"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

IVALIKOV, Yuriy Sergeyevich; VASKEVICH, D.N., red.

[Physicochemical methods of analysis] Fiz'ko-khimicheskie metody analiza. Moskva, Khimiia, 1964. 557 p. (MIRA 18:10)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 61725-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4/Ps-4 WW/RM

ACCESSION NR: AP5013064 UR/0190/65/007/005/0928/0932
678.01:54+678.86

37
34
B

AUTHORS: Rode, V. V.; Rafikov, S. R.; Yergebekov, M. Ye.; D'yachkov, G. A.; Vaskevich, D. N.; Konovalov, P. G.

TITLE: Thermooxidative degradation of polyalkylenephosphinic acids and their salts. 22nd communication in the series "Chemical transformations in polymers"

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 5, 1965, 928-932

TOPIC TAGS: polymer, thermal degradation, oxidation, polyalkylphosphinic acid, polyethylene

ABSTRACT: The work was undertaken to extend the investigations of polyalkylenephosphinic acids of different phosphorus content (A) and their salts (B), reported by S. R. Rafikov and M. Ye. Yergebekov (Dokl. AN SSSR, 160, 1331, 1965), and, in particular, to determine the thermal stability of these compounds at elevated temperatures. The thermooxidative degradation of the following compounds has been investigated: polyalkylphosphinic acids containing [illegible], 6.5, and [illegible] P and the Na, Ba, and Pb salts of [illegible] acid. The results were compared with thermal degradation data for pure polyethylene. Thermooxidative degradations were carried out in air in

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the temperature interval 200-400C. Overall weight loss, the amount of water liberated, and activation energies are tabulated for compounds investigated and are compared with the corresponding data for polyethylene. It was found that polyalkylphosphinic acids dehydrate at 200-250C and that the Na, Ba, and Pb salts of the 14% P acid decompose above 300C, the order of stability being Pb > Ba > Na. The introduction of 1.7% P into polyethylene greatly enhances its thermal stability. It is concluded that phosphorus-containing polymers are more stable than polyethylene. Orig. art. has: 2 tables and 5 graphs.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute for Hetero-Organic Compounds, AN SSSR)

SUBMITTED: 25Jul64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 007 OTHER: 000

aum
Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

BELYAKOVA, A.P.; BOKOV, Yu.S.; LAVRISHCHEV, V.P.; KONOVALOV, F.S.; VASKEVICH, D.N.

Photosensitivity of polyvinyl cinnamate and its nitro derivatives. Vysokom. soed. 7 no.9:1637-1640 S '65. (MIRA 18:10)

1. Vsesoyuznyy zaochnyy politekhnicheskiy institut.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

RODE, V.V.; RAFIKOV, S.R.; YERGEBEKOV, M.Ye.; VASKEVICH, D.N.; KONEVALOV, P.G.; D'YACHKOV, G.A.

Thermal degradation of polyalkylenephosphinic acids and their salts. Vysokom. soed. 7 no.8:1452-1455 Ag '65. (MIRA 18:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

ACC NR: AT6023221 SOURCE CODE: UR/2910/65/005/003/0369/0376

AUTHOR: Repshas, K. -- Repsas, K.; Vashkevichyus, R. -- Vaskevicius, R.; Denis, V. -- Dienys, V.; Pozhela, Yu. -- Pozela, J.

ORG: Institute of Physics and Mathematics, Academy of Sciences Lithuanian SSR (Institut fiziki i matematiki Akademii nauk Litovskoy SSR)

63
Br 1

TITLE: The Hall effect in p-type germanium in strong electric fields

SOURCE: AN LitSSR. Litovskiy fizicheskiy sbornik. v. 5, no. 3. 1965, 369-376

TOPIC TAGS: Hall effect, electron hole, hole mobility, germanium semiconductor, electric field

ABSTRACT: A method is proposed for investigating the Hall effect and other transverse effects in strong electric fields. A superhigh-frequency field was used as the force field which eliminated a number of experimental difficulties. The method was applied to a measurement of the Hall effect in p-type germanium. It was shown that the Hall mobility decreases with an increase of the electrical field more quickly than the drift mobility. The decrease in the Hall constant that was experimentally observed is explained by the distribution of the hot holes differing from a Maxwell distribution and the nonparabolic shape of the zone of light holes.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 40856-66

ACC NR: AT6023221

Orig. art. has: 4 figures and 6 formulas.

SUB CODE: 20/ SUBM DATE: 28Dec64/ ORIG REF: 004/ OTH REF: 022

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKEVICH, E., inzh.-mayor

Systems of interplanetary navigation. Av. i kosm. no.2: 35-40 F '66. (MIRA 19:1)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

ORLOV, V.V.; GOLASHVILI, G.V.; VASKIN, A.I.

[Resonance absorption of neutrons by a block] Rezonansnoe pogloshchenie neitronov blokom. Moskva, Glav.upr. po ispol'zovaniiu atomnoi energii, 1960. 16 p. (MIRA 17:1)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

ACC NR: AP6037077 SOURCE CODE: UR/0056/66/051/ 5/1483/1491

AUTHOR: Vaskin, A. I.; Guzhavin, V. V.; Ivanenko, I. P.

ORG: Institute of Nuclear Physics, Moscow State University (Institut ya[illegible]rnoy fiziki Moskovskogo gosudarstvennogo universiteta)

TITLE: New method of solving the equations of cascade theory

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 51, no. 5, 1966, 1483-1491

TOPIC TAGS: cascade, bremsstrahlung, electromagnetic interaction, approximate solution, particle distribution

ABSTRACT: This is an elaboration of an earlier communication (Izv. AN SSSR ser. fiz. v. 29, 1714, 1965), where a new method of solving the equations of electromagnetic cascade theory was outlined. The method is based on replacing the integral operator describing electron bremsstrahlung and pair production by photons by a simple approximate differential operator. In many cases this substitution greatly simplifies the integral differential equations of the cascade theory, reducing them to linear differential equations. An analysis of the solutions of the approximate differential equations shows that these solutions are in many important cases more accurate than the non-approximate solutions of the initial exact equations. By way of an example, the method was applied to the solution of the equations of one-dimensional cascade theory in the two approximation (A and B) defined by S. Z. Belen'kiy (Lavinnyye

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ACC NR: AP6037077

protsessy v kosmicheskikh luchakh [Cascade Processes in Cosmic Rays], Gostekhizdat, 1948). The method is applied to calculations with and without account of ionization losses. Among the problems that can be simplified by this method are the construction of a theory that accounts for the energy dependence of the absorption coefficient of the photons, and the determination of angular and spatial distributions of the particles. Orig. art. has: 5 figures, 24 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 20May66/ ORIG REF: 003/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VAS'KIN, D.

Using water-based putties. Biul. tekh. inform. po stroi. 5 no.5:24 My '59. (MIRA 12:8)

(Putty)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKIN I. S. Experience with polymethylmetacrylate resins in cranioplasty
Problems of Neurosurgery, Moscow 1949, 13/4 (41-46)

The author points out the inconveniences of autoplastics and describes two personal cases, in which complete absorption of a transplanted rib occurred. In the Leningrad Neurosurgical Institute, 83 cranioplasties were performed, bone transplants being applied in 41 cases and polymethylmetacrylate plates being used in 42. Polymethylmetacrylate is non-toxic, not absorbable, causes only a slight reaction after operation and is a good and inexpensive material for plastic repair, even in large defects of the skull.

Herman - Lodz (VIII, 9)

So: Neurology & Psychiatry Section VIII Vol. 3 No. 7-9

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

PARCHIN, I.S., VASKIN, I.S.

Brain - Surgery

Use of hemostatic sponge and of fibrinogen pads in brain surgery. Vop. neirokhir. 16, No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, May 1952. UNCLASSIFIED

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

POLENOV, Andrey L'vovich, professor; BABCHIN, I.S., professor, redaktor; BONDARCHUK, A.V., professor, redaktor; VASKIN, I.S., dotsent, redaktor; PISAREVSKIY, A.A., redaktor; RULEVA, M.S., tekhnicheskiy redaktor.

[Selected works] Izbrannye trudy. [Leningrad] Gos. izd-vo med. lit-ry, Leningradskoe otd-nie, 1956. 365 p. (MLRA 9:11)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Polenov)
(TRAUMATISM)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VOLKOV, A.A.; VASKIN, I.S.; ZOBINA, M.M.; MURATKHODZHAYEV, N.K.

Use of colloidal radioactive isotopes for radiotherapy of craniopharyngioma. Med. rad. 8 no.7:23-29 Jl '63. (MIRA 17:1)

1. Iz Leningradskogo nauchno-issledovatel'skogo neyrokhirurgicheskogo instituta imeni A.L. Polenova (dir. - prof. V.M. Ugryumov).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

UGRYUMOV, Veniamin Mikhaylovich; VASKIN, I.S.; ABRAKOV, L.V.

[Operative neurosurgery; manual for physicians] Operativnaia neirokhirurgiia; posobie dlia vrachei. Leningrad, Medgiz, 1959. 314 p. (MIRA 13:7)

(NERVOUS SYSTEM--SURGERY)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VAS'KIN, N.I.; ATROSHCHENKO, F.A.; PAVLOV, A.N.; PESIN, N.Ya.; MIROSHNICHENKO, V.D., red. izd-va; MINSKER, L.I., tekhn. red.; BOLDYREVA, Z.A., tekhn. red.

[Potentialities for reducing coal production costs in mines] Rezervy snizheniia sebestoimosti uglia na shakhtakh. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1962. 141 p. (MIRA 15:4)

(Coal mines and mining--Costs)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VAS'KIN, S., red.; GAYDASH, Ya., tekhn. red.

[Our countrymen are heroes of the Soviet Union] Nashi zemliaki-geroi Sovetskogo Soiuza. Elista, Kalmytskoe knizhnoe izd-vo, 1960. 126 p. (MIRA 14:6)

(Kalmyk A.S.S.R.—Military biography)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 6412-66 EWT(1)/T/EWA(h) IJP(c) AT

ACC NR: AP5027416 SOURCE CODE: UR/0181/65/007/011/3356/3362

AUTHOR: Vas'kin, V. V.; Uskov, V. A.; Shirobokov, M. Ya.

ORG: Gorskovskiy State University (Gor'kovskiy gosudarstvennyy universitet im. N. I. Lobachevskogo)

TITLE: Effect of an internal electric field on diffusion of impurities in semiconductors

SOURCE: Fizika tverdogo tela, v. 7, no. 11, 1965, 3356-3362

TOPIC TAGS: semiconductor theory, electric field, metal diffusion

ABSTRACT: This paper gives a theoretical analysis of the effect which an internal electric field generated by ionized impurity particles and current carriers has on the distribution of impurity concentration in semiconductors. It is assumed that the coefficient of diffusion is independent of concentration. The analysis is based on an approximate solution of the diffusion equation together with the Poisson equation. The calculated concentration profiles are compared with experimental data on diffusion of antimony into germanium. It is shown that when surface concentrations

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ACC NR: AP5027416

6

are comparable to or greater than the concentration of current carriers, where the field effect becomes noticeable, the distribution of impurity atoms differs from the well known expression (*circled p 3356*) corresponding to diffusion from a constant source without regard to the field. The results may be extended to the case of acceptor diffusion into intrinsic and extrinsic semiconductors. Curves are given for α as a function of surface concentration for intrinsic semiconductors and for those predoped with donors and acceptors. In conclusion, the authors are grateful to V. S. Metrikin and V. M. Maslova for assistance in carrying out the numerical calculations on a computer. Orig. art. has: 4 figures, 24 formulas.

SUB CODE: SS,EM/ SUBM DATE: 09Mar65/ ORIG REF: 001/ OTH REF: 006

Card 2/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

ACC NR: AP7005329 SOURCE CODE: UR/0181/66/008/012/3467/3473

AUTHOR: Vas'kin, V. V.; Metrikin, V. S.; Uskov, V. A.; Shirobokov, M. Ya.

ORG: Gor'kiy State University im. N. I. Lobachevskiy (Gor'kovskiy gosudarstvennyy universitet)

TITLE: Influence of internal electric field on simultaneous diffusion of impurities in semiconductors

SOURCE: Fizika tverdogo tela, v. 8, no. 12, 1966, 3467-3473

TOPIC TAGS: semiconductor impurity, physical diffusion, hf transistor, germanium semiconductor, crystal effect

ABSTRACT: In view of the importance of simultaneous diffusion of two components of semiconductors to the manufacture of high-frequency transistors and similar devices, the authors investigate theoretically the influence of the internal electric field on simultaneous diffusion of donors and acceptors in an intrinsic semiconductor. The mathematical analysis yields a set of formulas and theoretical curves for the distribution of the donor concentration in a diffusion layer. The theoretical results were compared with experimental data obtained for the simultaneous diffusion, at 795C, of indium and antimony in germanium, using In^{114} and Sb^{124} as radioactive tracers. The distribution of the donors and acceptors was determined by successive removal of layers. The results have shown that the donors have little influence on the diffusion of acceptors, but the effect of acceptors on the diffusion of donors is

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ACC NR: AP7005829

appreciable. This is due to differences in the diffusion coefficients of the two substances. The deceleration of the donors increases the increasing acceptor concentration. For the same surface concentration of the acceptors, the influence of the acceptors on the donor diffusion is greater when the donor concentration is low. Some discrepancies between the theoretical and experimental data were observed, and these are attributed to formation of defects. Orig. art. has: 3 figures, 16 formulas, and 1 table.

SUB CODE: 20/ 09/ SUBM DATE: 07Feb66/ ORIG REF: 006/ OTH REF: 005

Card 2/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 9680-66 EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) IJP(c)

ACC NR: AP5027599 SOURCE CODE: UR/0135/65/000/011/0013/0016

AUTHOR: Kulikov, F. R. (Engineer); Vas'kin, Yu. V. (Engineer)

44,55 44,55

ORG: none

TITLE: Welding of complex-shaped titanium-alloy pipe sections

44,55 44,55

SOURCE: Svarochnoye proizvodstvo, no. 11, 1965, 13-16

TOPIC TAGS: metal tube, arc welding, titanium alloy, inert gas welding, welding equipment component

ABSTRACT: The authors describe techniques and auxiliary equipment they developed for the annular and longitudinal argon arc welding of intricately shaped sections of titanium pipe measuring 50-200 mm in diameter and 0.6-3 mm in wall thickness (Fig.1). Since some of these sections reached 5 m in length, the authors developed a special device for shielding the atmosphere around the reverse side of the weld seams (Fig.2): the volume of inert gas bounded by two soft stoppers 1 is moved by means of cable 4 throughout tube 5 at a rate coordinated with the movement of the welding torch. The distance between the stoppers is adjusted by rod 2 and the gas is supplied by connecting pipe 3. As for the welding of shorter pipe sections, this may be carried out in a controllable-atmosphere chamber. Since titanium is highly active with respect to nitrogen, oxygen and hydrogen during its argon arc welding at temperatures of

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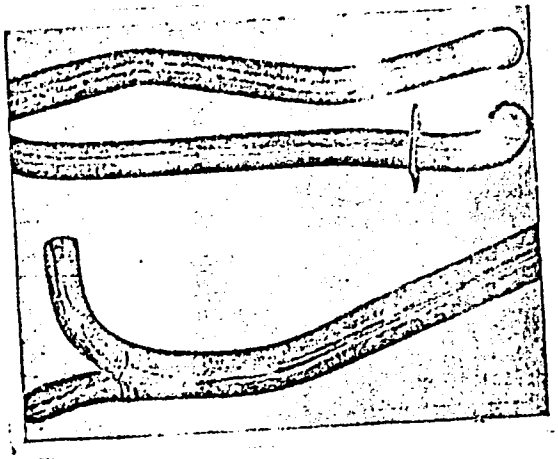

Fig. 1 Die-stamped welded pipe sections of ØT4 titanium alloy (wall thickness 0.8 mm)

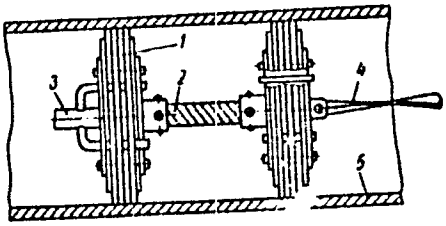

Fig. 2. Mobile shielding unit.

1 - soft stoppers; 2 - connecting rod; 3 - connecting pipe for admission of shielding gas; 4 - cable for pulling the unit along the pipe axis; 5 - pipe section

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ACC NR: AP5027599

>400°C, and this detrimentally affects the quality of the welded joints and leads to the formation of cracks and pores in the weld in some cases, the authors developed special techniques of surface treatment and assembling and welding which, if rigorously observed, assure high-quality welding. For example, surface treatment involves pickling in a HNO_3 solution and, after final annealing prior to welding, in a HCl solution. It is further shown that the few cases of delayed cracking of pipe sections welded by this method are attributable to the insufficiently high level of plastic properties of the base metal. Orig. art. has: 5 figures, 2 tables.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 27846-66 EWT(d)/EWT(m)/EWP(v)/EWP(j)/EWP(k)/EWP(h)/EWP(1) RM

ACC NR: AP5026776 SOURCE CODE: UR/0286/65/000/017/0066/0066

AUTHOR: Vas'kin, Yu. A.; Kulesho, I. M.; Korshikov, I. S.; Khankin, Yu. V.; Yurchenko, Yu. F.

ORG: none

17
B

TITLE: A device for welding thermoplastics. Class 39, No. 174350

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 66

TOPIC TAGS: welding equipment, plastic industry, thermoplastic material

ABSTRACT: This Author's Certificate introduces: 1. A device for welding thermoplastics using hf current. The unit contains an insulation casing and flat metal electrodes located on one side of the material to be welded. In order to produce a seam of any configuration, the casing is made in the form of a prismatic roller with the metal electrodes mounted by pairs in its faces. 2. A modification of this device with a recess in the insulation casing between the electrodes for welding thermoplastics without interlayers. 3. A modification of this device with a hexagonal prismatic roller.

UDC: 678.059.4
678.073

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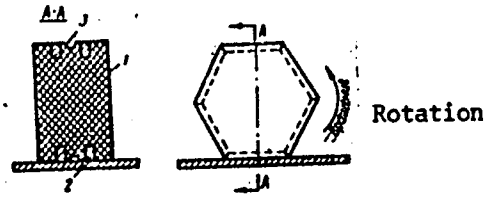

Fig. 1. 1--casing; 2--metal electrodes; 3--recess

SUB CODE: IE,MT/ SUBM DATE: 28Sep63/ ORIG REF: 000/ OTH REF: 000

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

TIKHONOVA, M., dvornik (Zagorsk, Moskovskoy obl.); GUROV, T., dvornik (Zagorsk, Moskovskoy obl.); VAS'KINA, A., dvornik (Zagorsk, Moskovskoy obl.); KISELEV, A., dvornik (Zagorsk, Moskovskoy obl.); VASINA, M., dvornik (Zagorsk, Moskovskoy obl.); SHAKALOVA, A., dvornik (Zagorsk, Moskovskoy obl.); TIKHONOVA, P., dvornik (Zagorsk, Moskovskoy obl.); PEROVA, A., dvornik (Zagorsk, Moskovskoy obl.)

An open letter from yard cleaners in Zagorsk. Zhil.-kom. khoz. 13 no.3: 10 Mr '63. (MIR 16:3)

(Cleaning machinery and appliances)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

ZAKHAROV, A.G.; SHISHOV, G.A.; ZAKHAROVA, Z.I.; VAS'KINA, A.I.; FILIPPOVA, L.S., red.; GROMOV, Yu.V., tekhn. red.

[Methods of the economic evaluation of the operational indices of sections and maintenance units of railroads] Metodika ekonomicheskoi otsenki pokazatelei ekspluatatsionnoi raboty otdeleniia i khozedinits dorogi. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 70 p. (MIRA 15:3)

(Railroads—Cost of operation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

BRENNER, V.A., kand. tekhn. nauk; VAS'KIN, N.I., gornyy inzh.; DANDZBERG, L.K., brigadir; ZAKON, Ya.A., inzh.; SHVETS, I.A., inzh.; YUDIN, N.P., kand. tekhn. nauk

New record for mining development workings in coal with the "Karaganda 7/15" cutter-loader. Ugol' 40 no.6:7-11 Je '65. (MIRA 18:7)

1. Giprouglegormash (for Brenner, Yudin). 2. Kombinat Karabandaugol' (for Vas'kin). 3. Shakhta No.122 tresta Sarar'ugol' (for Dandzberg, Zakon). 4. Trest Sarar'ugol' (for Shvets).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

YEVSEYEVA, A., TRUSHKINA, A., VAS'KINA, P., MIKHEYEVA, T.

Here's what collective farm women of Ryazan Province say.
Zdrav.Ros. Fed. 2 no.10:18-19 O '58 (MIRA 11:10)

1. Kolkhoz "Den' 9 yanvarya" Karablinskogo rayona (for Yevseyeva). 2. Kolkhoz imeni V.I. Lenina (for Trushkina). 3. Kolkhoz "Krasnoye znamya" Spasskogo rayona (for Vas'kina). 4. Kolkhoz "Progress" Sasovskogo rayona (for Mikheyeva).
(RYAZAN PROVINCE--DAY NURSERIES)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

USSR/Zooparasitology. Parasitic Worms. General Problems. G

Abs Jour: Ref. Zhur. - Biol., No 23, 1958, 104051

Author : Vask-Mar'yina, N. L., Geller, F. I.

Inst : -

Title : Case of Rat Hymenolepidosis and Diphyllidiosis of a Man in Tashkent.

Orig Pub: Med. parazitol. i parazitarn. bolezni, 1958, 27, No 2, 218-219

Abstract: No abstract

Card 1/1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKEVICH, D.N.

VASKEVICH, D.N., red.; LUR'YE, M.S., tekhn.red.

[Analytic control of production in the nitrogen industry] Analiticheskii kontrol' proizvodstva i azotnoi promyshlennosti. Moskva, Gos.nauchno-tekhn. izd-vo khim. lit-ry. Pt. 3. [Control at gas blower stations and in coke gas cleaning and distributing sections] Kontrol' na gazoduvnoi stantsii i v otdeleniiakh ochistki i razdeleniia koksovogo gaza. 1957. 143 p. Pt.4. [Control in shops conducting fractional distillation of air] Kontrol' v tsekhe razdeleniia vozdukha. 1957. 89 p. (MIRA 11:2)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti.
(Coke-oven gas) (Distillation, Fractional)
(Nitrogen industries)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKEVICH, D.N.

KHOKHLOVA, R.V.; VASKEVICH, D.N.

Detection of small quantities of diphenylquanidine in the air of industrial plants. Khim. prom. no.2:116-118 Mr '58. (MIRA 11:5)

1. Dorogomilovskiy khimicheskiy zavod imeni M.V. Frunze i Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany truda Vsesoyuznogo tsentral'nogo soveta profsoyuzov.
(Guanidine) (Factories—Safety measures)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

CA VASKO, A.

Preparation of single crystals of hexagonal selenium A Vaško. *Čas. Pest. Mat.* 72, 155-60(1947). Pure Se is distd. at 300° and 10^{-3} mm. Hg into glass tubes, sealed off, and heated to the b.p. of naphthalene for several months, when the crystals of Se are formed. By a similar technique at atm. pressure crystals 1 cm. long have been obtained. B. A.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

VASKO, A.

C

Cultivation of large hexagonal monocrystals of selenium.

A. VASKO. *Sklářské rozhledy*, 22 [6, 7] 98-100 (1946)

Large monocrystals of selenium can be prepared from absolutely pure selenium at low temperatures by sublimation and at high temperatures by condensation in 2 to 4 months. During this period the temperature is held strictly constant in a naphthalene bath sublimation thermostate. Curves of equilibrium with glassy selenium and photographs and drawings of apparatus are included.

N.J.K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

Vasko Antonin

CZECHOSLOVAKIA/Electronics - Electron Optics H-3

Abs Jour : Ref Zhur - Fizika, No 4, 1958, No 8673

Author : Vasko Antonin
Inst : Not Given
Title : Luminosity of Electron Optical Systems

Orig Pub : Ceskosl. casop. fys., 1955, 5, No 6, 645-655

Abstract : See Referat Zhur Fizika, 1957, No 6, 14931

Card : 1/1

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

[illegible] analytical considerations. The theory [illegible] meters are given and sensitivity expressions established from the solution of differential equation. The author refers to a paper by [illegible] discussion of the

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A.

Nonselective receivers of infrared radiation. III p. 415. LAKTROTECHNICKY OBZOR. (Ministerstvo strojirenstvi a Ministerstvo paliv a energetiky) Praha. Vol. 44, no. 8, Aug. 1955.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 33503-65 EWT(1)/EEC(t)/T Pl-4/Pep IJP(c)
G/0016/64/000/006/0392/0397

ACCESSION NR: AP5009330

AUTHOR: Vasko, A. (Prague)

TITLE: Determination of the absolute reflecting capacity with the aid of an UR-10 infrared spectrophotometer

SOURCE: Experimentelle Technik der Physik, no. 6, 1964, 392-397

TOPIC TAGS: IR spectrophotometer/UR-10 IR spectrophotometer

Abstract: Tests were conducted to establish the absolute dual-beam method (described by the author in Czech. J. Phys., Vol 9, 1959, p 667) for the reflecting capacity of the UR-10 infrared spectrophotometer, manufactured by People-Owned Enterprise (VEB) Zeiss. The principle, construction, operation, performance, and applications of the instrumental setup employed were described and the data obtained were presented and discussed. [illegible] Falta, [illegible] Vondrich from the [illegible] Prague, for the [illegible] calculation of the optical systems." [illegible] figures.

Card 1/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 33563-65

ACCESSION NR: AP5009330

[illegible] Institut fur Radiotechnik und Elektronik der Tschechoslowakischen [illegible] for Radiotechnology and Electronics, Czechoslovakian Academy of Sciences.

SUBMITTED: 13[illegible]

ENCL: 00

SUB CODE: OP

JPRS

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VAŠKO, A

535.8 : 537.533.3

7336. THE LIGHT GATHERING POWER OF OPTICAL SYSTEMS WITH AN ELECTRON OPTICAL MEMBER.

A. Vaško.

Czech. J. Phys., Vol. 6, No. 1, 13-21 (Jan., 1956). In Russian

The paper recapitulates the definitions of light-gathering power of purely optical systems for the case of the imaging of point and plane sources. A description is then given of the electron optical member and an attempt is made to formulate the light-gathering power of the combined systems containing this member. The light-gathering power of a system composed of an optical objective and an electron optical member for the imaging of point and plane sources is then investigated. It is shown that with such a compound optical system it is possible to achieve an increase in the brightness of the image as against that of the object. An investigation is also made into the light-gathering power of electron optical instruments which are composed of an optical objective, an electron optical member and an optical microscope, and an expression is derived for the upper limit of the light-gathering power of this system.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A

Simplification of formulas for computing optical constants of absorbing media. A. Vasko (Research Inst. Optics and Fine Mech., Prague). *Czechoslov. J. Phys.* 9, 125-7 (1957)(in German).—V. simplifies the formulas of Oswald and Schade (*C.A.* 49, 51i) for the reflection on a boundary and the absorption coeff. A. Kremheller

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

K-9

CZECHOSLOVAKIA/Optics - Instruments for Optical Analysis

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 24142

Author : Vasko A.
Inst : ~~Not Given~~
Title : Stable Optical Filters Made of Plastic.

Orig Pub : Jemna, mech. a opt., 1957, 2, No 6, 175-178

Abstract : Examination of the absorption light filters made of plastics. They are classified by type of spectral transmission curves. The process of their manufacture is briefly described. They are compared with glass and gelatin filters.

Card : 1/1

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

K

CZECHOSLOVAKIA/Optics - Spectroscopy.

Abs Jour : Ref Zhur Fizika, No 12, 1959, 28578

Author : Vasko, A., Prokopova, H.

Inst :

Title : Infrared Spectroscopy and Its Applications.

Orig Pub : Jemna mech. a opt., 1958, 3, No 9, 303-307

Abstract : Brief survey of the apparatus, technology, and applications of infrared spectroscopy in the region up to 50 microns. In the first part are considered: the nature of rotation-vibration spectra, absorption and radiation, sources of infrared rays, receivers, and optical materials.

Card 1/1

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

F

Country : Czechoslovakia
Category :

45652

Abs. Jour :

Author : Vaske, A. and Prokopova, H.
Institut. : Not given
Title : IR Spectroscopy and Its Applications

Orig Pub. : Jemna Mech a Opt, 3, No 10, 334-339 (1958)

Abstract : A review article with a bibliography listing seventeen articles. For the beginning see RZhKhim, No 10, 1959, 34673.

Yu. Satunovskiy

Card: 1/1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A.

"Frantisek Kaspar's Dvojkovy v elektrotechnice (Bimetals in Electrical Engineering): a book review."

Elektrotechnicky Obzor. Praha, Czechoslovakia. Vol. 47, no. 10, Oct. 1958.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclas

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

40966

S/081/62/000/016/033/043
B168/B186

24.2950

AUTHORS: Vaško, Antonín, Srb, Ivo

TITLE: A clarifying film against infrared radiation for optical materials and a method of producing it

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 16, 1962, 542, abstract 16P218 (Czechosl. patent 92767, November 15, 1959)

TEXT: A clarifying film, which reduces the reflection of infrared radiation from optical materials, especially from mixed crystals of thallium bromide and iodide, is produced from polymers and has a refractive index in the range 1.5-1.6. Polyethylene or polystyrene is used for this purpose. After being applied to the surface the polymer layer is heated to melting point (112-120°C) and is then cooled rapidly to 70°C, e.g. a film of polyethylene from a solution in CCl_4 is applied to a plate - in a horizontal position - of KRS-5 (mixed single crystal of thallium bromide and iodide with a refractive index of 2.3-2.4) at a temperature of 70°C. The consumption of material per square of 50 x 50 mm is 0.4 ml

Card 1/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

solution of 0.794 g polyethylene in 50 ml CCl_4. After evaporation of the CCl_4 the plate is heated to 120°C and cooled rapidly to 70°C. The translucence curve for a clarified plate is given. [Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

CZECH/37-59-1-20/26

AUTHOR: Antonín Vaško

TITLE: A Simplification of the Equations for the Calculation of the Optical Constants of Absorbing Materials: Letter to the Editor

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 1, pp 110-111

ABSTRACT: Oswald and Schade (Ref 1) have derived an equation for the reflectivity R and for the absorption coefficient K of an interface, when the transmissivity t and the reflectivity r of a thick layer d are known. A simplified method of derivation and a simplification of these expressions is discussed and compared with results due to Lukeš (Refs 2, 3).
There are 3 references, of which 2 are Czech and 1 is German.

Card 1/1

ASSOCIATION: Ústav pro výzkum optiky a jemné mechaniky, Praha (Optics and Precision Mechanics Research Institute, Prague)

SUBMITTED: September 2, 1958

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

CZECH/37-59-1-19/26

AUTHORS: A. Vaško, I. Srb

TITLE: Letter to the Editor: Polyethylene Anti-Reflection Coating for TlBr + TlI

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 1, pp 108-109

ABSTRACT: For the elimination of reflection, the index of refraction in our case must be 1.55-1.515. This condition is fulfilled in polyethylene. Polyethylene has absorption bands at 3.5 μ, 7 μ and 14 μ but these are unimportant because TlBr + TlI is used for long wavelengths (up to 38 μ). The layers were prepared by drying a solution of polyethylene in CCl_4 at 70 °C. The dry layer was heated to 120 °C and then rapidly cooled. Fig 1 shows the transmissivity of a 7 mm thick crystal of TlBr + TlI without the anti-reflection coating (curve 1) and the transmissivity of the same crystal with anti-reflection coatings of varying thickness (curve 2 - λ = 6.3 μ, curve 3 - λ = 11.2 μ, curve 4 - λ = 21.1 μ). Further work is in progress. There are 1 figure and 4 references, of which 3 are Czech and 1 is German.

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

CZECH/37-59-1-19/26

Letter to the Editor:
Polyethylene Anti-Reflection Coating for TlBr + TlI

ASSOCIATION: Ústav pro výzkum optiky a jemné mechaniky, Praha (Optics and Precision Mechanics Research Institute, Prague)

SUBMITTED: August 5, 1958

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

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67007

15.2120

CZECH/37-59-1-21/26

AUTHORS: A. Vaško, H. Prokopová

TITLE: Letter to the Editor: The Transmission of Arsenic Glass in the Region from 15 μ to 25 μ

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 1, pp 111-112

ABSTRACT: Arsenic glass (As_2S_3 or As_2S_5) is a promising optical material for the infra-red region. Its transmissivity (Refs 1-7) and reflectivity (Ref 8) have been measured up to 15 μ. This wavelength is usually considered the absorption edge. However, we have found in locally prepared material that after the strong absorption band at 15 μ, there is a further region of transmissivity. Fig 1 shows a typical absorption spectrum for a sample 0.98 mm thick. The new transmission region has a maximum at 17.18 μ and ends with a further absorption band. Further work is in progress. There are 1 figure and 8 references, of which 6 are English and 1 is Russian and 1 is German.

Card 1/1

ASSOCIATION: Ústav pro výzkum optiky a jemné mechaniky, Praha (Optics and Precision Mechanics Research Institute, Prague)

SUBMITTED: September 2, 1958

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

CZECH/37-59-3-25/29

AUTHORS: Vaško, A. and Lukeš, František

TITLE: Remark by A. Vaško on a Paper by F. Lukeš and Reply by F. Lukeš

PERIODICAL: Československý časopis pro fysiku, 1959, Nr 3, pp 330-331

ABSTRACT: František Lukeš has described in this journal (Ref 1) a new method of measuring the reflection which gives the reflexivity of a sample without requiring the knowledge of the reflexivity of the standard sample. This is, therefore, an absolute method of measurement. It is pointed out that, apart from the Lukeš method, there exist other methods which have not been mentioned in the paper of Lukeš.

Reply by František Lukeš to A. Vaško

The author points out that his paper was not intended to be a survey and, therefore, apart from the work of R.V. Tagirov, Ref 5, it did not discuss the various known methods of measurement.

Card 1/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

CZECH/37-59-3-25/29

Remark by A. Vaško on a Paper by F. Lukeš and Reply by F. Lukeš

There are 9 references, of which 3 are Czech, 1 Soviet, 3 German and 2 English.

ASSOCIATIONS: Laboratoř optiky ČSAV, Praha (Optical Laboratory of the Czechoslovak Ac.Sc., Prague) (A. Vasko)
Katedra fysiky přírodovědecké fakulty university, Brno (Chair of Physics, Brno University)

SUBMITTED: Article by A. Vaško - January 5, 1959
Reply by F. Lukeš - January 20, 1959

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

06634

CZECH/37-59-5-10/13

AUTHOR: Vaško, Antonín

TITLE: New Method for Measuring Absolute Reflectivity With Double-beam Spectrometers (Letter to the Editor)

PERIODICAL: Československý časopis pro fysiku, 1959, Nr 5, p 547

ABSTRACT: Normally, such spectrometers measure relative reflectivity by inserting two deflecting mirrors and the sample into one beam and three deflecting mirrors in the reference beam (Figure 1).
The upper part of Figure 1 shows a different arrangement of mirrors in the beam of the sample, making the measurement of reflectivity an absolute one. Here, Z_1 and Z_2 are the same deflecting mirrors as before, Z_3 is the measured sample. $Z_4 = Z_5$. The instrument measures:

$$\frac{R_{Z_3} R_{Z_4}}{R_{Z_3}} = R_Z$$

Card1/2

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06634

CZECH/37-59-5-10/13

New Method for Measuring Absolute Reflectivity With Double-beam Spectrometers (Letter to the Editor)

i.e. the absolute reflectivity.
Further work is in progress.
There is 1 figure.

ASSOCIATION: Laboratoř optiky ČSAV, Praha (Optical Laboratory of the Czechoslovak Ac.Sc., Prague)
SUBMITTED: March 18, 1959

Card2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A.

A new method for measuring the absolute reflectivity with a double-beam spectrometer. Antonín Vaško (Czechoslov. Acad. Sci., Prague). *Czechoslov. J. Phys.* 9, 607–8 (1959)(in German).—A new method permits the same external optical paths along the test-cell beam and sample-cell beam; this simplifies measurements in the infrared since the influence of H_2O vapor and CO_2 is the same along both paths. A. Kremlieller

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

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K

CZECHOSLOVAKIA/Optics - Physicsl Optics.

Abs Jour : Ref Zhur Fizika, No 11, 1959, 26024

Author : Vasko, A.

Inst : Research Institute for Optics and Precision Mechanics, Prague, Czechoslovakia

Title : Simplification of Formulas for the Calculation of Optical Constants of Absorbing Substances

Orig Pub : Chekhosl. fiz. zh., 1959, 9, No 1, 125-127

Abstract : The Oswald and Schade formula (Referat Zhur Fizika, 1958, No 3, 8524) for the calculation of the coefficients of reflection on the boundary of a body and the coefficient of absorption from the measured transmission and reflection of the thick layer, is derived in a simpler manner and is reduced to a form which simplifies considerably the calculation of the optical constants.

Card 1/1

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CZECHOSLOVAKIA/Optics - Physical Optics.

Abs Jour : Ref Zhur Fizika, No 1, 1960, 2080 K

After this the coating was heated for a short time to 1200 C and again rapidly cooled. -- P.G. Kark

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A.

CZECHOSLOVAKIA/Optics - Optical Media. K

Abs Jour : Ref Zhur Fizika, No 1, 1960, 1972

Author : Prokopova, H., Vasko, A.

Inst : Research Institute for Optics and Fine Mechanics, Prague, Czechoslovakia

Title : The Transmissivity of Arsenic Glass in the 15 μ to 25 μ Range.

Orig Pub : Chekhosl. fiz. zh., 1959, 9, No 2, 270

Abstract : The transmission spectrum of glass based on As_2S_3 and As_2S_5 was measured in the region from 0.8 to 25 μ, and was found past a region of transmission with a maximum at 17.18 μ the well known absorption* followed in turn by an absorption region which apparently alternated with still another transmission region. -- O. Molchanova

Card 1/1 * band near 15 μ

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

Z/012/60/000/02/007/019
E073/E435

AUTHOR: Vaško, A.

TITLE: Investigation of the Optical Homogeneity of Several Non-Transparent Substances in the Infra-Red Range

PERIODICAL: Silikáty, 1960, Nr 2, pp 169-171 + 2 plates

ABSTRACT: A modification of Toepler's cord method for the near infra-red range using an electron image converter is described. The presence of cords is demonstrated in the opaque materials: UG 6 filter glass, blue "Tempax-Tafelglas", arsenic and selenic glass and silicon single crystals. The described method is suitable for rapid determination of the homogeneity of some opaque or partly transparent materials. There are 9 figures and 3 references, 1 of which is Czech and 2 German.

ASSOCIATION: Laboratoř optiky ČSAV (Optics Laboratory, Czechoslovak Academy of Sciences)

SUBMITTED: October 5, 1959

Card 1/1

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

3,2970
9,4160
9,4175

83387

Z/037/60/000/005/031/056
E192/E382

AUTHOR: Vaško, A.

TITLE: The Fatigue of Silver-caesium Photocathodes Due to Infrared Radiation

PERIODICAL: Československý časopis pro fysiku, 1960, No. 5, p. 432

TEXT: Brief review of the works dealing with the problem of silver-caesium photocathodes. It is pointed out that, in general, it is maintained on the basis of the works of de Boer and Teves that infrared radiation does not fatigue the cathodes. The contrary was observed by the author in 1952 and this phenomenon was investigated on a number of transparent and non-transparent photocathodes. It is thought that the fatigue due to infrared irradiation is a general phenomenon in silver-caesium photocathodes. Measurements showing the dependence of fatigue on the intensity of infrared radiation, its temperature and spectrum distribution are given. The abnormal fatigue of the photocathodes, where the sensitivity of the cathodes is low for a considerable time after termination of the irradiation,

Card 1/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

83387

Z/037/60/000/005/031/056
E192/E382

The Fatigue of Silver-caesium Photocathodes Due to Infrared Radiation

is also mentioned. This effect was observed on various transparent and non-transparent photocathodes. The possible reasons for the disagreement between the author's measurements and the conclusions of de Boer and Teves are indicated.

ASSOCIATION: Laboratoř optiky ČSAV, Praha
(Optics Laboratory of the ČSAV, Prague)

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

S/058/62/000/003/043/092
A061/A101

AUTHORS: Srb, I., Vaško, A.

TITLE: The absorption spectrum of amorphous selenium in the infrared region

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 19, abstract 3V137 ("Chekhosl. fiz. zh.", 1961, v. B11, no. 9, 664 - 667, Russian, English summaries)

TEXT: The absorption spectrum of amorphous selenium was measured at 0.6 - 25 μ on samples of high purity and high optical homogeneity. In addition, absorption bands of liquid Se and the corresponding absorption bands of amorphous and liquid S were measured in the same wavelength range. The measurements indicate that the absorption bands 13.4 and 20.4 μ in the absorption spectrum of amorphous Se are characteristic of Se proper, i.e., they are not due to impurities, as assumed by other authors. The similarity between Se and S spectra in the infrared region is pointed out.

[Abstracter's note: Complete translation]

Card 1/1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A.; LIPKA, L.

Universal heated cell for spectral measurement. Jemna mech opt 6 no. 6: 161-162. Jr '61

1. Laborator optiky, Ceskoslovenska akademie ved, Praha.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 43581-65 EWT(1)/EWP(e)/EPA(s)-2/EWT(m)/EWP(1)/EPF(n)-2/EPA(w)-2/EWP(b)/T/
EEC(b)-2 Pab-10/Pt-7/Pi-4/Pu-4 IJP(c) GG/WH
ACCESSION NR: AT5009581 Z/0000/62/000/000/0146/0148 66

B+1

AUTHOR: Kuhn, A. (Kugn, A.); Vasko, A. (~~Vaskian~~ A.) 15

TITLE: absorption and reflection spectra of corundum, spinel and rutile single crystals in the infrared range 21

SOURCE: Konference o monokrystalech. 4th, Turnov, 1961. Sbornik referatov. Turnov, VUM, 1962, 146-148

TOPIC TAGS: Absorption spectrum, reflection spectrum, infrared spectrum, corundum crystal, spinel crystal, rutile crystal, single crystal, synthetic ruby, synthetic sapphire

ABSTRACT: A study was made of the absorption and reflection spectra of crystals produced by the Spolek pro chemickou a hutni vyrobu (Chemical and Metallurgical Society) by the Verneuil process. A Zeiss UR-10 infrared spectrometer was used to analyze an LiF prism in the 2-5.55 μ band, an NaCl prism in the 5.55-14.28 μ band, and a KBr prism for [illegible] estimated in the same device [illegible] sapphire [illegible] to that in corundum with Cr oxide (Rose de France). Filtration in ruby R5 (corundum [illegible]

Card 1/2

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L 43581-65

2

ACCESSION NR: AT5009581

0.25% Cr) proved to be about equal in crystals oriented along and transverse to the optical [illegible] considered isotropic. Similar tests on ruby R7 and alex- [illegible] of spinel and rutile show two lines [illegible] described, and measurements were made of the reflex bands of these crystals. Orig. art. has: 10 figures.

ASSOCIATION: [kuhn] Spolek pro chemickou a hutni vyrobu, Usti nad Labem (Chemical and Metallurgical Society); [Vasko] Laborator optiky CSAV, Prague (Optical Laboratory, CSAV)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT, OP

NO REF SOV: 000 OTHER: 007

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

S/081/62/000/011/004/057
E073/E192

9,5320

AUTHORS: Srb, I., and Vaško, A.

TITLE: On the absorption spectrum of amorphous selenium in the infrared region

PERIODICAL: Referativnyy zhurnal, Khimiya, no.11, 1962, 39, abstract 11 B212. (Chekhosl. fiz. zh., v.V11, no.9, 1961, 664-667 (abstract in Russian).)

TEXT: The absorption spectrum of amorphous selenium was studied in the region 0.6 to 25 microns. Optically uniform specimens of selenium with admixtures not exceeding 5×10^{-4}% were used. The absorption spectra of liquid selenium were investigated at 252°, as well as of amorphous and liquid sulphur. In the view of the authors, absorption bands at 13.4 and 20.4 microns observed in the absorption spectrum of amorphous selenium are not due to the admixtures but are intrinsic absorption bands. It is pointed out that there is a similarity in the absorption spectra of selenium and sulphur in the infrared region.

Card 1/1 [Abstractor's note: Complete translation.]

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, Antonin

First National Conference on Infrared Radiation Engineering.
Pokroky mat fyz astr 8 no.2:89-91 '63.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 18796-63 EWP(q)/EWT(m)/BDS AFFTC JD
ACCESSION NR: AP3003617 Z/0055/63/013/005/0358/0363

53
52

AUTHOR: Vasko, A.

TITLE: The vibration spectra of sodium chloride doped with sodium carbonate and sodium hydroxide

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 13, no. 5, 1963, 358-363

TOPIC TAGS: vibration spectrum, spectrum, absorption spectrum, sodium chloride, sodium carbonate, sodium hydroxide, reflection spectrum, infrared spectrum

ABSTRACT: Infrared absorption spectra in the 2—25-μ region were obtained of sodium chloride single crystals doped with 0.1—1 mol% sodium carbonate or sodium hydroxide. The crystals were prepared from the melt in air by the Kyropoulus method. Three absorption bands corresponding to CO_3^{2-} and one band at 3650 cm^{-1} corresponding to OH^- were identified in the spectra

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 18796-63
ACCESSION NR: AP3003617

of the doped crystals. Crystals doped with sodium carbonate and sodium hydroxide gave practically identical absorption spectra, which indicates that the hydroxide is completely converted to the carbonate. The reflection spectra of the carbonate-doped crystals did not exhibit bands caused by the absorption of sodium carbonate. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Laborator optiky, Ceskoslovenska akademie ved, Prague (Laboratory of Optics, Czechoslovak Academy of Sciences)

SUBMITTED: 15Jun62 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: PH NO REF SOV: 000 OTHER: 012

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

SRB, I.; VASKO, A.

The vibrational spectra of sulfur and selenium in the amorphous state and their similarity. Chekhosl fiz zhurnal 13 no.11:827-840 '63.

1. Laborator optiky, Ceskoslovenska akademie ved, Praha.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

Z/017/63/052/002/002/002
E081/E420

AUTHORS: Sequens Jiří, Engineer Doctor
Vaško Antonín, Engineer

TITLE: The visual presentation of temperature gradients of transient phenomena

PERIODICAL: Elektrotechniaky obzor, v.52, no.2, 1963, 86-92

TEXT: The use of the Schlieren method for observing temperature gradients in the range of temperature 20 to 300°C is described. The optical methods of Toepler and Philpot Svennson are considered in detail. Toepler's method uses two screens (Fig.1) where Z is a light source of constant intensity with a sharp edge at A; the lens O_1 produces an image of the source Z at C' where the edge of the screen is placed at a distance a' from the edge of the source image; the lens O_2 produces an image P' of the object P. If the image produced by the parallel rays is cut off by the edge at C' and only the image produced by the refracted rays is allowed to be projected, then a change of intensity is observed in places where there are thermal gradients. An expression is derived relating the relative change in intensity

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

Z/017/63/052/002/002/002
E081/E420

The visual presentation ...

of the image to the thermal gradient

$$\frac{\Delta L}{L} = \frac{sh}{a'} \mu \frac{d\vartheta}{dx} \qquad (6)$$

where μ is the thermal coefficient of the refractive index and ϑ is the temperature. Experimental results obtained on a simple arrangement of small cylindrical resistances are given. Thermal models are also given which enable a comparison of theory and experiment to be made. In addition, the paper deals with the inclined slit method developed by Philpot - Svensson (Arkiv för kemi, mineralogi o geologi, v.22A, no.10) which renders visible temperature gradients over a whole cross section of the medium. The gradient curve thus obtained yields after integration a curve showing the distribution of temperature over the investigated cross section. Tests made on simple thermal models are described as in the former case. The experimental results show that the graphical representation of the temperature gradients enables the shape of even complicated two dimensional gradient fields to be traced. In this way it is possible to examine the temperature

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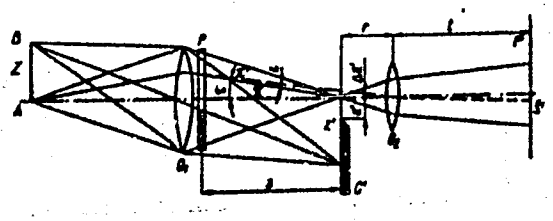
Z/017/63/052/002/002/002
E081/E420

The visual presentation ...

rise at various points on the tested device or to investigate on models the cooling arrangements and changes of them, necessary to improve their operation. There are 14 figures.

ASSOCIATION: Ústav pro elektrotechniku ČSAV a Laboratoř optiky ČSAV (Institute of Electroengineering Czech AS Optical Laboratory Czech AS)

SUBMITTED: April 19, 1962



Card 3/3

Fig.1.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A.

Vibration spectra of sodium chloride doped with Na_2CO_3 and NaOH. Chekhosl fiz zhurnal 13 no.5:358-363 '63.

1. Laborator optiky, Ceskoslovenska akademie ved, Praha.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

ACCESSION NR: AP4042353 Z/0050/64/000/007/0010/0010

AUTHOR: Kubec, V. (Engineer, Candidate of sciences); Sequens, J. (Doctor, Engineer); Vasko, A. (Engineer)

TITLE: Magnetic fields made visible

SOURCE: Bulletin Ceskoslovenske akademie ved, no. 7, 1964, 10

TOPIC TAGS: magnetic field, weak magnetic field, magnetic field visualization

ABSTRACT: In a previous study conducted at the Ustav pro elektrotechniku, CSAV (Institute of Electrical Engineering, CSAV), temperature fields had been made visible (CSAV Bulletin, no. 3, 1963). Using the experience gained, scientists developed a new method of making magnetic fields visible by means of a polariscope. The method is based on the Majorana effect (a colloidal solution consisting of ferromagnetic particles becomes doubly refracting in a magnetic field which is perpendicular to the optical axis of polarized light). A thin layer of magnetooptic liquid illuminated by polarized light is placed in a magnetic field, whose image can then be seen on the screen of a

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ACCESSION NR: AP4042353

polariscope. A colloidal solution of magnetite prepared at the Fyzikalní ústav, CSAV (Institute of Physics, CSAV) was used. This solution aids in visualizing relatively weak dispersed magnetic fields (e.g., around the winding of electric machines), mainly in cases when it would be difficult to calculate their shape. The inventors of the method are V. Kubec and J. Sequens of the Electrotechnical Institute, CSAV, and A. Vasko, of the Ustav radiotechniky a elektroniky CSAV (Institute of Radio Engineering and Electronics, CSAV). A patent has been applied for.

ASSOCIATION: none

SUBMITTED: 00 ATD PRESS: 3053 ENCL: 00

SUB CODE: EM NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

MILER, M.; VASKO, A.

Simple method of measuring the refraction index in the infrared area of a spectrum. Jemna mech opt 9 no. 1:8-9 Ja '64.

1. Laborator optiky, Ceskoslovenska akademie ved, Praha.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A., RNDr. inz. CSc.

Single beam methods of absolute reflectivity measurement. Jemne mech opt 10 no.3:69-71 Mr '65.

1. Institute of Radio Engineering and Electronics of the Czechoslovak Academy of Sciences, Prague. Submitted October 10, 1964.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VASKO, A.

On the absorption and reflection spectrum of amorphous selenium in the infrared region. Chekhosl fiz zhurnal 15 no.3:170-177 '65.

1. Institute of Radio Engineering and Electronics of the Czechoslovak Academy of Sciences, Prague 2, Trojanova 16. Submitted May 26, 1964.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

L 8261-66 EWT(1)/ETC/EWG(m)/EWP(t)/EWP(b) IJP(c) RDW/JD
ACCESSION NR: AP5007342 Z/0055/65/015/003/0170/0177

44,55

AUTHOR: Vasko, A.

TITLE: The absorption and reflection spectrum of amorphous selenium in the infrared region

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 15, no 3, 1965, 170-177

21,44,55

TOPIC TAGS: absorption spectrum, absorption band, selenium

ABSTRACT: The spectral dependence of the reflectivity and the absorption coefficient of amorphous selenium in the region between 2 and 25 were exactly determined in this work on perfectly optically homogeneous samples. Differences in the infrared spectra compared with data from the literature are discussed. The refractive index in the long-wave region was calculated from the dispersion relation on the basis of the entire distribution known today of the absorption coefficient in a wavelength region from approximately 0.13 A to 150 . The continuous component of the absorption in the long-wave region was found to be approximately proportional to the square of the wavelength. A theoretical deduction of the temp-

Card 1/2

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L 8261-66
ACCESSION NR: AP5007342

44,55 12

erature dependence of the previously experimentally found wave numbers of absorption bands is given. "The author is grateful to Dr H. Lundstrom from the research laboratories of the Bolidens Gruvaktiebolag Company, Skelleftehamn, Sweden, for valuable discussions and for his kind grant of a considerable amount of extremely pure selenium for this work. Thanks are also due to Eng. I. Srb for the preparation of optically homogeneous samples and Eng. S. Martinek for the graphical evaluation of the results." Orig. art. has: 5 figures.

ASSOCIATION: Institute of Radio Engineering and Electronics, Czech. Acad. Sci., Prague

44,55

SUBMITTED: 26May64 ENCL: 00 SUB CODE: MM, OP

NO REF SOV: 000 OTHER: 016

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

24(8) PHASE I BOOK EXPLOITATION SOV/2117

Soveshchaniye po eksperimental'noy tekhnike i metodam vysokotemperaturnykh issledovaniy, 1956

Eksperimental'naya tekhnika i metody issledovaniy pri vysokikh temperaturakh; trudy soveshchaniya (Experimental Techniques and Methods of Investigation at High Temperatures; Transactions of the Conference on Experimental Techniques and Methods of Investigation at High Temperatures) Moscow, AN SSSR, 1959. 789 p. (Series: Akademiya nauk SSSR. Institut metallurgii. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali) 2,200 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.L. Bankvitzer.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

COVERAGE: This collection of scientific papers is divided into six parts: 1) thermodynamic activity and kinetics of high-temperature processes 2) constitution diagram studies 3) physical properties of liquid metals and slags 4) new analytical methods and production of pure metals 5) pyrometry, and 6) general questions. For more specific coverage, see Table of Contents.

Experimental Techniques and Methods (Cont.) SOV/2117

Zosimovich, D.P., T.F. Frantsevich-Zabludovskaya, A.I. Zayats, I.P. Bogatova, N.Ye. Mechayeva, and A.T. Vas'ko. Electrochemical Method of Obtaining Nickel-Molybdenum and Nickel-Tungsten Alloys 505

In the electrolytic precipitation of nickel-molybdenum and nickel-tungsten alloys from ammoniacal solutions, an increase in the concentration of molybdenum and tungsten at a given concentration of nickel leads to (1) an increase in their relative content in the alloy, provided the experiments are carried out at temperatures of up to 30° C, and (2) a drop in the output of current. In both types of alloys an increase in ammonia concentration results in an increase in nickel content and a simultaneous drop in the output of current. A rise in temperature leads to an increase in the current output, especially in the case of tungsten-nickel alloys. With a change in current density the current output passes through a maximum in both types of alloys. A rise in temperature affects the composition of the two types of alloys differently: the relative amount of tungsten in the alloy increases sharply, while that of molybdenum is hardly affected. An increase in current density nearly always leads to a drop in molybdenum content, but does not affect the composition of the tungsten alloys. The electrolyte compositions required for producing alloys with identical amounts of molybdenum and tungsten are very different as regards the relative concentrations of the principal components. This may be due to the difference in the coefficients of diffusion of molybdeniferous and tungsteniferous ions determining the transfer of the ions to the cathode. Experiments conducted in large-scale installations confirm the belief that the proposed method is satisfactory for industrial application. An advantage of the suggested type of electrolytes (ammoniacal solutions) is their practically unlimited service life and their cheapness as compared with oxyacid electrolytes. The alloys thus produced are of satisfactory purity as regards metallic impurities (not more than 0.0.1 percent), but they contain a considerable amount of nonmetallic impurities, especially oxygen and nitrogen, because of the type of electrolytes used and the electrochemical process. Further study will be required to solve this problem.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

VAS'KO, A.T. [Vas'ko, O.T.]

Rectifying properties of the electrolyte-semiconductor (tungsten oxide) contact. Dop.AN URSR no.6:766-768 '61. (MIRA 14:6)

1. Institut obshchey i neorganicheskoy khimii AN USSR. Predstavleno akademikom AN USSR Yu. K. Delimarskim [Delimars'kyi, IU.K].
(Semiconductors)
(Electrolytes)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

S/659/62/008/000/027/028
I048/I248

AUTHORS: Vas'ko, A.T., and Zosimovich, D. [I., P., or N.]

TITLE: Electrochemical preparation of nickel-tungsten alloys from acid peroxide electrolytes

SOURCE: Akademiya nauk SSSR. Institut metallurgii, Issledovaniya po zharoprochnym splavam. v.8. 1962. 217-223

TEXT: Nickel-tungsten alloys were deposited on a Pt cathode from electrolytes containing Na tungstate 30 g./l., hydrogen peroxide (30% solution) 21 ml./l., boric acid 50 g./l/. sulfuric acid to pH 1.9-2.3, and nickel sulfate 0.01-600 g./l., at 50°C and a c.d. of 10 amp./sq.dm., using Ni anodes. Deposits with high W contents were obtained from electrolytes containing small amounts of Ni, but the current efficiency was extremely poor (0.03%); the deposits from electrolytes containing 20-300 g. $NiSO_4$/l. were of poor quality and contained non-metallic inclusions. The current efficiency with solutions containing 600 g. $NiSO_4$/l. was about 62%, and the W content of the deposit was 25%. Increasing the Na tungstate concen-

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S/659/62/008/000/027/028
I048/I248

Electrochemical preparation of...

tration above 20 g./l. had no effect on the W content of the deposit but reduced the current efficiency. Increasing the pH within the range 1.0 - 5.0 caused an increase in the current efficiency accompanied by a sharp decrease in the W content of the deposit; deposits with a high W content (70%) were obtained at pH below 1.5 but the rate of decomposition of the H_2O_2 was prohibitively high. The optimum H_2O_2 concentration was about 5 ml. of the 30% solution per liter electrolyte; the optimum boric acid concentration was 30 g./l. The temperature had to be maintained at 40-50°C, to prevent rapid decomposition of the H_2O_2 at higher temperatures, and to prevent crystallization of the boric acid at lower ones. The optimum c.d. was 10-20 amp./sq.dm. On the basis of the above data, the optimum process conditions are defined as follows: electrolyte composition - Na tungstate 20 g./l., $NiSO_4$ 600 g./l., H_2O_2 (30% solution) 5 ml./l., H_2SO_4 to pH 2.1; boric acid 50 g./l.; temperature 50°C; c.d. 10 amp./sq.dm. The W content of the deposit obtained under the optimum con-

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

S/659/62/008/000/027/028
I048/I248

Electrochemical preparation of...

ditions was 20%, and the energy consumption was 3.7 kw.hr./kg. deposit. The acid peroxide electrolyte has a higher stability, a lower toxicity, and is associated with higher current efficiencies than the ammonia-containing baths used for the deposition of Ni-W alloys. There are 4 figures and 3 tables.

Card 3/3

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

S/080/62/035/006/010/013
D204/D307

AUTHORS: Vas'ko, A. T. and Zosimovich, D. P.

TITLE: Electrochemical preparation of Ni-W alloys from acidic peroxide electrolytes

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 6, 1962, 1302-1308

TEXT: The experiments were conducted in a cell of the usual type, with an Ni cathode and Pt or Ni anodes, over 15 min to 10 hrs, with mechanical stirring: At 50°C and with a current density (D) of 10 A/dm^2 and using an electrolyte of Na_2WO_4 30 g/l, 30% H_2O_2 21 ml/l, H_3BO_3 50 g/l and H_2SO_4 to give pH 1.9 - 2.3, it was found that the best alloys (~25% W) were deposited from solutions to which 300 - 600 g $NiSO_4$/l were added. Under the same conditions and with 400 g $NiSO_4$/l of electrolyte, the optimum Na_2WO_4 content was ~20 g/l, which gave an alloy of ~25% W, with a current efficiency

Card 1/3

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(ρ) > 60%. Using an electrolyte containing 30 g Na_2WO_4/l, 420 g $NiSO_4$/l and 20 ml of 30% H_2O_2/l, and adjusting the pH with H_2SO_4, the preferred pH range was 2.0 - 2.2. With 20 g Na_2WO_4, 400 g $NiSO_4$, and 50 g H_3BO_3 per liter, at pH 2.0 - 2.2, it was found that small (5 ml/l) additions of H_2O_2 raised the W content and ρ of the alloy, whilst further additions lowered ρ and, to a certain extent, the W content. Additions of 30 - 50 g/l of H_3BO_3 to the electrolyte containing optimum amounts of Na_2WO_4, H_2O_2 and $NiSO_4$, at pH 2.0 - 2.2 improved the alloy quality and raised ρ. The optimum range of temperature was 40 - 50°C. Increasing the D lowered the W content of the alloy and raised ρ, but at D > 20 A/dm^2 the deposits were partly dendritic; low D's (~2.5 A/dm^2) yielded dense, light colored deposits with high corrosion resistance, suitable for use as coatings. The recommended conditions (electrolyte - Na_2WO_4 20 g/l, 30% H_2O_2 5 ml/l, $NiSO_4$ 600 g/l, H_3BO_3 50 g/l, H_2SO_4 to give pH

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859020001-5

2.1; temperature - 50°C, D = 10 A/dm^2) give an alloy containing 19% W, with a ρ of 88%. The power consumption was 3.7 kw-hrs/kg of alloy as opposed to 12 kw-hrs/kg necessary for similar alloys deposited from ammoniacal electrolytes. There are 4 figures and 3 tables.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN SSSR (Institute of General and Inorganic Chemistry, AS USSR)

SUBMITTED: May 9, 1961

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VAS'KO, A.T.

Polarization during simultaneous electrodeposition of tungsten with other metals. Ukr. khim. zhur. 29 no.8:878-880 '63. (MIRA 16:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

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AUTHOR: Vas'ko, A. T.; Tobolich, V.V.

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TITLE: Corrosion resistance of titanium and its alloys in hydroxylamine sulfate solution

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 11, 1966, 1253-1254

TOPIC TAGS: corrosion resistance, titanium, titanium alloy, hydroxylamine sulfate

ABSTRACT: The corrosion resistance of titanium and its alloys in acid solutions of hydroxylamine sulfate (120 g/l hydroxylamine sulfate and 80 g/l H_2SO_4) during the production of caprolactam was studied at 25-30° and 100-105°. The brand or composition of the alloys and the results of corrosion tests are shown in Table 1. It was found that titanium and its alloys are very stable and the corrosion is uniform in character. It is concluded that VT-1 titanium is a promising lining material because of its high corrosion resistance and relatively low cost. Orig. art. has: 1 table.

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Table 1

Brand or composition of alloy	T, °C	Testing time, hr	Corrosion rate, g/m hr
VT-1	25—30	1032	0,00023
Ti—10% Mo	25—30	1032	0,00051
Ti—25% Mo	25—30	1032	0,0014
Ti—50% Mo	25—30	1032	0,0026
Ti—20% Ta	25—30	1032	0,0000
VT-1	100—105	720	0,0065
VT-6	100—105	720	0,039
Ti—25% Mo	100—105	2200	0,0043
Ti—50% Mo	100—105	2200	0,013

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VAS'KO, I.P.

Supplying natural gas to air preheaters of a large blast furnace. Mat. i gornorud. prom. no.1:57 Ja-F '65. (MIRA 18:3)

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KOVAL', M.P., kand. veter. na s. [illegible]

Case of carbamide poisoning in cows. Veterinariia 41 no.[illegible] 49-50 O '64. (MIRA 18:[illegible])

1. Grodnenskiy sel'skokhozyaystvennyy institut (for Koval').
2. Glavnyy veterinarnyy vrach stantsii po bor'be s boleznyami zhivotnykh Grodnenskogo proizvodstvennogo upravleniya (for Vas'ko).

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BENDIG, Laszlo, dr.; VASKO, Janos, dr.

Experience with the treatment of rheumatic fever in children. Orv.hetil. 101 no.44:1560-1561 30 O '60.

1. Orszagos Testneveles- es Sportegeszsegugyl Intezet, Gyermekosztaly.
(RHEUMATIC FEVER ther)

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