32919
S/194/61/000/011/049/070
D271/D302

Nickel plating of type metal...

of ultrasonics made it possible to shift the threshold of quality coverage from 1.5 to 5 A/dm^2; this accelerates by four times the process of nickel deposition. At the same time, ultrasonic vibrations make it possible to raise cover hardness to 450 kg/mm^2 (instead of 250 when usual methods of nickel plating are used). It is noted that it is not worth while increasing the ultrasonic intensity beyond 0.5 W/cm^2 as the deposition of metal function of current remains virtually constant after this limit. An experimental ultrasonic bath was developed with a capacity of 80 l, using two vibrators type PM-1.3; experimental plating was done in this bath in optimal conditions. It was found that by using ultrasonics nickel plating can be accelerated altogether by 6-8 times. 5 figures. 1 table. [Abstracter's note: Complete translation]

Card 2/2

NOVITSKIY, Vladimir Anatol'yevich, kand. geogr. nauk; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhn. red.

[Electrification is the pivoting point in creating the economics of communism] Elektrifikatsiia - sterzhen' sozdaniia ekonomiki kommunizma. Minsk, 1961. 26 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.24) (MIRA 15:2)

(Electrification)

TSELIBEYEV, B.A., kand.meditsinskikh nauk; NOVITSKIY, V.B.

Electroconvulsive therapy and aminazine in the treatment of schizophrenia. Vrach. delo no.9:114-116 S '60. (MIRA 13:9)

1. Gruppa AMN SSSR, prikreplannaya k deystv. chlenu AMN SSSR, prof. Ye.A. Popvu i Moskovskaya oblastnaya psikhonevrologicheskaya bol'nitsa No 3.

(SHOCK THERAPY) (CHLORPROMAZINE)
(SCHIZOPHRENIA)

NOVITSKIY, V.D.

PHASE I BOOK EXPLOITATION SOV/4012

Akademiya nauk Ukrainskoy SSR. Otdeleniye fiziko-matematicheskikh nauk. Sessiya po mirnomu ispol'zovaniyu atomnoy energii

Trudy (Transactions of the Session on Peaceful Uses of Atomic Energy), Kiyev, Izd-vo AN Ukrainskoy SSR, 1958. 188 p. 2,500 copies printed.

Resp. Ed.: M. V. Pasechnik, Doctor of Physics and Mathematics; Editorial Board: A. K. Val'ter, Academician, Academy of Sciences Ukrainskaya SSR, O.F. Nemets, Candidate of Physics and Mathematics, M. V. Pasechnik, Doctor of Physics and Mathematics; Ed. of Publishing House: T. K. Remennik; Tech. Ed.: N. P. Rakhlina.

PURPOSE: This collection of articles is intended for physicists and scientific personnel working in nuclear research.

COVERAGE: The articles in this collection discuss linear proton accelerators, electron accelerators, electrostatic accelerators, magnetron lenses, the interaction of charged particles and neutrons with nuclei, the applications of tagged atoms in physics research, and experimental methods. Some of the articles are descriptions of already existing nuclear installations and experimental apparatus. No personalities are mentioned. There is a bibliography of Soviet and non-Soviet sources at the end of most of the articles.

GORDEYLYAKOVSKIY V.V.; NOVITSKIY, V.F.

New type of power installations. Gaz.prom.no.1:21-25 Ja '57. (MLRA 10:1)

(Gas turbines) (Gas producers)

NOVITSKIY, V.F. (Kiyev); TRAKHTENBERG, A.Ye.(Kiyev)

Heating system boilers fired with natural gas. Vod.i san. tekh. no.7:24-26 Je '60. (MIRA 13:7)
(Boilers)

NOVITSKIY, V.G.

Basic trends in the manufacture of new spinning and textile machines for the production of synthetic fibers. Khim.volok. no.3:13-14 '62. (MIRA 16:2)

1. Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu.
(Spinning machinery) (Textile machinery)

GLINTERNIK, S.R. (Leningrad); YEMEL'YANOV, A.V. (Leningrad); MEYMAN, L.R. (Leningrad); NOVITSKIY, V.G. (Leningrad)

Assurance of operational reliability of ionic converters in power engineering systems. Izv. AN SSSR. Otd. tekh. nauk. Energ. i avtom. no.5:19-27 S-O '59. (MIRA 13:1)

1. Energeticheskiy institut AN SSSR.
(Electric current converters)

NOVITSKIY, V.G. (Leningrad)

Effect of d.c. power transmission on the static stability of an electric power system. Izv.AN SSSR.Otd.tekh.nauk Energ. i avtom no.1:12-23 Ja-F '61. (MIRA 14:3)
(Electric power distribution--Direct current)

GERTSENBERG, G.R.; GLINTERNIK, S.R.; KASHTELYAN, V.Ye.; KICHAYEV, V.V.; NOVITSKIY, V.G.; SIRYY, N.S.

Study of the parallel operation of electric current generators feeding two electric power systems via a.c. and d.c. power transmission lines. Sbor. rab. po vop. elektromekh. no.6:17-36 '61. (MIRA 14:9)

(Electric power distribution) (Electric generators)

GLINTERNIK, S.R.; KICHAYEV, V.V.; NOVITSKIY, V.G.

Characteristics of a d.c. power network constituting a part of an a.c. power transmission system. Sbor. rab. po vop. elektromekh. no.6:37-50 '61. (MIRA 14:9)

(Electric power distribution)

NOVITSKIY, V.G., inzh. (Leningrad)

Increase in the static stability of a system by a method which involves the regulation of the transmission of d.c. power. Elektrichestvo no.6:58-61 Je '61. (MIRA 14:10)
(Interconnected electric utility systems)

NOVITSKIY, V.G.

Use of MN-7 and MPT-9 electronic simulating devices in calculating the steady-state stability of a system which includes a d.c. power transmitting network. Sbor. rab. po vop. elektromekh. no.6: 153-160 '61. (MIRA 14:9)

(Electric power distribution—Models)
(Electric network analyzers)

NEYMAN, Leopid Robertovich; GLINTERNIK, Saveliy Romanovich; YEMEL'YANOV, Anatoliy Vladimirovich; NOVITSKIY, Viktor Grigor'yevich; BARKOVSKIY, I.V., red. izd-va; BOCHVER, V.T., tekhn. red.

[D.C. transmission lines as elements of power systems]Elektroperedacha postoiannogo toka kak element energeticheskikh sistem. Moskva, Izd-vo Akad. nauk SSSR, 1962. 340 p. (MIRA 15:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Neyman).
(Electric power distribution--Direct current)
(Electric current converters)

KOSTENKO, M.P., akademik; NEYMAN, L.R.; GLINTERNIK, S.R., kand.tekhn. nauk; KASHTELYAN, V.Ye., inzh.; NOVITSKIY, V.G., inzh.; SIRYY, N.S., inzh.; GERTSENBERG, G.R., kand.tekhn.nauk

Automatic control and stability during parallel operation of the generators of an electric power plant feeding a.c. and d.c. power transmission lines. Elektrichestvo no.10:1-9 O '62. (MIRA 15:12)

1. Institut elektromekhaniki AN SSSR (for Kostenko, Neyman, Glinternik, Kashtelyan, Novitskiy, Siryy). 2. Vsesoyuznyy elektrotekhnicheskiy institut (for Gertsenberg). 3. Chlen-korrespondent AN SSSR (for Neyman).

(Electric power distribution)

NOVITSKIY, V.G.

Consideration of d.c. power transmission lines in the calculation of the static stability of a consolidated electric power system. Sbor. rab.po vop.elektromekh.no.8:97-108 '63. (MIRA 16:5)

(Electric power distribution)

GLEBOV, I.A.; KASHTELYAN, V.Ye.; NOVITSKIY, V.G.; SIDEL'NIKOV, V.V.; SIROTKO, V.K.; MEL'NIKOV, N.A.; LUGINSKIY, Ya.N.; STERNINSON, L.D.; YUREVICH, Ye.I.; TSUKERNIK, L.V.

Scientific problems in the field of automatic control and regulation of large electric power systems and their elements. Sbor. rab. po vop. elektromekh. no.10:23-40 '63. (MIRA 17:8)

NOVITSKIY, V. K.

Dissertation: "Investigation of the Formation and Structure of Hollow Steel Ingots." Cand Tech Sci, Central Sci Res Inst of Technology and Machine Building (TSNIITMash), 17 May 54. Vechernyaya Moskva, Moscow, 7 May 54.

SO: SUM 284, 26 Nov 1954

SOV/137-58-7-14814

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 126 (USSR)

AUTHOR: Novitskiy, V.K.

TITLE: An Investigation of the Forming and Structure of Hollow Steel Castings (Issledovaniye formirovaniya i stroyeniya stal'nykh polykh otlivok)

PERIODICAL: V sb.: Vyplavka stali dlya fasonnogo lit'ya. Moscow, Mashgiz, 1957, pp 106-143

ABSTRACT: The investigation adduces a comparison of existing methods of producing critical hollow parts and notes the low yield of passable work produced when they are made by hydraulic press forging from standard steel billets (B). A list is given of the advantages resulting from the use of hollow B (HB). A number of methods of producing them is listed, and data are presented on the nature of liquation, on mechanical properties, and on the structure of HB. The process whereby 25-t HB are produced at the im. Ordzhonikidze Ural Heavy Machinery Plant is examined. Drawings of molds, diagrams of temperatures in various portions of the B, methods of taking specimens, and photographs of longitudinal sections of the B are presented. On the

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SOV/137-58-7-14814

An Investigation of the Forming and Structure of Hollow Steel Castings

basis of the work done, the author hypothesizes that HB of the best quality are obtained when heat is driven out of the cavity very rapidly by water cooling. A thin-walled steel tube should be used as the rod for forming the cavity in the B.

I.K.

1. Steel castings--Structural analysis

Card 2/2

SOV/137-59-4-7745

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 4, p 59 (USSR)

AUTHOR: Novitskiy, V.K.

TITLE: The Construction of a Vacuum Installation for Casting Large-Size Ingots up to 120 ton Weight

PERIODICAL: V sb.: Primeneniye vakuuma v metallurgii, Moscow, AS USSR , 1958, pp 107 - 111

ABSTRACT: The author describes basic characteristics of a large-size vacuum installation, intended for the casting of ingots of up to 120 ton weight. The installation consists of a vacuum chamber, the chamber covering lid, an intermediate device and a pump station with pipes and a condenser for the chilling and purification of gases drawn off the chamber. The chamber has a cylindrical shape, its external diameter is 4,900 mm, the height without the covering lid is 6,350 mm. It is made of 20-mm thick sheet steel. The chamber walls are inside equipped with transverse and longitudinal 200 mm wide and 40 mm thick reinforcing ribs. The presence of ribs makes the chamber inside diameter equal to 4,460 mm. The chamber bottom is made of 30 mm thick sheet steel and is strengthened from the

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The Construction of a Vacuum Installation for Casting Large-Size Ingots up to 120 ton Weight

aluminum or brass plates are placed; they are sealed with water glass and serve as vacuum tighteners for the time when the ladle is not yet filled with metal. The installation for cooling-off the hot gas, drawn off the chamber, and for its purification from dust consists of a 3.5 m high cylinder of 600 mm in diameter. In this cylinder water circulates around longitudinal pipes, through which the exhaust gas passes. The cooled-off gas enters the upper portion of the container where a dust collecting filter is placed. The pump station is situated outside the shop; it consists of 7 vacuum pumps of the VN-6 type and of 2 pumps of the RVN-30 type with a total efficiency of $\sim$ 1,500 m^3/hour at the atmospheric pressure.

Ye.K.

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The Construction of a Vacuum Installation for Casting Large-Size Ingots up to 120 ton Weight

external surface by 50 mm thick and 250 mm high reinforcing ribs. A forged water-cooled supporting ring is mounted on the chamber top; it has a ring-shaped recess to place a sealing rubber band of 100 x 30 mm cross section. There is an emergency hatch of 600 mm in diameter in the side of the chamber; on the top there is a hole of 250 mm in diameter to evacuate air and gases. All parts of the chamber are weld-joined. The chamber is fixed on a foundation. Its weight is $\sim$ 45 t. The chamber covering lid is of a complicated design and has the shape of a truncated cone. Its lower basis is formed by a forged supporting ring, having on its perimeter a 100 mm wide protrusion which enters into the recess with the packing in the upper chamber ring. The cover with all its effective loads rests merely on the rubber packing; this ensures reliable sealing. At the upper basis of the cover there is a supporting ring through which metal teeming from the intermediate ladle is carried out. On the upper basis of the cover an adjusting plate with a water-cooled packing ring is fixed, on which the intermediate ladle is placed. To observe the ascent of metal in the mold and the behavior of metal during degassing there are inspection holes in the covering lid. The total weight of the lid is 20.5 t; the chamber volume is $\sim$ 130 m^3. The intermediate ladle has a capacity of 20 t. In the nozzle underneath the plug two

Novitskiy V.K.

Use of Vacuum in Metallurgy (Cont.) 533

Moscow, Izd-vo AN SSSR, 1958, p165.

Trans. of a Conf. on Above (ed. SAMARIN, A.M.)

Author's conclusions: 1. Use of vacuum during teeming causes erratic solidification of the ingots, which in turn leads to unsatisfactory physical and mechanical characteristics. 2. If the chamber is evacuated when the filling process has already started, results are somewhat better, but there are still disadvantages, including marked chemical heterogeneity. 3. Vacuum treatment in a preliminary ladle gives favorable results as regards reducing the amount of dissolved hydrogen and producing a denser ingot. 4. Vacuum treatment in the teeming ladle itself may also produce satisfactory results, but the degree of rarefaction must be much greater, since both metal and slag must be degasified. 5. On the basis of the investigations, the use of vacuum appears to be advisable in the production of large ingots and heavy forgings since it promotes plasticity and makes it possible to reduce the heat-treating time for large ingots.

Novitskiy, V.K. Design of a Vacuum Installation for Teeming Large Castings Weighing up to 120 Tons 107

The author describes the installation, which was designed on the basis of research conducted by the Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya (Central Scientific Research Institute of Technology and Machine Building) and the Ural'skiy zavod tyazhelogo mashinostroyeniya (Urals Heavy-Machinery Plant). It consists of a vacuum chamber and a pumping station with pipe system and cooler.

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There are 2 drawings.

Khitrik, S.I., Neymark, N.Ya., Nikolayev, V.I. and Gasik, M.I. Obtaining Dense Ingots of Carbon-free Ferrochrome and Metallic Manganese by the Vacuum-treatment Method 112

Author's conclusions: 1. Blistering of the ingots is caused by a high gas content, particularly hydrogen and nitrogen. 2. Vacuum treatment is the simplest and most reliable method of producing dense ingots of these metals. 3. Introduction of vacuum treatment of ferroalloys at the Zaporozh'ye Ferroalloys Plant resulted in an increase of 5-20 percent in the satisfactory yield of metallic manganese and an increase of 3 percent in the case of carbon-free ferrochrome. 4. Vacuum treatment of alloys makes it possible to reduce the content of gases, phosphorus, and nonmetallic inclusions. 5. Vacuum treatment under a residual pressure of about 5 mm. mercury also permits a certain reduction of the carbon content, thus assuring a yield of Khr0000-type ferrochrome of unvarying quality. 6. It is recommended that vacuum treatment be tested in the production of other ferroalloys. (There are 3 Soviet references).

V. K. Novitskiy

AUTHOR: Gulyayev, B.B. SOV/24-58-4-37/39

TITLE: Conference on Crystallisation of Metals (Soveshchaniye po kristallizatsii metallov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 4, pp 153 - 155 (USSR)

ABSTRACT: This conference was held at the Institut mashinovedeniya AN SSSR (Institute of Mechanical Engineering of the Ac.Sc. USSR) on June 28-31, 1958. About 400 people participated and the participants included specialists in the fields of foundry, metallurgy, crystallography, physics, welding, heat, physical chemistry, mathematical physics and other related subjects. In addition to Soviet participants, foreign visitors included Professor D. Czikl (East Germany) and N.I. Chvorinov (Czechoslovakia). This conference on crystallisation of metals was the fourth conference relating to the general problem of the theory of foundry processes.

Crystallisation of Steel and Alloys with Special Properties. The following papers were read: V.I. Lapitskiy, N.I. Stupar', K.P. Budachev, V.L. Oleksiyenko, A.I. Marinov - "Certain Methods of Reducing Non-uniformities of Large Castings (up to 20 t) made of Rimming Steel"; V.K. Novitskiy, A.B. Mikul'chik and V.V. Blinov - "Influence of Internal Crystallisers on the Structure and Properties of Steel Ingots"; N.I. Chvorinov (Czechoslovakia) - "On the Crystallisation of Steel"; A.P. Bronov - "Crystallisation of Continuously Cast Ingot and Influence on it of the Properties of

Card6/10 Liquid Steel"; L.I. Morozenskiy and O.D. Zigel' - "Influence of Movement of the Metal in the Liquid Core on the Crystallisation of Steel Ingots and Castings"; N.N. Guglin, A.A. Korikova and B.B. Gulyayev - "Crystallisation and Mechanical Properties of Steels at Elevated Temperatures"; V.Ya. Neymark - "Influence of Inoculation on the Deformation of the Crust and the Speed of Solidification of Ingots"; G.P. Ivanov - "Thermal Stresses and Deformation in the Crust of a Crystallising Ingot"; V.G. Gruzin and P.I. Yampol'skiy, Kuznetsov dealt with problems of formation of the primary structure of structural steel and the influence on it of the temperature of pouring.

The features of crystallisation of castings made of alloys with special properties and of austenitic steels were dealt with in the following papers: I.I. Gorbunov - "Influence of Inoculation on the Structure and on the Physico-mechanical Properties of High-alloy Steels"; F.F. Khimushin, F.V. Aksenov, N.F. Lashko and B.Ya. Bodina - "Occurrence of Non-uniformities in High-temperature alloys During Crystallisation and Heat

Card7/10 Treatment" and "Experimental Investigation of the Process of Crystallisation of Cast Blades Made of Refractory Alloys"; A.M. Yufarov considered the process of recrystallisation of steel.

NOVITSKIY, V. K.

СЛИТОК И СВОЙСТВА СТАЛИ

Д.Ф.Чернега	Исследование [illegible] металла.
К.С.Просвирин Л.Н.[illegible]	Распределение [illegible] в слитках [illegible] стали.
Ю.А.[illegible] Н.Г.[illegible] Н.Я.[illegible]	Кинетика [illegible]
В.Г.[illegible]	[illegible] стали.
С.А.[illegible] В.К.Новицкий А.С.[illegible]	[illegible]
В.Г.[illegible] С.М.[illegible]	[illegible] стали.
В.М.Тагеев Ю.Д.Смирнов	О [illegible] стали.
В.М.Тагеев Ю.Д.Смирнов	[illegible]
А.Н.[illegible] В.С.[illegible]	[illegible] стали.
Ю.А.[illegible] В.П.[illegible]	[illegible]

Report submitted for the 5th Physical Chemical Conference on Steel Production, Moscow -- 30 Jun 1959.

NOVITSKIY, V.K.

PHASE I BOOK EXPLOITATION SOV/3559

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, t. 5 (Investigations of Heat-Resistant Alloys, Vol 5) Moscow, Izd-vo AN SSSR, 1959. 425 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V.A. Klimov; Tech. Ed.: I.F. Kuz'min; Editorial Board: I.P. Bardin, Academician, G.V. Kurdyumov, Academician, N.V. Ageyev, Corresponding Member, USSR Academy of Sciences (Resp. Ed.), I.A. Oding, I.M. Pavlov, and I.F. Zudin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

COVERAGE: This book, consisting of a number of papers, deals with the properties of heat-resisting metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as Cr, Mo, and W on the heat-resisting properties of various alloys are studied. Deformability and workability of certain metals as related to the thermal conditions are the object of another study described. The problems of hydrogen embrittlement, diffusion and the deposition of ceramic coatings on metal surfaces by means of electrophoresis are examined. One paper describes the apparatus and methods used for growing monocrystals of metals. Boron-base metals are critically examined and evaluated. Results are given of studies of interatomic bonds and the behavior of atoms in metal. Tests of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

GOROZHANKIN, A.N., kand.tekhn.nauk; NOVITSKIY, V.K., kand.tekhn.nauk; KRYANIN, I.R., doktor tekhn.nauk; IODKOVSKIY, S.A., kand.tekhn. nauk; LADYZHENSKIY, B.N., kand.tekhn.nauk; MIL'MAN, B.S., kand.tekhn. nauk; KLOCHNEV, N.I., kand.tekhn.nauk; TSYPIN, I.O., kand.tekhn. nauk; LEVIN, M.M., kand.tekhn.nauk; BALDOV, A.L., inzh.; LYASS, A.M., kand.tekhn.nauk; CHERNYAK, B.Z., kand.tekhn.nauk; ASTAF'YEV, A.A., kand.tekhn.nauk; YERMAKOV, K.A., inzh.; GRIBOYEDOV, Yu.N., kand.tekhn.nauk; MYASOYEDOV, A.N., inzh.; BOGATYREV, Yu.M., kand. tekhn.nauk; UNKSOV, Ye.P., doktor.tekhn.nauk, prof.; SHOFMAN, L.A., kand.tekhn.nauk; PERLIN, P.I., inzh.; MOSHNIN, Ye.N., kand.tekhn. nauk; PROZOROV, L.V., doktor tekhn.nauk; CHERNOVA, Z.I., tekhn. red.

[Some technological problems in the manufacture of heavy machinery] Nekotoryye voprosy tekhnologii tiazhelogo mashinostroeniia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry. Part 1. [Steel smelting and casting, founding, heat treatment, shaping metals by pressure] Vyplavka i razlivka stali, liteinoe proizvodstvo, termicheskaia obrabotka, obrabotka metallov davleniem. 1960. 266 p. (Moscow. TSentral'nyi nauchno-issledovatel'skii institut tekhnologii i mashinostroeniia. [Trudy] no. 98). (MIRA 13:7)
(Steel) (Founding) (Forging)

PHASE I BOOK EXPLOITATION SOV/4344

Soveshchaniye po teorii liteynykh protsessov, 4th

Kristallizatsiya metallov; trudy soveshchaniya (Crystallization of Metals; Transactions of the Fourth Conference on the Theory of Casting Processes) Moscow, Izd-vo AN SSSR, 1960. 325 p. 3,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya.

Resp. Ed.: B. B. Gulyayev, Doctor of Technical Sciences, Professor; Ed. of Publishing House: V. S. Rzheznikov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE: This book is intended for metallurgists and scientific workers. It may also be useful to technical personnel at foundries.

COVERAGE: The book contains the transactions of the Fourth Conference (1958) on the Theory of Casting Processes. [The previous 3 conferences dealt with hydrodynamics of molten metals (1955), solidification of metals (1956), and shrinkage processes in castings (1957)]. General problems in the crystallization of metals, including the crystallization of constructional steels, alloy steels with special properties, cast iron, and of nonferrous alloys, are discussed. Recognition is given to D. K. Chernov and N. T. Gudtsov and their students, B. B. Gulyayev and A. G. Spasskiy, for their contributions to the understanding of the basic problems involved in the theory of crystallization of ferrous and nonferrous metals and alloys. Academician A. V. Shubnikov is also mentioned in connection with his work on the planning of research on crystal formation. References accompany several of the articles.

(60)

Novitskiy, V.K.

S/765/61/000/000/002/003

AUTHORS: Iodkovskiy, S.A., Novitskiy, V.K., Loboda, A.S., Burylichev, G.I., Kudel'kin, V.P., Topilin, V.V., Shiryayev, N.A., Molev, D.S.

TITLE: The effect of the wall thickness of the mold on the quality of nickel-base-alloy castings.

SOURCE: Slitok i svoystva stali; trudy V konferentsii po fiziko-khimicheskim osnovam proizvodstva stali. Moscow, Izd-vo AN SSSR, 1961, 47-60.

TEXT: The paper describes an experimental investigation intended to improve the quality of large-size gas-turbine components. The investigation is concerned with the fundamental defect of highly alloyed Ni-alloy castings, poured into ordinary molds with a vertical taper of 5% and a b/r ratio of 0.55-0.75, namely the presence of internal fissures of thermal origin. The investigation is directed toward the elimination of one of the two possible causes of internal fissures, namely, the stresses which arise as a result of the great difference in temperature (T) along the cross-section of the casting during solidification and cooling. To counteract this effect, the T gradient along the cross-section of the casting must be reduced. Practical means for this purpose include either the reduction of the heat capacity and the heat conductivity of the mold material, the heat rejection of the external

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surface of the mold, or a change of the mass of the mold itself (through the use of molds with a reduced wall thickness). It was found that, for castings of the weight range investigated (50-150 kg), the principal factor that determines the rates of their solidification and cooling appears to be the mass of the mold itself. The thinner mold heats up more rapidly than the ordinary thicker mold, and the T gradients are substantially reduced. The investigation also covered the effect of an external thermal insulation layer applied to an ordinary and a thin-walled mold on the macrostructure of the castings and on their rate of cooling. A decrease of the wall thickness of a mold to a b/r ratio of less than 0.30 results in a significant decrease of the mass of the mold, a reduction of the rate of solidification of the casting, a reduction in the T difference between the periphery and the axis of the ingot, and, as an ultimate consequence, in an absence in the casting of any internal thermal fissures. There is no appreciable change in macrostructure, but a casting poured into a thin-walled and thermally-insulated mold is completely free of internal fissures. The experimental thin-walled molds were used in actual production in the pouring of highly-alloyed Ni alloys in castings of 500, 700, and 750 kg, and resulted in the elimination of internal fissures and in a reduction of the number of low-grade rejects as identified by ultrasonic inspection. There are 7 figures and 2 tables; no references.

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A006/A101

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AUTHORS: Pokatayev, S. V., Engineer, Novitskiy, V. K., Candidate of Technical Sciences, Kryanin, I. R., Doctor of Technical Sciences

TITLE: The effect of the steel melting method upon toughness in the weld-adjacent zone during electric slag welding

PERIODICAL: Svarochnoye proizvodstvo, no. 1, 1963, 3 - 8

TEXT: Different values of toughness in weld-adjacent zones of steel from different heats depend on melting factors, such as deoxidation, content of sulfur, phosphorus and gas. The investigation was made with grade 20ГС (20GS) steel containing (in %): 0.16 - 0.22 C, 1.0 - 1.3 Mn, 0.6 - 0.8 Si, ≤ 0.030 S and P; ≤ 0.3 Cr, Ni and Cu. Specimens of steels from different heats were electric-slag welded at 850 - 900 amps current; 40 - 41 v arc voltage; 203 m/h electrode feed rate, and 1.2 m/h welding speed. The flux was ФЦ-7 (FTs-7). The following results are presented. The melting process exerts a considerable effect upon the mechanical properties of 20GS steel. Free Al in amounts of 0.01% and less, reduces the toughness on account of ferrite brittleness and the

Card 1/3

The effect of the steel melting method upon...

singling out of sulfides in the form of films on the austenite grain boundaries. Ferrite brittleness is caused by an increased content of dissolved oxygen and nitrogen. Particularly high sulfide separation on the grain boundaries takes place at a sulfur content in the steel exceeding 0.02%. A low content of free Al and increased sulfur amounts reduce the metal toughness in the coarse grain range even to a higher degree. The causes are: coarse-grained structure, singling out of brittle excess ferrite along the boundaries of overheated grains, and the presence of sulfide inclusions in the ferrite edges along the grain boundaries. The negative effect of sulfur upon the toughness of 20GS steel in the weld joints increases strongly with a higher carbon content in the steel. The possibility was established of melting low alloy 20GS steel without a decrease in toughness in the superheated zone during electric slag melting. The basic conditions for producing such a steel are: melting with not over 0.02% S, deoxidation with 0.02 - 0.04% rated amount of free Al. It is recommended to use ferroaluminum for deoxidation taking into account Al losses during its introduction into the ladle. The P content should be limited to 0.02%. The thermal cycle of the electric slag welding process was determined by S. S. Astaf'yev,

Card 2/3

The effect of the steel melting method upon...

S/135/63/000/001/001/016
A006/A101

A. I. Rymkevich, (TsNIITMASh), A. I. Pugin and V. A. Merkulov (IMET imeni Baykov). There are 10 figures and 2 tables.

ASSOCIATION: TsNIITMASh

Card 3/3

MEDVED', L.I., prof., otv. red.; YEVTUSHENKO, G.I., dots., zam. otv. red.; KUNDIYEV, Yu.I., dots., red.; KRIVOGLAZ, B.A., prof. red.; NOVITSKIY, V.K., prof., red.; SUPONITSKIY, M.Ya., dots., red.; SHAKHBAZYAN, G.Kh., prof., red.

[Industrial hygiene; interdepartmental collection of scientific papers] Gigiena truda; mezhvedomstvennyi sbornik nauchnykh rabot. Kiev, Zdorov'ia, 1964. 268 p. (MIRA 18:3)

1. Kiev. Institut gigiyeny truda i professional'nykh zabolevaniy. 2.Kiyevskiy institut gigiyeny truda i professional'nykh zabolevaniy (for Medved', Krivoglaz).

POKATAYEV, S.V., inzh.; NOVITSKIY, V.K., kand. tekhn. nauk; KRYANIN, I.R., doktor tekhn. nauk

Effect of steelmaking conditions on the impact toughness at low temperatures of electric slag welded joints. Svar. proizv. no.6:22-26 Je '63. (MIRA 16:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya.

VENIKOV, V.A., doktor tekhn. nauk, prof. (Moskva); NOVITSKIY, V.M., inzh. (Moskva); SHTROBEL', V.A., inzh. (Moskva)

Strong regulation achieved by third and fourth derivatives of the absolute angle. Elektrichestvo no.3:32-37 Mr '64. (MIRA 17:4)

NOVITSKIY, V.M.

Use of statistical methods in the study of regulated power systems. Trudy MEI no.54:377-392 '64. (MIRA 17:12)

L 06459-67 EWT(m) JR

ACC NR: AP6024541 SOURCE CODE: UR/0089/66/021/001/0046/0046

AUTHOR: Morikov, V. M.

28
B

ORG: none

TITLE: Homogenization of a heterogeneous periodic system

SOURCE: Atomnaya energiya, v. 21, no. 1, 1966, 46

TOPIC TAGS: nuclear reactor technology, reactor neutron flux, free path, heterogeneous nuclear reactor, homogenization

ABSTRACT: This is a summary of article no. 92/3586, submitted to the editor and filed, but not published in full. Homogenization is defined as replacement of a heterogeneous priodic system by an equivalent homogeneous medium in which the neutron flux and current coincide in each elementary cell with the corresponding values for the heterogeneous system, on the average. Two presently known homogenization methods are reviewed (by D. Behrens, Proc. Phys. Soc. A 62, 607, 1949, and by N. I. Laletin, Trans. of Second Geneva Conference, Papers by Soviet Scientists, v. 2, M. Atomizdat, 1959, p. 634) and it is shown that both methods are fully equivalent if correct account is taken of the angular correlations between the individual mean free paths of the neutrons. Orig. art. has: 3 formulas.

SUB CODE: 18/ SUBM DATE: 21Jan66/ ORIG REF: 001/ OTH REF: 001

Card 1/1 fla

UDC: 621.039.512.2: 621.039.51.13

L 06412-67 EWT(m)/EWP(t)/ETI LJP(c) JD/JG

ACC NR: AP6024026 SOURCE CODE: UR/0252/66/042/001/0015/0018

66
B

AUTHOR: Gurzadyan, G. A. (Corresponding member AN ArmSSR); Novikov, V. M.

ORG: Byurakan Astrophysical Observatory Branch, Academy of Sciences, Armenian SSR (Filial Byurakanskoy astrofizicheskoy observatorii Akademii nauk Armyanskoy SSR)

TITLE: Light filters for the ultraviolet region of the spectrum, made of thin layers of alkaline metals

SOURCE: AN ArmSSR. Doklady, v. 42, no. 1, 1966, 15-18

TOPIC TAGS: sodium, potassium, rubidium, uv filter, metal film, optic transmission

ABSTRACT: The authors report a method, for which an Author's Certificate was awarded (no. 179961 of 30 January 1965), for producing filters by evaporating in vacuum a film of sodium, potassium, and rubidium on a polished plate of crystalline LiF and subsequently hermetically sealing the metal with a second polished plate of LiF and a ring gasket made of polyethylene or teflon (Fig. 1). The filters

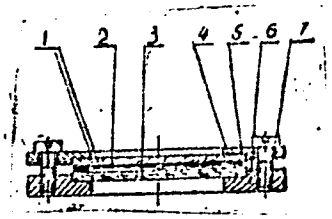

Fig. 1. Construction of light filter. 1,3 - plane-parallel LiF plates, 2 - alkaline metal film, 4 - teflon ring gasket, 5,6 - stainless steel frame, 7 - screw

manufactured in this manner make it possible to isolate individual spectral regions in the 1000 - 3000 Å range. The

Card 1/2

L 06422-67

ACC NR: AP6024026 O

vacuum apparatus used for the purpose is described. The sodium, potassium, and rubidium filters had respective transmission maxima of 16, 40, and 9% at 1600, 2500, and 2600 Å. The transmission of all filters in the visible region (~5000 Å) was of the order of 2%. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 09Sep65/ ORIG REF: 001/ OTH REF: 008

Card 2/2

Novitskiy, Viktor Mikhaylovich

SHALIMOV, Mikhail Georgiyevich, kandidat tekhnicheskikh nauk; NOVITSKIY, Viktor Mikhaylovich, kandidat tekhnicheskikh nauk; ZLIMOV, V.F., kandidat tekhnicheskikh nauk, redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Automatic and remote control of traction substations for railroads] Avtomatika i telemekhanika tiagovykh podstantsii zheleznykh dorog. Moskva, Gos.transp. zhel-dor. izd-vo, 1955. 216 p. (MIRA 9:2)
(Automation) (Electric railroads--Substations)

NOVITSKIY, V. O.

PA38/49T33

USSR/Engineering Mar 49
Water Power

"Utilization of the World's Water Resources,"
V. O. Novitskiy, 1 p

"Elek Stants" No 3

Lists the available supply of water power, and the amount being used, for North America, South America, Europe, Africa, Asia, and Australia.

[redacted] 38/49T33

NOVITSKIY, V.O., inzh.

Experience in the erection of supports and the construction of 110 kv. electric transmission lines made of long reinforced spun concrete uprights. Mont. i stroi. no.6:110-115 Je. (MIRA 17:11)

1. Moskovskiy filial institute "Orgenergostroy."
(Electric lines--Poles)

BODROV, G.D., inzhener; NOVITSKIY, V.P., kandidat tekhnicheskikh nauk.

Reinforced concrete supports for electric transmission lines. Elek. sta. 24 no.12:33-34 D '53. (MLRA 6:12)
(Electric lines--Poles)

SERGIYEVSKIY, A.D., kand.tekhn.nauk (Leningrad); NOVITSKIY, V.P., kand. tekhn.nauk (Leningrad).

New designs for bridge floors. Put' i put.khoz. no.9:37-38 S '57. (MIRA 10:10)

(Bridges, Iron and steel)

NOVITSKIY, V. P.

Novitskiy, V. P., On the hydrological investigations in the northern part of the Barents Sea in the fall of 1955 and 1956, Nauchno-tekhn. byul. Polyarn. n-i. in-ta morsk. rybn. x-va i okeanogr (Scientific technical bulletin of the Polar Scientific Research Institute of the Maritime Fish Economy and Oceanology), No 4, 1957, p 44-48; (RZhGeofiz 8/58-5643)

NOVITSKIY V. P.

PHASE I BOOK EXPLOITATION SOV/4149

Leningrad. Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy institut

Problemy Arktiki; sbornik statey, vyp. 7 (Problems of the Arctic; Collection of Articles, No. 7) Leningrad, Izd-vo "Morskoy transport," 1959. 135 p. 500 copies printed. XEROX COPY

Additional Sponsoring Agency: USSR. Ministerstvo morskogo flota.

Resp. Ed.: V.V. Frolov; Editorial Board: L.L. Balakshin, A.A. Girs, P.A. Gordiyenko (Deputy Resp. Ed.), I.M. Dolgin, L.G. Kaplinskaya, A.A. Kirillov, Ye.S. Korotkevich, V.V. Lavrov, I.V. Maksimov, A.I. Ol', I.I. Poznyak, and B.V. Felisov; Tech: L.P. Drozhzhina.

PURPOSE: The publication is intended for geographers, oceanographers, and particularly for all those interested in the studies of Arctic and Antarctic regions.

COVERAGE: This collection of 19 articles is the seventh of a series of publications dealing with problems of the Arctic and Antarctic. The articles deal mainly with the characteristics of water in the Barents Sea, hydrological conditions in the estuaries of Siberian rivers, types of atmospheric circulation in the Arctic,

Card 1/5

Card 2/5

YAKOVLEV, Boris Aleksandrovich, kand. geograf. nauk; KAS'YANOV, A.P., red.[deceased]; MOVITSKIY, V.P., kand.geogr. nauk,red.; BARANOV, I.A., tekhn.red.

[Climate of Murmansk Province] Klimat Murmanskoi oblasti. Murmansk, Murmanskoe knizhnoe izd-vo, 1961. 178 p. (MIRA 15:2)

(Murmansk Province--Climate)

NOVITSKIY, V.P.

Permanent currents in the northern part of the Barents Sea.
Trudy GOIN no.64:3-32 '61. (MIRA 14:8)
(Barents Sea—Ocean currents)

NOVITSKIY, V.P.

Dyanmics of the waters of the Sea of Marmara on the Bosporus shelf of the Black Sea. Okeanologiia 5 no.5:841-848 '65.
(MIRA 18:11)

1. Azovo-Chernomorskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.

NOVITSKIY, V.S., inzh.

Use of concrete pistol in electrical equipment installation operations. (MIRA 16:12)
Energ. stroi. no.16:69-71 '60.

1. Moskovskiy filial Vsesoyuznogo instituta po proyektirovaniyu organizatsiy energeticheskogo stroitel'stva.

NOVITSKIY, V. V.

NOVITSKIY, V. V. -- "Application of Variational Methods in the Calculation of the Skin of the Wing and Fuselage of an Airplane." Sub 10 Dec 52, Military Aeronautical Engineering Academy imeni Prof. N. Ye. Zhukovskiy. (Dissertation for the Degree of Candidate in Technical Sciences).

SO: Vechernaya Moskva, January-December 1952

NOVITSKIY, V.V., kand.tekhn.nauk (Moskva)

The delta function and its use in structural mechanics. Rasch. prostr. konstr. no.8:207-244 '62. (MIRA 16:6)
(Functions) (Structures, Theory of)

PEREVERZEV, M.P., inzh.; NOVITSKIY, V.V., inzh.; GRITSENKO, V.G., inzh.

Rock pressure manifestations in the development of steeply dipping seams in the "Yanovka" hydraulic mine. Ugol'.prom. no.4:35-38 Jl-Ag '62. (MIRA 15:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut gidrodobychi uglya.
(Donets Basin--Hydraulic mining) (Rock pressure)

MUSLIN, K.E.; PEREVERZEV, M.P.; NOVITSKIY, V.V.; GRITSENKO, V.G.

Improving rock pressure control in mining steeply dipping seams under conditions of the Yanovka hydraulic mine. Ugol' Ukr. 6 no.6:13-15 Je '62. (MIRA 15:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut gidrodobychi uglya.

(Donets Basin--Hydraulic mining)
(Rock pressure)

UMANSKIY, A.A.; AFANAS'YEV, A.M.; VOL'MIR, A.S.; GRIGOR'YEV Yu.P.; KODANEV, A.I.; MAR'IN, V.A.; NOVITSKIY, V.V.; TIKHOMIROV, Ye.N., retsenzent; SNITKO, I.K., red.

[Collection of problems on the strength of materials] Sbornik zadach po soprotivleniiu materialov. Izd.2., perer. i dop. Moskva, Nauka, 1964. 550 p. (MIRA 18:1)

NOVITSKIY, V.V., inzh.; PEREVERZEV, M.P., inzh.

Control of a difficult-to-cave roof at the "Sukhodol'skaia" No.1 mine. Bezop.truda v prom. 7 no.7:20-21 Jl '63. (MIRA 16:9)
(Donets Basin—Coal mines and mining)

KALUZHENKO, R.K.; NOVITSKIY, V. Ye.

Immunopathology of infectious nonspecific polyarthritis. Terap. arkh. 35 no.5:87-89 My'63 (MIRA 16:12)

1. Iz kliniki fakul'tetskoy terapii (nachal'nik - prof. V.A. Beyyer) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

KUERYAVTSEV, G.V.; NOVITSKIY, V.Ye.; YAFAYEV, R.Kh.

Carbon agglomeration reaction (carbo-test) in the diagnosis of infectious nonspecific polyarthritis. Vop. revm. 3 no.3: 63-67 Jl-S'63 (MIRA 17:3)

1. Iz kliniki fakul'tetskoy terapii (nachal'nik - prof. V.A. Beyyer) i kafedry epidemiologii (nachal'nik - prof. I.I. Rogozin) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

NOVITSKIY, V. Yu.

Plywood Industry

Plywood containers from waste veneer sheets. Der. i lesokhim. prom. 1, No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

NOVITSKIY, Ye.

The progress could have been more significant. Voen. znan. 40 no.7:27 Jl '64 (MIRA 17:8)

1. Nachal'nik shtaba grazhdanskoy oborony Borispol'skogo rayona, Kiyevskaya oblast'.

BOYAROV, A.I.; KLEYMENOV, Yu.V.; NOVITSKIY, Ye.A.; OVCHARENKO, G.I.

The "Kaliber-VEI" induction profilograph and profilometer. (MLRA 9:2)
Stan.i instr. 26 no.12:20-24 D '55.
(Surfaces (Technology))

L 6479-66 EWT(m)/EWP(t)/EWP(b) LIP(c) JD

ACC NR: AP5028011 SOURCE CODE: UR/0386/65/002/008/0353/0356

AUTHOR: Ivanov, A. G.; Mineyev, V. N.; Novitskiy, Ye. Z.; Yanov, V. A.; Bezrukov, G.I.

ORG: none

TITLE: Anomalous polarization of sodium chloride under impact loading

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu (Prilozheniye), v. 2, no. 8, 1965, 353-356

TOPIC TAGS: sodium chloride, shock wave propagation, pressure effect, electric polarization, single crystal

ABSTRACT: The authors report results of an investigation of the polarization of single-crystal sodium chloride under impact loading perpendicular to the cleavage plane (100) in the interval of pressures (P) from 50 to 550 kbar. The impact loading was by means of the explosive devices used by L. V. Al'tshuler et al. (FTT v. 5, 279, 1963). A simple measuring circuit was used (Fig. 1). The parameters of the shock wave in the single crystal were calculated from the known state of the screen. A measuring line made of RKK-0.3/10 cable of 200 ohm wave resistance and an OK-21 oscilloscope were used in the experiments. The crystal thickness (l_0) fluctuated between 0.15 and 0.19 cm. The results of the experiments in the form of a plot of the initial current jump density (I) against the compression behind the front of the shock wave (σ) are shown in Fig. 2. Each point on the curve was obtained in a separate experiment. Shock-wave compression of polycrystalline samples of sodium chloride with initial density 2.13

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L 6479-66
ACC NR: AP5028011

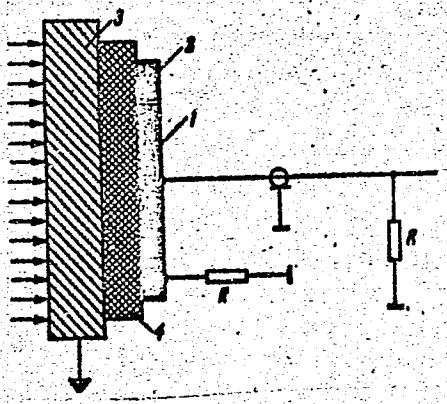

Fig. 1. Experimental setup

1 - Measuring electrode (2 cm dia.); 2 - guard ring (area equal to measuring electrode); 3 - metal screen (Al, Cu); 4 - NaCl single crystal. Arrows show direction of shock wave motion.

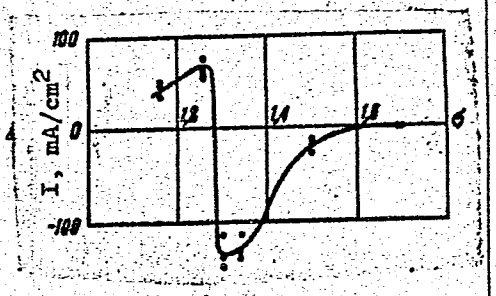

Fig. 2. Plot of $I = f(\sigma)$.

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L 6479-66

ACC NR: AP5028011

g/cm^3 (l_0 = 0.3 cm, P = 250—270 kbar) yielded a polarization current I = 5.5 ma/cm^2. The authors found no acceptable physical explanation for the observed anomaly in the behavior of the sodium chloride (in polar crystal I increases monotonically with σ). This fact may be connected somehow with a phase transition which has not been observed hitherto under dynamic loading in the pressure range under consideration. Orig. art. has: 3 figures and 1 formula. [02]

SUB CODE: SS / SUBM DATE: 02Aug65/ ORIG REF: 005/ OTH REF: 002 /

ATD PRESS: 4140

nw

Card 3/3

ACC NR: AP7000058 SOURCE CODE: UR/0207/66/000/005/0104/0107

AUTHOR: Ivanov, A. G. (Moscow); Novitskiy, Ye. Z. (Moscow)

ORG: none

TITLE: Problem of double layer in shock-compressed dielectrics

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 5, 1966, 104-107

TOPIC TAGS: pressure transducer, dielectric material, dielectric layer

ABSTRACT: A pressure pulse transducer (consisting of flat electrodes separated by a dielectric) equivalent circuit is derived and its response to pressure pulses is considered. The dielectric material when undergoing pressure stress develops changes on the surfaces perpendicular to the direction of the stress. The transducer is analyzed on the basis of an assumption that a double charge layer is formed in the dielectric. The initial current pulse in the transducer circuit is shown to be proportional to the value of the dipole moment of the molecule, number of dipoles per unit volume, and the area of the plates. The transducer is considered to consist of two regions with the pressure front as the dividing line. Cases of high and low conductivity behind the front are treated. Orig. art. has: 4 figures, 17 formulas.

SUB CODE: 20,09/ SUBM DATE: 28Apr65/ ORIG REF: 001/ OTH REF: 001

Card 1/1

NOVITSKIY, Yu. I.

I-2

USSR/Physiology of Plants. Photosynthesis.

Abs Jour: Ref. Zhur-Biologiya, No 1, 1958, 1129.

Author : Novitskiy, Yu. I.
Inst : Institute of Physiology of Plants of the Academy of Sciences USSR
Title : A Device for Studying Photosynthesis by Using C^{14} in an Air Current.

Orig Pub: Fiziol. Rasteniy, 1956, 3, No 6, 574-578.

Abstract: This is a description of a device for determining photosynthesis by using $C^{14}O_2$ in an air current, without separating the leaf from the plant, with subsequent calculation of C^{14} according to fractions of the leaf in separate organs of the plant. The device consists of the following parts: (1) a chamber which envelops the leaf and whose edges are lined with rubber tubing so as to form a hermetic seal, (2) hoses leading into and out of the chamber, (3) an apparatus for supporting

-13-

Card : 1/2

of equal areas of different leaves. The project was completed in the Institute of Physiology of Plants of the Academy of Sciences USSR. There is a bibliography of 14 titles.

-14-

Card : 2/2

NOVITSKIY YU. I.

I-2

USSR/Physiology of Plants - Respiration and Metabolism.

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10383

Author : Novitskiy, Yu. I.

Inst : Institute of Physiology of Plants Academy of Sciences USSR

Title : The Electrophoretic Method of Separating Amino-Acids from Sugars (Preliminary Report)

Orig Pub : Fiziol. rasteniy, 1957, 4, No 1, 103-105

Abstract : 0.5 ml. of fourfold alcohol extract of perilla or lettuce leaves was deposited on the middly part of a strip of flat

(A) L 3989-66

ACC NR: AP5024603 UR/0326/65/012/005/0920/0929
581.14.03

AUTHOR: Strekova, V. Yu.; Tarakanova, G. A.; Prudnikova, V. P.; Novitskiy, Yu. I.

TITLE: Some physiological and cytological changes in growing seeds in a constant magnetic field

SOURCE: Fiziologiya rasteniy, v. 12, no. 5, 1965, 920-929

TOPIC TAGS: magnetic field, biological effect, plant physiology, plant respiration, plant metabolism, plant development

ABSTRACT: A study has been made of the effect of a stationary magnetic field produced by ring magnets on the oxygen consumption and growth-zone cytology of three-day-old sprouts grown in the dark. The field strength at seed level was 58, 62, and 100 oe. "Vyatka" rye, "Nemchinovskaya" lupine, horse beans, and "Nerosimiya" cucumbers were tested. The seeds were grown in 0.7% agar in a circle around the south magnetic pole of the field. At a field strength of 58 and 62 oe, the growth of sprouts was accelerated. A field of 100 oe did not appreciably affect the growth of rye. The greatest effect of the field was observed when temperature conditions were optimum for the given type of plant. Fields of 58 and 62 oe inhibited the absorption of oxygen by sprouts; the greatest inhibiting effect was observed when the seeds were swelling. A magnetic field slightly lowered the dry mass of sprouts per unit length but did not affect its expenditure relative to controls. The RNA content in the growth zone

Card 1/2

L 3989-66

ACC NR: AP5024603

of the stems and roots of maize and lupine increased in a magnetic field, but the DNA content remained relatively constant. The mitotic coefficient in the embryonic zone of lupine and rye roots increased in a 62-oe field, mostly during early mitotic phases. The size of cells in the root-elongation zone of lupine and rye increased approximately 18% in a magnetic field. Orig. art. has: 10 tables and 1 figure. [CD]

ASSOCIATION: Institut fiziologii rasteniy im. K. A. Timiryazeva Akademii nauk SSSR, Moscow (Institute of Plant Physiology, Academy of Sciences, SSSR)

SUBMITTED: 07Dec64 ENCL: 00 SUB CODE: LS

NO REF SOV: 018 OTHER: 023 ATD PRESS: 4120

QC

Card 2/2

TARAKANOVA, G.A.; STRESKOVA, V.Yu.; PRUDNIKOVA, V.P.; NOVITSKIY, Yu.I.

Some physiological and cytological changes in germinating seeds in a constant magnetic field. Report No.2: Effect of a uniform magnetic field of low intensity. Fiziol.rast. 12 no.6:1029-1038 N-D '65. (MIRA 18:12)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR, Moskva. Submitted December 7, 1964.

NOVINSKIY, Yu.S., agronom po zashchite rasteniy

Plant protection in Poland. Zashch. rast. ot vred. i bol. 9 no. 4:51-52 '64. (MIRA 17:5)

NOVITSKIY, K. Yu.; KHACHATUROVA, G. T.; YUR'YEV, Yu. K.

Furan series. Part 32: 5-Nitro-2-halomethylfurans in the synthesis of 5-nitro-2-furfurylamines. Zhur. ob. Khim. 34 no.6:1[illegible]9 Je '64. (MIRA 17:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

NOVKOV, D.

TECHNOLOGY

Periodical STROITELSTVO. Vol. 5, no. 8, 1958

NOVKOV, D.: MATEV, M.: Using a group of dredging machines for road construction. p. 23.

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

NOVKOV, D.

"On the question of snow removal from Bulgarian roads."

STROITELSTVO., Sofiia, Bulgaria., Vol. 6, No. 1, 1959

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

1. KHROMOV, S. I.; NOVKOV, S. S.; RASULOVA, I. L.; ZELINSKIY, N. D., Acad.

2. USSR (600)

4. Cyclohexane Derivatives

7. Contact transformation of butyl-substituted benzene and cyclohexane, Dokl. AN SSSR, 87, No. 4, 1952.

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

NOVKOVIC, B.

NOVKOVIC, B. Agriculture of India; a general outline pl.1

Vol. 2. nol 10, Oct. 1954
POLJOPRIVREDA
AGRICULTURE
Beograd

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), LC, VOL, 4, no. 9,
Sept. 1954, Encl.

NOVKOVIC, D.

"Miniature polygons for antiaircraft batteries and the control of service."
Vojni Glasnik, Beograd, Vol 7, No 10, Oct 1953, p. 51

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

BRUDZ', V.G.; USKOVA, L.Ye.; NOVKOVSKAYA, N.A.; POSLAVSKAYA, K.D.; RAKOVSKAYA, V.A.; PETROVA, G.D.; BROVKIN, L.V., red.; SHPAK, Ye.G., tekhn. red.

[Manual of technical specifications for reagents and preparations used in laboratory work; organic reagents and preparations] Sbornik tekhnicheskikh uslovii na reaktivy i preparaty dlia laboratornykh rabot; organicheskie reaktivy i preparaty. Moskva, Gos.nauchno-tekhn.izd-vo khim.lit-ry. 1961. 582 p. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimreaktivov i osobo chistykh veshchestv Gosudarstvennogo komiteta Soveta Ministrov SSSR po khimii (for all except Brovkin, Shpak).
(Chemical tests and reagents)

KLEMENT'YEVA, A.I.; SKOROKHODOV, M.A.; Prinimali uchastiye: ALEKSANDROV, G.P.; BABUN, F.Ya.; BAYBARIN, P.P.; VAYNSHTEYN, TS.Z.; GUSEV, L.V.; ZHETVIN, N.P.; KONTSEVAYA, Ye.M.; LEVINA, M.M.; NOVLYANSKAYA, K.A.; PODVOYSKIY, L.N.; TSUNTSEV, D.S.; FLEROV, N.G.; CHIKHACHEV, I.A.; YUROV, Yu.M.; GUSKOVA, N., red.; YEGOROVA, I., tekhn.red.

[Light over the gate] Svet nad zastavoi. Moskovskii rabochii, 1959. 422 p. (MIRA 12:4)
(Moscow--Metallurgical plants)

NOVLYANSKAYA, K. A.

Novlyanskaya, K. A. - "On the introduction of post-spasm psychic conditions in epilepsy of children," Report 2, Trudy Tsentr. in-ta psikhiatrii, Vol. IV, 1949, p-421-34

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949)

IOVLYANSKAYA, K.A.

Review of foreign literature on child psychiatry published during the last 10 years. Zhur.nevr. i psikh. 56 no.9:757-763 '56. (MLRA 9:11)
(CHILD PSYCHOLOGY,
review (Rus))

NOVLYANSKAYA, K.A.

Diagnostic and prognostic criteria during the interparoxysmal period in epilepsy; according to observations at a pediatric hospital [with summaries in French]. Zhur.nevr. i psikh. 57 no.7:865-870 '57. (MIRA 10:9)

1. Detskaya psikhiatricheskaya klinika (nauchnyy rukovoditel' - prof. G.E.Sukhareva) TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.
(EPILEPSY, in infant and child,
diag. & progn. aspects of interparoxysmal stages (Rus))

NOVLYANSKAYA, E.A.

One of the form of prolonged pathological reactions in puperty; anorexia nervosa in adolescents [with summary in French] Zhur. nevr. i psikh. 58 no.7:861-866 '58 (MIRA 11:7)

1. Kafedra psikhiatrii detskogo vozrasta (zav. - prof. G.Ye. Sukhareva) TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.

(APPETITE DISORDERS,
anorexia nervosa in adolescents (Rus))

NOVLYANSKAYA, K.A.

One of the forms of prolonged pathological reactions at the age of puberty (the syndrome of dysmorphophobia). Zhur.nevr.i psikh. 60 no.7:891-895 '60. (MIRA 14:1)

1. Kafedra psikhiatrii detskogo vozrasta (zav. - prof. G.Ye.Sukhareva) TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.
(ADOLESCENCE) (PUBERTY)

NOVLYANSKAYA, K.A.

Clinical characteristics of the fear syndrome in infectious diseases; according to data from a pediatric clinic. Zhur. nevr. i psikh. 61 no.7:1071-1076 '61. (MIRA 15:6)

1. Kafedra psikhiatrii detskogo vozrasta (zav, G.Ye. Sukhareva) TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.
(FEAR)
(COMMUNICABLE DISEASES)

FEDOTOV, D.D., prof., otv. red.; VRONO, M.S., red.; DEYANOV, V.Ya., red.; LAPIDES, M.I., red.; MAMTSEVA, V.N., red.; YURKOVA, I.A., red.; NOVLYANSKAYA, K.A., red.; ROKHLIN, L.L., red.; SKANAVI, Ye.Ye., red.

[Problems of pediatric psychoneurology] Problemy psikhonevrologii detskogo vozrasta. Moskva, 1964. 530 p. (MIRA 18:5)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut psikhiatrii. 2. Klinika psikhozov detskogo vozrasta Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR (for Skanavi, Lapides). 3. Kafedra detskoy psikhiatrii TSentral'nogo instituta usovershenstvovaniya vrachey (for Novlyanskaya, Mamtseva, Vrono).

NOVLYANSKAYA, M. G. PA 243T92

USSR/Mathematics - Historical Nov/Dec 52

"Thirtieth Anniversary of Death of Academician A. A. Markov," M. G. Novlyanskaya

"Usp Matemat Nauk" Vol 7, No 6 (52), pp 213-215

Article appears in "Mathematical Life in the USSR" section of "Usp Matemat Nauk." On 12 Sep 52, in Leningrad, the 70th session of the Committee on the History of Physicomathematical Sci, Acad Sci USSR, was held under the presidency of Acad V. I. Smirnov on the occasion of 30th anniversary of Markov's death.

243T92

NOVLYANSKAYA, M.G.; SHAFRANOVSKIY, K.I., redaktor; KRAVETS, T.P., redaktor.

[Boris Semenovich IAkobi; reading list] Boris Semenovich IAkobi; bibliograficheskii ukazatel'. Moskva, 1953. 318.(MLRA 7:11)

1. Akademiya nauk SSSR. Komissiya po istorii fiziko-matematicheskikh nauk. 2. Chlen-korrespondent AN SSSR (for Kravets).
(Bibliography--IAkobi, Boris Semenovich, 1801-1874)
(IAkobi, Boris Semenovich, 1801-1874--Bibliography)

1. NOVLYANSKAYA, M. G.

2. USSR (600)

4. Scientists

7. Meeting devoted to the memory of native scientists (in the Commission on the History of Physico-Mathematical Sciences). Vest. AN SSSR 23, No. 2, 1953.

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

NOVLYANSKAYA, M.G.

Meeting in memory of A.N.Lodygin and V.V.Petrov. Vest.AN SSSR 23 no.5: 111-112 My '53. (MLRA 6:7)
(Lodygin, Aleksandr Nikolaevich, 1847-1923)
(Petrov, Vasilii Vladimirovich, 1761-1834)

PA 246T49

NOVLYANSKAYA, M. G.

USSR/Astronomy - Historical Jan/Feb 53

"Meeting of Commission on History of Physico-Mathematical Sciences of the Acad Sci USSR," M. G. Novlyanskaya

"Astron Zhur" Vol 30, No 1, pp 116, 117

A meeting devoted to the memory of V. Ya. Struve, Russian astronomer, was held 17 Oct 52. The speakers were B.A. Orlov (Pulkovo Observatory) and Prof A.N. Deych.

246T49

NOVLYANSKAYA, Mariya Grigor'yevna; ANDREYEV, A.I., prof., doktor istor. nauk, red.; SHUKHARDIN, S.V., kand.tekhn.nauk, red.; BOCHEVER, V.T., tekhn.red.

[I.K.Kirilov and his atlas of the Russian Empire] I.K.Kirilov i ego atlas Vserossiiskoi imperii. Moskva, Izd-vo Akad.nauk SSSR, 1959. 77 p. [___ Atlas of the Russian Empire] ___ Atlas Vserossiiskoi imperii. 1959. 2 plates, 29 maps (in portfolio). (MIRA 13:2)

(Russia--Maps)

NOVLYANSKAYA, M.G.

D.G. Messerschmidt and his diary on the journey across Siberia. Izv. Vses. geog. ob-va 94 no.3:231-239 My-Je '62. (MIRA 15:7)
(Messerschmidt, Daniel Gottlieb, 1685-1735)
(Siberia--Description and travel)

NOVLYANSKAYA, M.G.

The first scientific exploration of the Lower Tunguska Valley. Mat. Otd. ist. geog. znan. Geog. ob-va SSSR no.1:42-63 '62. (MIRA 17:3)

NOVITSKAYA, N.N.; ISAYEV, I.S.; NEFEDOV, O.M.

Study of the mechanism of monocyclic hydrocarbon formation in the pyrolysis of 7,7-dichloronorcaranes by the tracer technique. Zhur.VKHO 10 no.4:458-459 '65.
(MIRA 18:11)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR i Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

ANAN'IN, V.V.; KOKOVIN, I.L.; NOVITSKAYA, V.I.

Results of retrospective serological examination of the population in foci of leptospirosis. Zhur.mikrobiol., epid. i immun. 42 no.10:136-137 O '65. (MIRA 18:11)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR, Moskva, i Mozdokskaya rayonnaya sanitarno-epidemiologicheskaya stantsiya. Submitted October 28, 1964.

RYBNIKOV, N.I.; NOVITSKIY, G.A.

Vascular changes as an index of the effectiveness of treating polyarthritis of various etiology with Khmel'nik radon mineral baths. Vop.kur., fizioter. i lech. fiz. kul't 30 no.5:462-463 S-O '65. (MIRA 18:12)

1. Kafedra propedevticheskoy terapii (zav. - prof. M.Ye. Milimovka) Vinnitskogo meditsinskogo instituta imeni Pirogova.

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L 35565-65 EPF(c)/EPF(n)-2/EPR/EWG(j)/EWT(d)/EWT(l)/EWT(m)/EWP(b)/EWP(a) Pr-4/
ACCESSION NR: AP5008153 Pu-4/Pu-4 WH/WW/JW/ S/0286/65/000/005/0031/0031
MJW/JD

AUTHORS: Zinchenko, A. I.; Zarechenskiy, Ye. T.; Moshchenko, K. Ye.; Kanevskiy, L. S.; Sinyavskiy, B. S.; Novlyanskiy, V. P.; Kaklyugin, B. S.; Fal'ko, V. I.; Kosmynin, Ya. Ya.; Gonin, L. Sh.; Kralin, L. A.

50
B

TITLE: A graphite heat exchanger. Class 17, No. 168734

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 31

TOPIC TAGS: heat exchanger, graphite

ABSTRACT: This Author Certificate presents a graphite heat exchanger made of blocks with channels for heat-exchanging media. It is equipped on the ends with caps and fittings for introducing and removing the indicated media. To improve the thermal efficiency and to reduce weight, the caps are equipped with adapter plates and horizontal baffles for multipass parallel countercurrents of the media.

ASSOCIATION: none

SUBMITTED: 20Feb63 ENCL: 00 SUB CODE: TD

NO REF SOV: 000 OTHER: 000

Card 1/1