 1960). In the present paper the authors deal with experiments on nickel with additions of silicon which was subjected to thermal cycling in fields up to 10 Oe in the temperature range 8 to 60°C. The alloy was chosen because its low Curie point (50°C) simplifies the compensation for the thermal expansion of the specimen and allows measurements to be made throughout the entire temperature range with a single compensator. The magnetization and the magnetostriction during heating and cooling were measured on a test-rig suitable for simultaneous measurement of both phenomena. A sketch of the test-rig is shown in Fig.1. The coils of the vertical astatic

[illegible]agnetometer 1 had two independent windings - a magnetization winding 2 and a compensation winding 3 (for neutralising the vertical component of the Earth and other parasitic fields). [illegible] of the coils had a [illegible] cooling [illegible]. The magnetostriction was measured by [illegible] principle of [illegible] mechanical [illegible] [illegible] specimen. The specimen 5 [illegible] compensation rod [illegible] [illegible] tube 7, whose surface carried a heating spiral 8 [illegible] of the specimen [illegible] by magnetostriction [illegible] transmitted [illegible] to an agate prism 9 which supported a light aluminum lever 10, the second prism 11, resting on the [illegible] was connected to the compensation [illegible] [illegible] magnetostriction [illegible] light beam on the scale. A damper [illegible] mechanical [illegible] lever. The instrument had a sufficiently high sensitivity (0.25 x 10 [illegible]) permitted fixing reliably the zero value of the magnetostriction at

Card 3/6

a constant temperature and ensured reproducibility of the measurements. Hence demagnetization could be effected by direct current switching and changing over to an a.c. which decreased to zero. The changes in the magnetization were recorded during heating and cooling at intervals of 6 to 8 Gauss each. The specimens were rods (length 251.5 mm and diameter 1.8 mm) of nickel with 4 wt.% Si. To relieve internal stresses, the specimens were subjected to high-temperature annealing in vacuo and subsequent slow cooling with magnetic protection. Fig.2 shows the curves of magnetization (a) and magnetostriction (b) obtained during heating and cooling in d.c. fields of 0.0195, 0.05, 1.30, 2.60 and 5.7 Oe. Magnetostriction cannot be detected in a field of 0.0195 Oe, although magnetization was clearly pronounced at this field intensity. The changes in magnetization ΔI, Gauss and in the magnetostriction $\Delta \lambda$ (Fig.3), resulting from cyclic temperature changes at first show a sharp increase with field strength, reaching a maximum for fields of 0.2 to 1.0 Oe and then a reversion to zero at a field strength of 5.77 Oe. The temperature hysteresis of magnetization $\Delta I/I_0$ and magnetostriction $\Delta \lambda/\lambda_0$

Card 4/5

VLASOV, A.Ya.; ANTONOV, I.V.

Temperature-dependent magnetic hysteresis and temperature hysteresis of magnetostriction in nickel and nickel-copper alloys. Izv.Sib.otd.AN SSSR no.8:121-124 '61. (MIRA 14:8)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR, Krasnoyarsk i Kemerovskiy pedagogicheskiy institut.
(Hysteresis) (Copper-nickel alloys) (Magnetostriction)

24 2200

S/126/61/012/002/005/019
E021/E335

AUTHORS: Antonov, I.V. and Vlasova, A.Ya.

TITLE: Temperature hysteresis of the magnetization and the magnetostriction of nickel

PERIODICAL: Fizika metallov i metallovedeniye, 1961, vol. 12, No. 2, pp. 188 - 192

TEXT: Experimental results are given of the magnetic temperature hysteresis and the magnetostriction temperature hysteresis of nickel in a cycle heating - cooling (20 to 400 °C) in fields of various strengths. The experiments were made on a test rig which enabled, simultaneously the magnetization and the magnetostriction. The magnetization was measured by means of a vertical [illegible] magnetometer. The magnetostriction was measured by means of an instrument operating on the principle of a mechanical optical lever with compensation of the thermal expansion of the specimen. The instrument for measuring the magnetostriction had a sensitivity of 0.28×10^{-7} with good repeatability of the results. The

Card 1/3

demagnetization was by means of ... changing over to AC, the amplitude of which decreased to zero. The magnetization as well as the magnetostriction ... were measured in every case in a temperature ... from 20 °C to 400 °C. Fig. ... shows the ... magnetization, I gauss as a function of the ... (1-1 0.0195 Oe; 2-2 0.65 Oe; 3-3 2.60 Oe ...). Fig. 3 gives the temperature hysteresis of the magnetostriction (2-2 0.65 Oe; 3-3 2.60 Oe, 4-4 9.00 Oe). ... shows the dependence of the magnetic temperature hysteresis (Curve 1 - ΔI, gauss) and of the magnetostriction temperature hysteresis (Curve 2 - $\Delta\lambda \times 10^{-6}$) as a function of the external field H Oe. Fig. 5 shows the relative changes in the magnetization (Curve 1) and the magnetostriction (Curve 2) of nickel after a heating-cooling cycle as a function of the intensity of the external magnetic field H Oe. The results are in agreement with views expressed by Vonsovskiy ... and Akulov on the process of magnetization, according to which in very weak fields

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the displacement of the boundaries is reversible. The proportion of the irreversible displacements increases with increasing field and a maximum value is reached for a certain field intensity. It is particularly for these field intensities that maximum values of temperature hysteresis are obtained.
There are 5 figures and 11 references: 10 Soviet and 1 non-Soviet. The English-language reference quoted is:
Ref. 1 - I.R. Ashworth - Ferromagnetism, London, 1938.

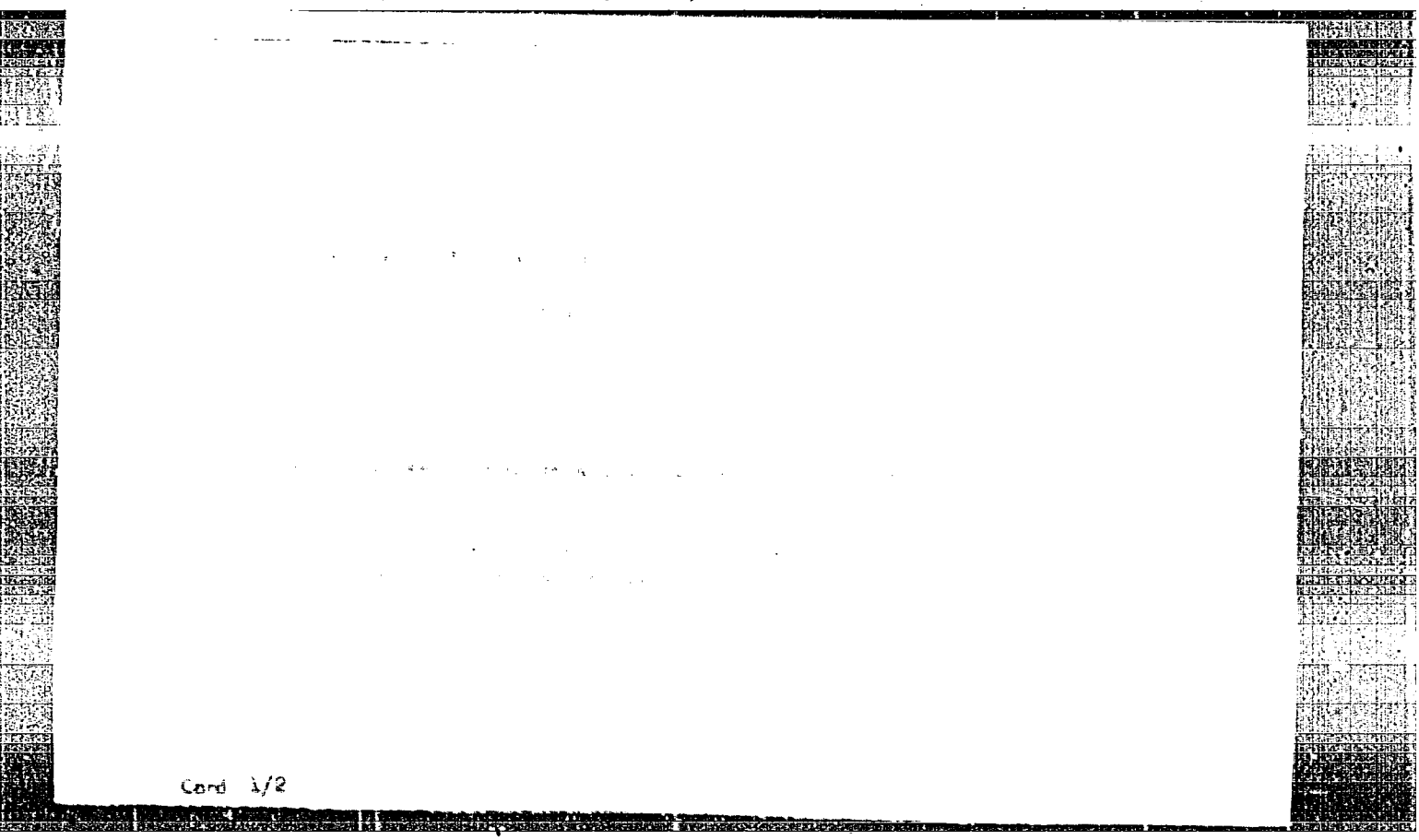
ASSOCIATION: Institut fiziki SO AN SSSR (Institute of Physics of SO AS USSR)
Kemerovskiy pedagogicheskiy institut (Kemerovo Pedagogical Institute)

SUBMITTED: May 20, 1960 (initially)
March 20, 1961 (after revision)

ANTONOV, I.V.

Magnetostriction of nickel-copper alloys in weak fields. Izv.vys. ucheb.zav.; fiz. no.5:170-171 '61. (MIRA 14:10)

1. Kemerovskiy pedagogicheskiy institut.
(Nickel-copper alloys--Magnetic properties)



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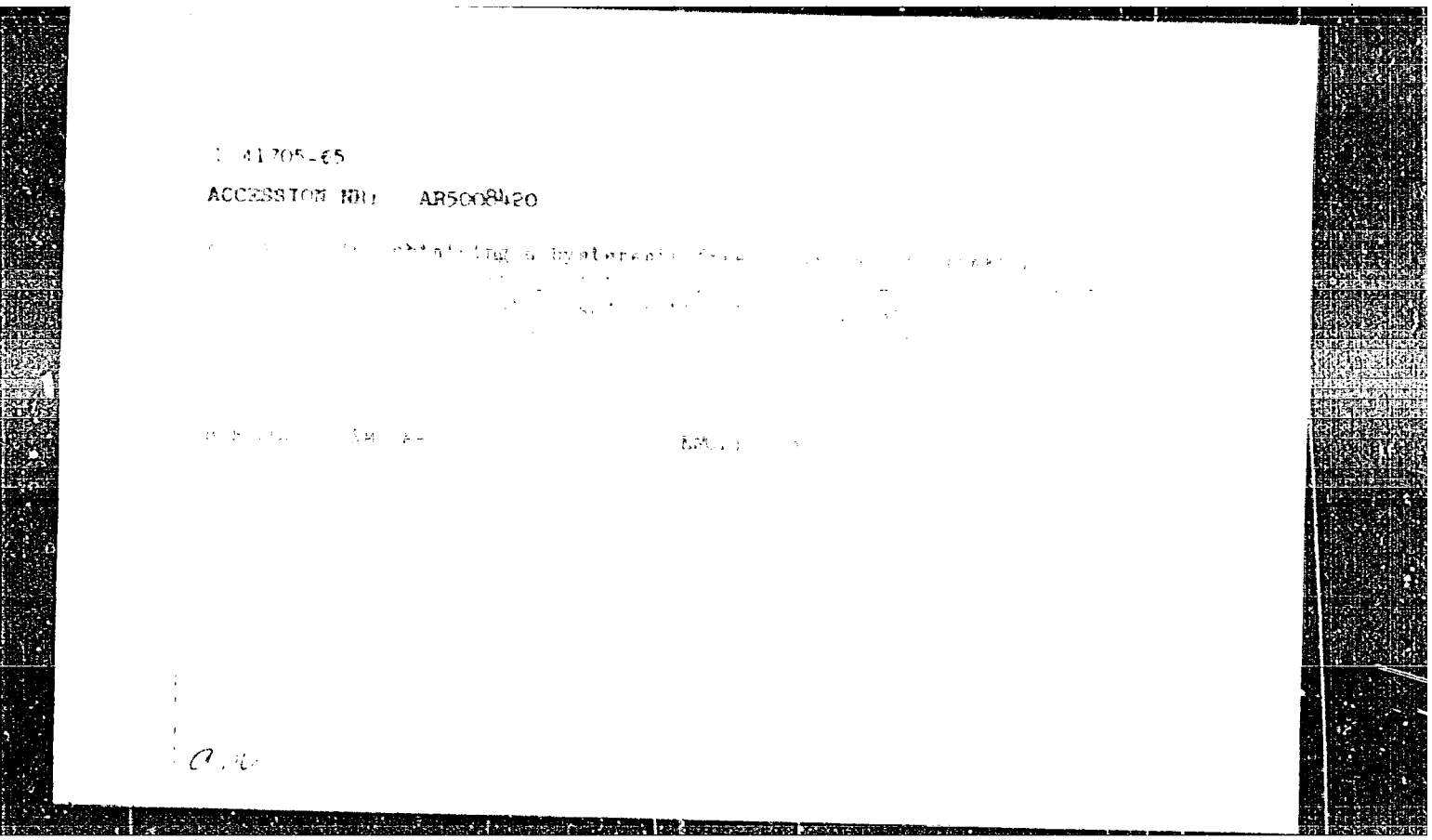

ACCESSION NO: AR5008420

AUTHOR: Antonov, I. V.; Usanov, V. V.; [illegible]

TITLE: Time dependence of magnetization [illegible]

CITED SOURCE: Uch. zap. Kemerovsk. gos. ped. in-t, vyp. 7, 1963, 87-89

TOPIC TAGS: time dependence, magnetization, recrystallization [illegible]

SUB CODE: EM, MM ENCL: 00

Card 1/1

ANTON V, I.V.

Determination of magnetostriction constant and their temperature dependence on the basis of experiments conducted on polycrystalline specimens. Izv. vys. ucheb. zav.; fiz. no.5:128-130 '64. (MIRA 17:11)

1. Kemerovskiy pedagogicheskiy institut.

ANTONOV, I.Yu.

Introducing short periods of scavenging in vibration and machine drilling. Razved.i okh.nedr 28 no.3:48-49 Mr '62. (MIRA 15:4)

1. Kurgan-Tyubinskaya gidrogeologicheskaya partiya.
(Vakhsh Valley--Boring)

DINIC, Miodrag, sanitetski potpukovnik mr.ph.; POPASEVIC, Blanka, docent dr.; ANTONOV, Ivan, sanitetski porucnik mr.ph.

Colorimetric method for the determination of novocaine hyurochloride in mixtures with adrenaline or corbasile. Vojnosanit. pregl. 23 no.1:34-36 Ja '66.

1. Vojnosanitetski zavod u Sarajevu; Medicinski fakultet u Sarajevu, Institut za hemiju.

[redacted], PETKO

Geography and Geology

Tursene i prouchvane na podzemni vodi; spetsialna khidrogeologiia. Sofiia, Nauka i izkustvo, 1957. 412 p.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No2 2, February 1959, Unclass.

ANTONOV, Khr.

Hydrogeologic conditions in the Dimitrovgrad region.
Godishnik Min geol inst 7:61-86 '60/'61 [publ. '62].

ANTONOV, KH.

"Underground water in the region of the block of salt in Provadiya Okoliya," p. 191 (Izvestiia, Vol. 5, 1957, Sofiia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

ANTONOV, K.

"Subterranean waters in Bulgaria. Tr. from the Russian."

CASOPIS PRO MINERALOGII A GEOLOGII., Praha, Czechoslovakia., Vol. 4, No. 1, 1959

Monthly list of EAST EUROPEAN ACCESSIONS (EEAI), LC, Vol. 8, No. 7, July 1959, Unclas

ANTONOV., K. A., BOGOSLOVSKIY, P. V. Eng.

Repair of 35 kilovolt supporting pin-insulators. Rab., energ., 23, no. 8, 1952.

SO: MLRA. November 1952.

1. ANTONOV, K.A.; BOGOSLOVSKIY, P.V.

2. USSR (600)

4. Electric Transformers

7. Operating 3-10 kv line transformers, K.A. Antonov, Eng. P.V. Bogoslovskiy, Nab.energ. 3 no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

1. ANTONOV, K.A.; BOGOSLOVSKIY, P.V.

2. USSR (600)

4. Electric Circuit Breakers

7. Preventing damage to lead-ins of circuit breakers VT-35N, K.A. Antonov, Eng. P. V. Bogoslovskiy, Rab.energ. 3 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

ANTONOV, Khr., doktor

Karstic water in the region of the Sofia western Stara Planina.
Godishnik Min geol inst 8:517-536 '61-'62 [publ. '63].

ANTONOV, K.I., inzh.; SAMOSATSKIY, N.N., inzh.

Modernization of screw presses. Khim. mashinostr. no. 6: 34-35 N-D '62. (MIRA 17:9)

ANTONOV, K. [K.]

Cand. of Technical Sciences.

"Reinforced Concrete with Supporting Mounting in Civilian Construction" presented at VIII Session of Acad. of Architecture of USSR (27-31 Dec 1947, Moscow). Arkhitektura i Stroitel'stvo," Vol. III, No. 1, Jan 1948.

[illegible], [illegible].

32437. [illegible], K. K. Sravnitel'naya otsenka [illegible] metallicheskogo i [illegible] karkasa vysotnogo [illegible]. [illegible] i konstruktsii v [illegible]. [illegible], No. 3 194[illegible], s. 25-31..

S[illegible]: Letopis [illegible] Statey, Vol. 44

ARKHIPOV, K

K

Dostizheniya otechestvennoy tekhniki no stroitel'stve vysotnykh zdani v Moskve (Achievements of Soviet technology in the construction of multi-story buildings in Moscow) Moskva "Pravda", 1951. 31 p. illus. Cataloged from abstract. A lecture on construction of tall buildings in and around Moscow indicating dimensions and number of stories and comparing them with USA skyscrapers.

N/5
748.1
.A6

IVANOV, I.T., kandidat tekhnicheskikh nauk, otvetstvennyy redaktor; ANTONOV, K.K., redaktor; VOLZHENSKIY, A.V., redaktor; GORNOV, V.N., redaktor; KUZNETSOV, G.F., redaktor; PEVZNER, I.V., inzhener, redaktor; ROTERT, P.P.; FRIDBERG, G.V., redaktor; PECHKOVSKAYA, T.V., tekhnicheskiy redaktor

[Skyscraper designs; experience in design and construction] Konstruktsii vysotnykh zdanii; iz opyta proektirovaniia i vozvedeniia. Red. kollegiia I.T.Ivanov, K.K.Antonov, A.V.Volzhenskii i dr. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1952. 103 p. [Microfilm] (MLRA 7:10)

1. Chlen-korrespondent Akademii arkhitektury SSSR (for Antonov, Volzhenskiy, Gornov, Kuznetsov, Rotert) 2. Akademiya arkhitektury SSSR, Moscow. Institut stroitel'noy tekhniki.
(Skyscrapers)
(Architecture--Designs and plans)

USSR/Engineering - Tall Buildings Feb 52

"Soviet Science and Tall Building Construction," K. K. Antonov, Corr Member, Acad Sci USSR

"Priroda" No 2, pp 58-65

"Conspicuous among Moscow skyscrapers is the Moscow U, 220 m high and 2,200 cu m in vol (cf "Priroda" No 1, 1952). Under construction are other buildings: 32-floor, 2,000-room administrative building; 26-floor, 1,000-room hotel on shore of Moscow River; 32-floor residential house on Kotelnicheskaya Quay;

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20-floor hotel on Komsomolskaya Place; and others. All buildings are outstanding in their architectural beauty, in contrast to the ugly, gloomy skyscrapers of New York.

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ANTONOV, K.K.

Conference on skyscrapers. Biul.stroi.tekh. 10 no.12:35-36 D '53. (MLRA 6:8)
(Skyscrapers)

ANTONOV, K.K., chlen-korrespondent; LEBEVSKAYA, O.M., kandidat tekhnicheskikh nauk.

Wall construction in many-storied framed buildings. Gor.khoz.Mosk. 27 no.8: 20-23 Ag '53. (MLRA 6:8)

1. Akademiya arkhitektury SSSR (for Antonov). (Walls)

ANTONOV, K.K.

New requirements in connection with the developments in prefabricated reinforced concrete construction. Standartizatsiia no.4:41-43 Jl-Ag '55. (MLRA 8:10)

1. Chlen-korrespondent Akademii Arkhitektury SSSR
(Precast concrete construction)

ANTONOV, Konstantin Konstantinovich; ZAKHAROV, N.G., kandidat tekhnicheskikh nauk, redaktor; TARAYEVA, Ye.K., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Analytical method in the planning and standardization of precast concrete elements; bent elements] Analiticheskii metod v ekonomike proektirovanii i unifikatsii sbornykh zhelezobetonnykh konstruktsii; izgibaemye elementy. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1956. 30 p. (MLRA 10:6)
(Precast concrete construction)

ANTONOV, K.K., kandidat tekhnicheskikh nauk.

Unification of net loads of standard multistoried industrial buildings. Biul. stroi. tekh. 13 no.9:7-8 S '56. (MLRA 9:11)

1. Institut promyshlennykh zdaniy i sooruzheniy Akademii stroitel'stva i arkhitektury SSSR.
(Construction industry)

ANTONOV, K.K., kand. tekh. nauk; KHARITONOVA, Ye.P., inzh.

Results of testing precast reinforced concrete roofs built without using girders. Biul. stroi. tekh. 15 no.2:10-15 F '58. (MIRA 11:2)

1. Nauchno-issledovatel'skiy institut puti i stroitel'stva Akademii stroitel'stva i arkhitektury SSSR.
(Roofing, Concrete--Testing)

ANTONOV, K.K., kand.tekhn.nauk

"Precast reinforced concrete foundations of frame buildings" by S.A. Rivkin, D.A. Korshunov, M.M. Frenkel'. Reviewed by K.K. Antonov. Bet. i zhel.-bet. 8 no.11:3 of cover N '62. (MIRA 15:11)

(Foundations) (Precast concrete)
(Rivkin, S.A.) (Korshunov, D.A.) (Frenkel', M.M.)

AYZENSHTADT, G.E.-A.; ANTONOV, K.V.

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(Kazakhstan--Petroleum geology)

AYZENSHTADT, Girsh Yesel'-Aronovich; ANTONOV, Karp Vasil'yevich; NEVEL'SHTEYN, V.I., vedushchiy red.; SAFRONOVA, I.M., tekhn.red.

[Formation of salt domes and oil pools in the southern part of the Emba] Formirovanie solianykh kupolov i zalezhei nefti IUzhnoi Emby. Leningrad, Gostoptekhizdat, 1963. 315 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.207). [MIRA 16:8)
(Emba region--Oil fields) (Emba region--Salt domes)