

VINNITSKIY, L.Ye., akdn.tekhn.nauk; BLINOVA, Z.A.

Selecting the material for the rubber-metal parts of the absorption  
devices of passenger car automatic couplers. Vest. TSNII MPS 20  
no.5:38-42 '62. (MIRA 15:8)  
(Car couplings) (Rubber--Testing)

BLINOVA, Z.A., kand. tekhn. nauk; VINITSKIY, L.Ye., kand. tekhn. nauk;  
RUL'KOV, V.I., inzh.; Prinimali uchastiye: KRASNOVA, N.A.;  
MAL'TSEVA, O.I.

Evaluation of the properties of oil-resistant rubber-and-metal shock absorbers for the axle equipment of TE3 diesel locomotives. Trudy TSNII MPS no.267:100-106 '63. (MIRA 16:11)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINOVA, Z.A., kand. tekhn. nauk; VINITSKIY, L.Ye.; kand. tekhn. nauk;  
YAKOVLEV, M.A., inzh.; AKIMOV, V.G., inzh.

Selecting rubber for the shock absorbers of the central support  
cones of the VL60 locomotive. Trudy TSNII MPS no.267:107-  
112 '63. (MIRA 16:11)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLINOVA, Z.A., kand.tekhn.nauk; VINITSKIY, L.Ye., kand.tekhn.nauk; MAL'TSEVA, O.N., inzh.; YAKOVLEV, M.A.; AKIMOV, V.G., nauchnyy sotrudnik

Selecting wear resistant rubber for the cones of the central locomotive bearers. Elek. i tepl.tiaga 7 no.11:36-38 N '63. (MIRA 17:2)

1. Otdeleniye polimerov Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta Ministerstva putey soobshcheniya (for Blinova, Vinitskiy, Mal'tseva). 2. Starshiy inzh.-konstruktor Kolomenskogo teplovozostroitel'nogo zavoda (for Yakovlev). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrovozostroyeniya (for Akimov).

VINITSKIY, L.Ye.; BLINOVA, Z.A.; YAKOVLEV, M.A.

Rubber cone shock absorbers in locomotive body central supports.  
Kauch.i rez. 23 no.11:33-37 N '64.

(MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhelezodorozhogo  
transporta.

KHRONOV, G.A., inzh.; SHATSILLO, A.A., kand. tekhn. nauk; BLINOVA, Z.A.,  
kand. tekhn. nauk; VINITSKIY, L.Ye., kand. tekhn. nauk

Service life of the rubber-metal hinged shock absorbers of locomotives.  
Vest. TSNII MPS 24 no.5:35-38 '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektromekhaniki i  
Vsesoyuznyy nauchno-issledovatel'skiy institut zhelezodorozhного  
transporta.

USSR / Farm Animals. The Silkworm.

Q

Abs Jour: Ref Zhur-Biol., No 5, 1959, 21364:

Author : Turayev, N. S.; Blinovskaya, O. M.; Kornyakova, T. S.  
Inst : Sverdlovsk Institute of Agriculture.  
Title : The Effect of Feed, Temperature and Calendar Terms  
of Feeding upon the Development of the China Oak  
Silkworm.

Orig Pub: Tr. Sverdlovskikh In-ta, 1957; 1; 163-167.

Abstract: In the course of 4 years the China oak silkworm (COS) was raised on the leaves of the Maksimovich hawthorn taking into consideration temperature conditions and the duration of day light. It was established that the hawthorn represents a perfectly suitable oak substitute for the COS since the duration of the caterpillars' development when they feed on the hawthorn, as well as the weight

Card 1/2

GEDYY, Pavel Konstantinovich; BLINOVSKIY, Aleksandr Petrovich;  
KOVALENKO, A.V., inzh., retaenzent; DUGINA, N.A., tekhn.red.

[Standardization and simplification in the machinery industry]  
Normalizatsiya i unifikatsiya v mashinostroenii. Izd.2., ispr.  
i dop. Moskva, Mashgiz, 1962. 255 p. (MIRA 16:2)  
(Machinery—Standards)

25(5)  
AUTHORS:

Aronov, Z.M. and Blinovskikh, A.P., Engineers

SOV/28-59-2-10/26

TITLE:

In the Sverdlovsk Sovnarkhoz (V Sverdlovskom Sovnarkhoze)

PERIODICAL:

Standartizatsiya, 1959, Nr 2, pp 33-34

ABSTRACT:

The Sovnarkhoz of the Sverdlovsk economic administrative region supervises the work of different branches of industry which were previously controlled by 22 Ministries. Such dispersion hampered effective standardization. In the machine building industry for example only 20% to 40% of all components were standardized. Since the Sovnarkhoz took over, eight scientific research institutes have been set up to supervise and coordinate standardization work, and special standardization offices have been established in each enterprise. Current technical facilities are therefore being examined more thoroughly with a view to more qualitative output.

Card 1/1

BLINOVSKIKH, G.I.

Device for tightening the truck frame of series "I" car during  
welding. Rats. prodl. na gor. elektrotransp. no.9:43 '64.  
(MIRA 18:2)

1. Sluzhba podvizhnogo sostava Tramvayno-trolleybusnogo uprav-  
leniya Sverdlovska.

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINOVSKYU,

Change in the power supply network of an SB-69M electric  
motor. Prom. energ. 20 no.6:18-19 Je 105.

(KRA 18/6)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLINOVSKIKH, S.P., inzh.

Improvement in piston engine valve designs. Prom. energ. 17  
no.9-20-22 S '62. (MIRA 15:8)  
(United States—Gas and oil engines—Valves)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINOVSKIKH, S.P., inzh.

Modernization of the valves of the expander of the "Air reduction" oxygen system. Khim. amshinostr. no. 6:35-36  
N-D '62. (MIRA 17:9)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLINOVSKIY, A.P.

Standardization in enterprises of the Sverdlovsk Economic Council.  
Standartizatsiya 24 no.12:32-33 D '60. (MIRA 13:11)  
(Sverdlovsk Province--Standards, Engineering)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

TYUL'PANOV, Nikolay Mikhaylovich; ELINOVSKIY, O.K., red.

[Park forest management] Lesoparkovoe khoziaistvo. Mo-  
skva, Stroizdat, 1965. 170 p. (MIRA 18:7)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINOVSKIKH, S.P., inzh.

Device for determining pilot cable strands. Prom.energ. 19  
no. 4:37-38 Ap '64. (MIRA 17:5)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLINOVSKIY, K.V. [deceased]

Trees and shrubs in landscaping the settlements of the eastern part of Ashkhabad Province. Trudy Turk. bot. sada no.4:5-104 '62. (MIRA 15:7)

(Ashkhabad Province--Landscape gardening)  
(Ashkhabad Province--Woody plants)

BLINOVSKIY, Yu. A., Doc Med Sci -- (diss) "Pathogenesis of epileptic disease (liver--interoreceptors--brain)." Tashkent, 1960. 23 pp; (Ministry of Public Health Uzbek SSR, Tashkent State Medical Inst); 350 copies; price not given; (KL, 25-60, 137)

42066

18.9500

P/053/62/000/008/002/004  
I004/I242

AUTHORS: Blinowski, Andrzej and Szyszko, Engeniusz

TITLE: Improved technology of extracting doped single crystals of germanium on a pilot-plant scale

PERIODICAL: Przeglad Elektroniki, no: 8, 1962, 451-454

TEXT: The purpose of this work was to increase the yield and improve the parameters of crystals obtained by the Czochralski method. The stretching should be stopped at a point corresponding to the lower tolerance limit of conductivity. The rest of the charge in the crucible is left for the next stretching operation after addition of the next portion of the charge together with the impurity. In the case of germanium doped with

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P/053/62/000/008/002/004  
I004/I?42

Improved technology....

antimony this method increases the yield from 25 to 60%. Multiple replenishment of the charge and impurity does not effect the life time of impurity carriers, dislocation density, or spontaneous crystallization in the course of stretching. The life time of impurity carriers varied between 50 to 200 microseconds while the dislocation density varied between  $3 \times 10^3$  to  $1.2 \times 10^{-4} \text{ cm}^{-2}$ . In order to obtain low dislocation density crystals the seeds were cut in the [111] direction from single crystals with very low conductivity and subsequently annealed at  $900^\circ\text{C}$  in an atmosphere of hydrogen for 4 to 8 hours. The results were not reproducible. Low dislocation-density material was obtained by the so called "lengthening" method which consists of pulling crystals of a small diameter, equal to that of the seed. The density of dislocations is increased by a large diameter of the single crystal,

Card 2/3

P/053/62/000/008/002/004  
I004/I242

Improved technology....

pollution of the melt surface, variations of the diameter of the crystal in the course of stretching, heat shock at the final stretching stage, deviation of the crystal growth direction from the [111] axis. There is 1 table.

ASSOCIATION: Fabryka Fötprzewodników "TEWA" (The "Tewa" Semiconductors Factory)

Card 3/3

BLINOWSKI, KONRAD

POLAND/Solid State Physics - Structural Crystallography

E-4

Abs Jour : Ref Zhur - Fizika, No 6, 1958, No 13093

Author : O'Connor Denis, Blinowski Konrad

Inst : Not Given

Title : An Automatic Timing and Recording Circuit for Use with a  
Neutron Crystal Spectrometer.

Orig Pub : Acta Phys. polon., 1957, 16, No 4, 293-298

Abstract : The described apparatus is intended for registering changes  
and automatically controlling a neutron spectrometer. The  
quantities registered are the angular position, the time of  
measurement, the intensity of the primary and scattered  
neutrons. For this purpose use is made of a standard elec-  
tronic summing network. The apparatus makes it possible  
to use most economically the time of the measurements for  
that reason, that the time and the frequency of the measure-  
ment depend on the intensity of the scattered neutrons.

Card : 1/1

P/046/60/005/007-8/006/007  
A224/A026

AUTHOR: Blinowski, Konrad

TITLE: Neutron Diffraction Studies in Solid-State Physics

PERIODICAL: Nukleonika, 1960, Vol. 5, No. 7-8, pp. 481-493

TEXT: The paper presented at the reactor conference of Socialist Countries, convened at Rossendorf on June 13 to 18, 1960, and written in English language, describes the equipment and experimental methods used in the study of neutron diffraction at the Instytut Badań Jądrowych (Institute of Nuclear Research) in Warsaw. Described are: a double-crystal spectrometer for slow-neutron spectrum measurements, cross-section studies, and crystal structure studies; a cold-neutron facility for neutron-phonon interaction studies; a slow-neutron chopper; a 100-channel time analyzer; and a rotating crystal arrangement for the measurement of the spectra of inelastically scattered neutrons. There are given: results of slow-neutron spectrum measurements, cold-neutron production, structural investigation of PbO, tungsten carbide (WC), and magnetic structure of pyrite FeS<sub>2</sub>. Investigation results are given of parasitic Bragg reflections observed in the neutron spectra from crystal mono-

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P/046/60/005/007-8/006/007  
A224/A026

Neutron Diffraction Studies in Solid-State Physics

chromators. There are 10 figures, 4 photographs and 38 references: 34 English and 4 Polish.

ASSOCIATION: Polish Academy of Sciences, Institute of Nuclear Research, Warsaw,  
Department of Nuclear Physics

SUBMITTED: May 9, 1960

Card 2/2

L 11841-66 EWT(1)/EWP(e)/EWT(m)/EPF(n)-2/EWA(d)/EWP(k)/EWP(b) IJP(c) W/GG/GS/M

ACC NR: AT6000472

SOURCE CODE: UR/0000/65/000/000/0088/0090

AUTHOR: Blinov, V. A.

ORG: None

TITLE: Effect of high pressure on the structure of glass

SOURCE: Vsesoyuznoye soveshchaniye po stekloobraznomy sostoyaniyu. 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya. Leningrad, Izd-vo Nauka, 1965, 88-90

TOPIC TAGS: coordination chemistry, aluminum oxide, glass property, high pressure research, catalyzed crystallization, silicate glass, crystal, cation

ABSTRACT: Structural transformations were studied in alkali metal silicate glasses under pressure in which 1 mole of  $\text{SiO}_2$  was replaced by 1 mole of  $\text{Al}_2\text{O}_3$ . The compositions  $\text{K}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$ ,  $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$ , and  $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$  were subjected to 40,000 atm pressure at 400°C for 15 min. The presence of 1 mole of  $\text{Al}_2\text{O}_3$  was found to increase the compression of glass by about 6% as compared to the corresponding two-component compositions. This is attributed to an increase in the coordination number of aluminum from four to six. This conclusion was confirmed by the fact that the author was able to synthesize for the first time

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71  
70  
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ACC NR: AT6000472

low-temperature forms of eucryptite and spodumene by catalyzed crystallization under pressure, since such forms can be obtained only if the coordination number of aluminum has changed from four to six. It is concluded that in glass subjected to pressure there take place structural changes which are similar to those occurring in eucryptite and spodumene crystals and which involve the change from four to six in the coordination number of aluminum. This was also confirmed by determination of molar refraction. In general, the action of high pressures on the glass causes profound changes in its structure; if cations of variable coordination are present, their coordination increases as a function of the temperature and pressure. An increase in the ionic radius of the cation and in the concentration of alkalis prevents the cation coordination from increasing.  
Orig. art. has: 2 tables.

SUB CODE: /1, 30 / SUM DATE: 22May65 / ORIG REF: 001 / OTH REF: 001

Card 2/2

HU)

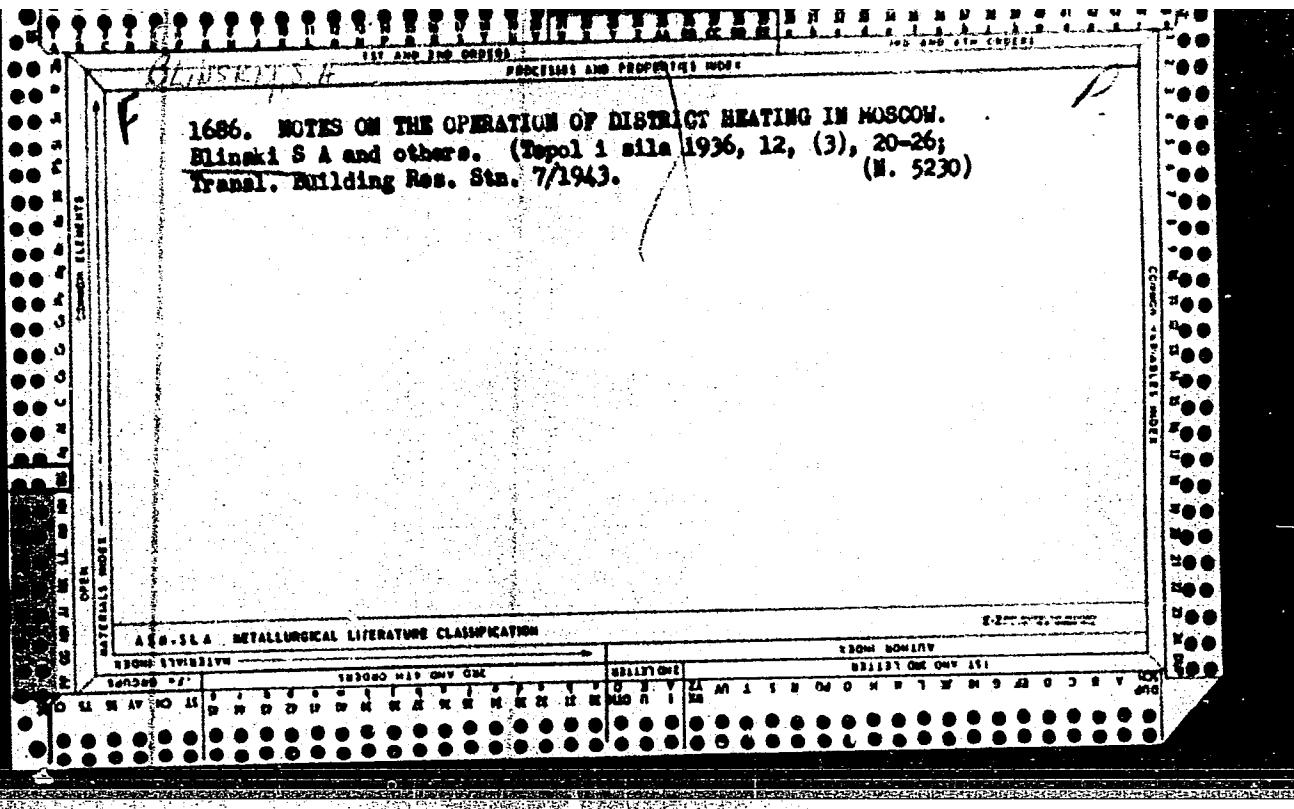
HLINSKI, S.

Yugoslavia (430)

Science

Generalizations on a Monge theory, p. 175.  
GLASNIK MATEMATICKO-FIZICKI I ASTRONOMSKI,  
Vol. 5, no. 4-5, 1950.

East European Accessions List, Library of Congress,  
Vol. 1, no. 14, Dec. 1952. UNCLASSIFIED.



Blinstrubas, S. [I.]

Survey of the methods of interpreting magnetic anomalies.

P. 87, (Liethuvos TSR Mokslu akademija. Geologijos ir geografijos institutas.  
MOKSLINIAI PRANESIMAI. Vol. 2, 1955, vilnius, Lithuania)

MONTHLY Index of East European Accessions (EEAI) LC. vol. 7, no. 2,  
February 1958

15-57-8-11506

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 8,  
pp 203-204 (USSR)

AUTHOR: Blinstrubas, S.

TITLE: Interpretation of Magnetic Anomalies (K voprosu  
interpretatsii magnitnykh anomaliy)

PERIODICAL: Nauch. soobshch. In-t geol. i geogr. AN LitSSR, 1955,  
Vol 2, pp 100-147

ABSTRACT: The author derives formulas which solve the direct and  
inverse magnetometric problems for the case of a vertically  
magnetized steeply dipping stratum of a limited extent and lying at a great depth. First a formula is derived for determination of H and Z along a certain profile in the field of a uniform polarity. Then, by integration, formulas are obtained for determining H and Z created by a thin vertical stratum at a great depth and of the length extent of  $2L$ . The profile is directed across the strike of the bed. Further, formulas are given for determination of H and Z created

Card 1/2

15-57-5-6844

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5  
p 160 (USSR)

AUTHOR: Blinstrubas, S. I.

TITLE:

Inclined Strata at Great Depth and of Infinite Extent,  
Magnetized Along the Direction of Dip (Inverse Problem  
of Magnetometry) [Naklonnyye plasty bol'shogo pogruzhe-  
niya i beskonechnogo prostiraniya, namagnichennyye po  
napravleniyu padeniya (Obratnaya zadacha magnitometrii)]

PERIODICAL: Tr. AN LitSSR, 1956, BZ, pp 51-62.

ABSTRACT: The author discusses the solution of the inverse problem  
in magnetometry by a formula derived by the author (Tr.  
AN Lit SSR, 1956, B1, 17-21). The method of interpre-  
tation is based on the use of spacings between  
characteristic points on the anomaly curves for the  
horizontal and vertical components and on the graphical  
determination of depth to the plane of the magnetic  
fields. Simplified formulas and graphs are presented.  
The proposed method is illustrated by an example of

Card 1/2

BLINSTRUBAS, S.

SCIENCE

PERIODICAL: DARBAI. SERIJA B. TRUDY. SERIIA B. No. 3, 1958

Blinstrubas, S. Inclined thread of poles. In Russian. p. 183.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2,  
February 1959, Unclass.

BLINSTRUPAS, S.I. [Blindtrubas, S.]; GEDVILAYTE, N.M. [Gedvilaite, N.]

Modeling magnetic and gravitational fields. Liet ak darbai  
B no.4:73-85 '61.

1. Institut geologii i geografii AN Litovskoy SSR.

ELINSTRUBAS, S.I.

Calculation of the plan of anomalous magnetic and gravitational fields and the determination of the horizontal dimensions of disturbing bodies. Trudy AN Lit.SSR. Ser.B. no.1:85-96 '62  
(MIRA 17:8)

1. Institut geologii i geografii AN Litovskoy SSR.

KARATAJUTE-TALIMAA, V., red.; NARBUTAS, V., red.; BLINSTRUBAS, S., doktor tekhn. nauk, red.; GARUNKSTIS, A., kand. geogr. nauk, red.; GRIGELIS, A., kand. geol.-min. nauk, red.; DALINKEVICIUS, J., doktor geol.-min. nauk, red.; KONDRTAS, A., kand. geol.-min. nauk, red.

[Problems of the Devonian stratigraphy and paleogeography of the Baltic region] Voprosy stratigrafii i paleogeografii devona Pribaltiki; doklady. Vilnius, Mintis, 1964. 145 p.

(MIRA 18:6)

1. Soveshchaniye po stratigrafii i paleogeografii devona Pribaltiki. Vilnius, 1962.
2. Chlen-korrespondent AN Litovskoy SSR (for Dalinkevicius).
3. Institut geologii Gosudarstvennogo geologicheskogo komiteta SSSR, Vilnius (for Karatajute-Talimaa, Narbutas).

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINTSOV, I.K. [Blintsov, I.K.]

Ivan Prokof'evich Rogovoi; on his 70th birthday. Vestsi AN  
SSSR. Ser. biial. nav. no.3:124-126 '65. (MIRA 18:11)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

USSR / Forestry. Forest Management

K-4

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43935

Author : Blintsov, I. K.

Inst : Institute for Socialist Agriculture Belorussian SSR

Title : Soil Moisture and Its Effect on the Rate of Growth  
in the Pine Plantings of Pine-Foxberry (Cranberry)  
Type of Habitat

Orig Pub: Sb. nauchn. tr. In-t. sots. s. kh. AN BSSR,  
1956, vyp. 4, 130-193

Abstract: The studies were conducted at the Negorelsk Experimental Training Forest in Minskaya Oblast.  
The chief characteristics of local soils are described. The forestry-valuation characteristics of

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USSR / Forestry. Forest Management

K-4

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43935

the tested varieties are also given. There is a close relationship between the moisture reserves in the soil during the first half of the year and the yearly added growth. The presence of moisture in the soil in spring and summer has a substantial effect on the increase in diameter. Under the conditions in the Belorussian SSR moisture is a factor which limits the forest productivity. The article points out the necessity of creating conditions which would contribute to the moisture accumulation by means of introducing the culture of deciduous species and by thinning out the canopy.

V. V. Protopopov

Card 2/2

BLINTSOV, I.K., kand. sel'skokhozyaystvennykh nauk

Soils of the Negoreloye Experimental Forest Station. Sbor.  
nauch. trud. BLTI no. 10; 423-434 '57. (MIRA 11:12)  
(Dzerzhinsk District—Forest soils)

BLINTSOV, I.K.

Changes in the plant cover and productivity of pine stands due  
to the effect of drainage. Sbor. nauch. rab. Bel. otd. VBO no.3:  
153-157 '61. (MIRA 14:12)

(White Russia--Pine)  
(Drainage)

BLINTSOV, I.K.

Soil and ground conditions for the growth of Miroslav oak and  
fir-and-oak stands. Dokl. AN BSSR 7 no.12:847-850 D '63.  
(MIRA 17:8)

1. Belorusskiy tekhnologicheskiy institut imeni Kirova.  
Predstavлено академиком AN BSSR P.P. Rogovym.

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINTSOV, I.K.

Soils and cultural conditions of the growth of pine stands in  
drained swamps. Bot.; issal. Bel. otd. VBO no.6;171-177 '64. (MIRA 18;7)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINTSOVSKAYA, R.A.

GURVICH, B.I., professor; BLINTSOVSKAYA, R.A.; GARANINA, S.A.; KOLOBIAMINA, S.A.

Clinical aspects, early diagnosis and treatment of murine typhus  
salmonellosis in small children. Pediatriia no.4:30-35 Ap '57.

(MIRE 10:1C)

1. Iz kafedry gospital'noy pediatrii Gor'kovskogo meditsinskogo  
instituta (zav. - prof. B.I.Gurvich) i Gorodskoy detskoy kliniche-  
skoy bol'nitsy (glavnnyy vrach Ye.G.Krupko)  
(SALMONELLA)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLINTSOV, I.K., kand. sel'skokhozyaystvennykh nauk

Water permeability of soils in pine plantations of the  
pine-cowberry forest type. Sbor. nauch. trud. BLTI  
no.11:159-165 (58). (MIRA 15:12)  
(Negoreloye region—Soil percolation)  
(Negoreloye region—Forest soils)

BLINTSOVASKAYA, R. A., GARANINA, S. A., KOLOHICKINA, S. A., GUREVICH, B. I.

"Clinic, early diagnosis, and treatment of salmonelloses  
(mouse typhus) in young children."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists  
and Infectionists, 1959.

BLINTSOVSKIY, E.L. (Alma-Ata)

Method for determining the degree of cerebrospinal fluid permeability of the spinal cord in closed complicated spinal fractures.  
(MIRA 14:1)  
Vop.neirokhir. 24 no.6:47-48 N-D '60.

1. Klinika gospital'noy khirurgii Kazakhskogo meditsinskogo instituta.  
(SPINAL CORD—PERMEABILITY) (SPINE—FRACTURE)

BLINTSOVSKIY, Ye.L.

Measuring the oxygen saturation of arterial blood in thoracic operations. Khirurgiia 36 no.12:10-13 '60. (MIRA 14:1)

1. Iz gospital'noy khirurgicheskoy kliniki (i. o. zav. kafedroy - dotsent N.S. Narodetskiy) Kazakhskogo meditsinskogo instituta.  
(BLOOD—OXYGEN CONTENT) (CHEST—SURGERY)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLINTSOVSKIY, Ye.Z.

Anesthesia in operations on the spinal cord. Vop. neirokhir 24  
no. 2:51-53 Mr-Sp '60. (MIRA 14:1)  
(SPINAL CORD--SURGERY) (ANESTHESA)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

L 10503-65 EWT(d)/EED-2/BWP(1) Pg-4/Pg-4/Pg-4/Pg-4 IJP(c) 03/82  
ACCESSION NR. AT4046524 S/2976/64/000/201 0000 2000

AUTHOR: Blinushov, V. P.

TITLE: High-sensitivity null-element for a high-speed "analog - code" converter

SOURCE: Moscow. Vy'seheye tekhnicheskoye uchilishche. Vy'chislitel'naya tekhnika,  
no. 4, 1964, 99-107

TOPIC TAGS: converter, analog code converter, null element, coder, semi-conductor modulator, switching time

ABSTRACT: Noting that the conversion of continuous to digital values can be accomplished by various kinds of coding devices, the accuracy and operational speed of which depend on the comparison circuitry employed, the author has made it possible to carry out 50,000 comparisons a second using triodes of no more than 30 microvolts. Recommendations are given for the choice of the triodes of the semi-conductor modulator. The null-element discussed in this paper is based on the "modulation - amplification - detection" principle (see the enclosure) which is the most promising method of obtaining the required degree of resolution. Special attention is given to the design of the null-element. Elements of this type are used in the

Card: 1, 3

**L 10503-65****ACCESSION NR.: AT4046524**

working stability of this component that the resolving power of the entire device finally depends. Among the various types of modulators available for use in the receiver, the author has found the electronic type - specifically the triode - to be the best, as compared with the mechanical versions. Some criteria are given for the selection of pertinent modulator parameters.

**switching time required to bring the triode from the saturation region to the back current region imposes fundamental limitations on the type of transistors to be employed. A brief analysis is given of the different factors which influence the switching time, such as the rate of generation or carriers as well as the finite time constant of the collector-emitter capacitance of the semiconductor. The effect of electron accumulation by auxiliary electrodes is also considered.**

**ASSOCIATION:** none**SUBMITTED:** 00**ENCL:** 01**SUB CODE:** EC, DP**NO REF SOV:** 004**OTHER:** 003**Card 2/3**

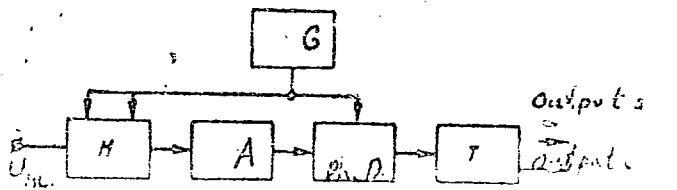


Figure 1. Block diagram of a null-element: G - generator;  
M - modulator, A - a.c. amplifier, Pb. D - phase  
sensitive detector, T - trigger

Card 3/3

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

New Isotopes of Antimony

SOV/89-5-6-17/25

Card 2/2

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

SELINOV, I.P.; VARTANOV, N.A.; KHULELIDZE, D.Ye.; BLIODZE, Yu.A.; ZAYTSEVA,  
N.G.; KHALKIN, V.A.

New isotope Te<sup>115</sup>. Zhur.eksp.i teor.fiz. 38 no.5:1654 My '60.  
(MIRA 13:7)  
(Tellurium--Isotopes)

BLICKH, A.V.

Calculation of balance sheets of system with a recirculating substance.  
Plast.massy no.4:27-29 '61. (MIRA 14:4)  
(Distillation, Fractional)

BLIOKH, I., inzhener.

Work experience of technical information offices. Zhil.-kom.khoz.  
6 no.3:9-10 '56. (MLRA 9:8)

1. Nachal'nik tekhnicheskogo kabinet Moszhilupravleniya..  
(Municipal services)

BLIOKH, I.A., inzhener; EPSHTEYN, G.N., inzhener

Mechanized cleaning of areas around housing units. Gor.khoz.Mosk.  
29 no.9:16-18 S '55. (MLRA 8:12)  
(Street-cleaning machinery)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLIOKH, M. M.

29202. Ocherk razvitiya otechestvennogo proizvodstva (morskikh) shturmanskikh priborov,  
Zapiski po gidrografii, 1949 No. 1, № 54-65.

SO: Letopis' zhurnal'nykh Statey, Vol. 39, Moskva, 1949

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLIOKH, M., morskoy ofitser v otstavke

I.P.Kollong, outstanding scientist in the field of compass re-  
search. Mor.flot 19 no.6:37 Je '59. (MIRA 12:9)  
(Kollong, Ivan Petrovich, 1839-1901)  
(Aids to navigation)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

BLIOKH, M., inzh.-podpolkovnik v otstye

Skilled users of nautical instruments. Mor.flot. 20 no.8:39  
Ag '60. (MIRA 13:8)  
(Nautical instruments)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLIOKH, M., inzh.-podpolkovnik v otstavke

Fifty years of use of the gyrocompass in the Russian fleet. Mor.  
flot 21 no.5:36-37 My '61. (MIRA 14:5)  
(Gyrocompass)

SOLOVEY, D.Ya., kand.khimicheskikh nauk; Prinimali uchastiye:  
ROGACHEVA, O.I., inzh.; TELEGINA, V.V., inzh.; KOBZEEVA, L.I.,  
tekhnik; BLOKH, M.B., laborant; YUSOVA, V.I., laborant

Corrosion resistance of reinforcement in silica concrete.  
Stroi.mat. 8 no.1:7-10 Ja '62. (MIRA 15:5)  
(Concrete reinforcement—Corrosion)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3

SOLOVEY, D.Ya., kand.tekhn.nauk; Prinimali uchastiye: KOBZева, L.I.,  
tekhnik; YUSOVA, V.I., laborant; BLOKH, M.B., laborant

Protecting the reinforcement from corrosion in autoclaved silicate  
concretes. Sbor. trud. ROSNIIMS no.20:84-89 '61. (MIRA 16:1)  
(Concrete reinforcement—Corrosion)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000205520013-3"

BLIOKH, P., kand.fiz.-matem.nauk (Khar'kov)

Is interstellar signalization possible? Nauka i zhyttia 11  
no.3:21-24 Mr '62. (MIRA 15:8)  
(Astronautics—Communication systems)

006

109-2-1-12/17

AUTHOR: Bliokh, P. V.

TITLE: High-Frequency Oscillations in Electron Beams with Periodically Changing Velocity (O vysokochastotnykh kolebaniyakh v elektronnykh puchkakh s periodicheski menyayushcheysha skorost'yu)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol 2, Nr 1, pp 92-103 (USSR)

109-2-1-12/17

High-Frequency Oscillations in Electron Beams with Periodically Changing . . .

This equation is obtained without any limitation as to the value of velocity spread. By a series of mathematical operations, the author arrives at the final dispersion equation (25) which is based on a determinant similar to that developed by Hill (reference 10). Analysis of the equation under various conditions shows that, in a beam placed in a periodic longitudinal electric field, generation of waves with exponentially rising amplitudes is possible without any delay system. Rising solutions of the beam interaction with slow waves are an analogue of Cerenkov's radiation in an R-F band which can be considered as a resonance between the natural oscillations of the field in a dielectric-filled waveguide and the driving force due to a moving particle. Rising solutions with fast waves can be treated as a parametric resonance of an interaction of the electron beam with a periodic external field. The selection of the theme and assistance in the work by Ya. B. Faynberg are acknowledged.

There are 11 references, 5 of which are Soviet, in the article.

SUBMITTED: May 25, 1956

AVAILABLE: Library of Congress

Card 2/2      1. Electron beams--Oscillation    2. Electron beams--Velocity    3. Electromagnetic waves--Applications    4. Waveguides--Applications

BLIOKH, P.V.

Parametric generation of oscillations in electron beams. Izv.  
vys. ucheb. zav.; radiofiz. 1 no.5/6:183-184 '58.  
(MIRA 12:8)

1. Khar'kovskiy institut radiofiziki i elektroniki AN USSR.  
(Electron beams) (Oscillations)

SOV/109-3-9-7/20

AUTHORS: Bliokh, P. V., Kaganov, M. I.

TITLE: On the Theory of a Travelling-Wave Tube, Taking into Account  
the Radial Oscillations of the Electrons (K teorii lampy  
begushchey volny s uchetom radial'nykh kolebaniy elektronov)PERIODICAL: Radiotekhnika i elektronika, 1958, Vol 3, Nr 9,  
pp 1172-1181 (USSR)ABSTRACT: The interaction of a relativistic electron beam with  
electromagnetic waves in a waveguide can be described by  
the following system of equations:

$$\left. \begin{aligned} \text{rot } \mathbf{E} &= -\frac{1}{c} \frac{\partial \mathbf{H}}{\partial t}, \\ \text{rot } \mathbf{H} &= \frac{1}{c} \frac{\partial}{\partial t} \epsilon \mathbf{E} + \frac{4\pi}{c} \rho \mathbf{v}, \\ \frac{\partial \rho}{\partial t} + \text{div } \rho \mathbf{v} &= 0, \\ \frac{d}{dt} \frac{\mathbf{v}}{\left(1 - \frac{\mathbf{v}^2}{c^2}\right)^{1/2}} &= e \left( \mathbf{E} + \frac{1}{c} [\mathbf{v}, \mathbf{H}] \right), \end{aligned} \right\} \quad (1)$$

Card 1/5 where  $\epsilon$  denotes the permittivity tensor. If the deviations

SOV/109-3-9-7/20

On the Theory of a Travelling-Wave Tube, Taking into Account the Radial Oscillations of the Electrons

from the steady-state value of the electron beam  $\rho_0$  and the electron velocity  $v_0$  are small, Eqs.(1) can be written as Eq.(2), where  $\Omega^{*2}$  is a tensor of the plasma frequency of the beam. From Eq.(2) it is possible to derive the dispersion equation of the system which is in the form of Eq.(3), in which  $\gamma_r$  is the radial wave number (determined from the boundary conditions at the walls of the waveguide). Eq.(3) determines the relationship between the propagating constant  $\gamma$  and the frequency of the signal  $\omega$ , and can be used to investigate the conditions under which amplification or oscillation of the system is possible. If the beam velocity  $v_0$  is equal to the wave velocity  $u_r$ , the dispersion equation can be written as Eq.(5) in which quantities  $x$  and  $y$  are defined by Eqs.(4). From Eqs.(4) and (5) the parameters  $\omega$  and  $\gamma$  can be expressed by

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SOV/109-3-9-7/20

On the Theory of a Travelling-Wave Tube, Taking into Account the Radial Oscillations of the Electrons

Eqs.(6) and (7). From these it is possible to determine the conditions of amplification and oscillation. The conditions are illustrated in Figs.1 and 2 where functions  $f(x)$  and  $g(x)$  are plotted. In the general case, when  $v_o$  is not equal to  $u_r$ , the dispersion equation is written as Eq.(9) in which  $\xi$  and  $\eta$  are defined by Eqs.(8). The expressions for  $\omega$  and  $\gamma$  are then given by Eqs.(10) and (11) respectively. Graphs of the functions  $h(\xi)$  for various values of  $\beta$  are shown in Figs.3 and 4. If the charge density in the beam is comparatively small, it is possible, by solving Eq.(3), to determine the correction factor  $\delta^2$  for the propagation constants of the system; this is expressed by Eq.(12). However, this expression cannot be used at the resonant frequency and it is shown that for this case the correction factor is expressed by Eq.(14). This equation can be used to determine the optimum operating conditions for the system. This is done by differentiating Eq.(14') and equating it to zero. This procedure leads to Eq.(15) which determines the positions of the extrema. Thus, it is found that, in the absence of radial electron motion, the optimum conditions are

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SOV/109-3-9-7/20

On the Theory of a Travelling-Wave Tube, Taking into Account the Radial Oscillations of the Electrons

expressed by Eqs.(16) and (17) while, in the case of a fully isotropic system, they are given by Eqs.(18) and (19); these cases are illustrated in the graphs of Fig.5. For the case of the tube operating as an oscillator the resonant frequency and the propagation constant are defined by Eqs.(20) in which  $\nu$  is given by Eq.(21). The optimum conditions for the oscillations can be determined from Eqs.(22). The conditions are indicated in Table 2 for three different cases. From the analysis it is concluded that apart from the usual longitudinal oscillations, a travelling wave tube also exhibits radial oscillations; this effect, however, does not lead to any significant alteration of the operation

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SOV/109-3-9-7/20

On the Theory of a Travelling-Wave Tube, Taking into Account the Radial Oscillations of the Electrons

of the system. The authors express their gratitude to Ya. B. Faynberg for valuable discussion on the subject. The paper contains 2 tables, 5 figures and 5 Soviet references.

SUBMITTED: March 1, 1957.

Card 5/5

BLIOKH, P. V.: Master Phys-Math Sci (diss) -- "Parametric excitation of electromagnetic oscillations in electron beams". Khar'kov, 1959. 9 pp (Min Higher Educ Ukr SSR, Khar'kov Order of Labor Red Banner State U im A. M. Gor'kiy), 150 copies (KL, No 10, 1959, 122)

AUTHOR: Bliokh, P. V.

06336  
SOV/141-2-1-8/19

TITLE: On the Energy Losses Experienced by a Charged Particle Passing Through a Periodically Nonuniform Dielectric

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1959,  
Vol 2, Nr 1, pp 63-72 (USSR)

ABSTRACT: The parametric Cherenkov effect has been considered by Faynberg and Khizhnyak in Ref 4, who discuss the example of a layered dielectric in which the dielectric constant changes discontinuously along the particle trajectory (Ref 4). However, in many cases the periodic structure is characterized by continuous changes in the properties of the dielectric. In particular, the parameters of the medium may change according to a sinusoidal law, for example, when a standing ultrasonic wave is excited in a plasma. A parametric Cherenkov radiation in such a medium has a number of properties and these are discussed in the present paper. If one considers the interaction of a charged particle moving along the z-axis with electromagnetic waves in a nonuniform dielectric, the Fourier components of the axial component of the electric field  $E_{z,\omega}$  are Card 1/3 given by Eq (1). In this equation e and v are the charge

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SOY141-2-1-8/19

On the Energy Losses Experienced by a Charged Particle Passing Through  
a Periodically Nonuniform Dielectric

and the velocity of the particle,  $k = \omega/c$ ,  $\omega$  is the frequency, and  $c$  is the velocity of light. The dielectric constant  $\epsilon$  is assumed to be a function of  $z$  only. The solution of the problem when the dielectric constant varies according to Eq (3) may be reduced to the solution of a differential equation of the form given by Eq (4) which is the basic equation for the problem under consideration. Assuming that the changes in  $\epsilon$  are small, the frequency range in which electromagnetic waves can be excited in the nonuniform dielectric is determined. Expressions are obtained for the intensity of the Cherenkov radiation and the polarization losses for the two special cases  $\lambda \ll L$  and  $\lambda \gg L$ , where  $\lambda$  is the wave length and  $L$  is the period of the changes in  $\epsilon$ .

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06336

SOV/141-2-1-8/19

On the Energy Losses Experienced by a Charged Particle Passing Through  
a Periodically Nonuniform Dielectric

Acknowledgment is made to Ya. B. Faynberg for suggesting the  
problem and help in its solution. There are 10 references,  
of which 2 are English and the rest Soviet.

ASSOCIATION: Khar'kovskiy institut radiofiziki i elektroniki (Khar'kov  
Institute of Radiophysics and Electronics)

SUBMITTED: June 28, 1958.

Card 3/3

DOROKHOV, Aleksandr Petrovich; ELIOKH, Pavel Viktorovich, otv.red.;  
KURILLOVA, T.M., red.; PLETENITSKIY, V.Yu., tekhn.red.

[Calculation and design of antennas and feeder devices] Raachet  
i konstruirovaniye antenno-fidernykh ustroistv. Khar'kov, Izd-vo  
Khar'kovskogo gos.univ., 1960. 449 p. (MIRA 13:8)  
(Wave guides) (Coaxial cables)  
(Antennas (Electronics))

33204

9.9445 (1538)

S/141/61/004/005/006/021  
E032/E114

AUTHORS: Bliokh, P.V., and Kaner, E.A.

TITLE: Interaction of an electron beam with electromagnetic waves in an anisotropic dielectric

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,  
Radiofizika, vol.4, no.5, 1961, 875-885

TEXT: The authors discuss, on the linear approximation, the interaction of an electron beam with electromagnetic waves in an infinite anisotropic dielectric. It is stated that the problem has been treated by many authors most of whom confined their attention to the case where the direction of the beam is parallel to the axis of the anisotropic crystal. A.M. Frank (Ref.5: ZhETF, v.38, 1751 (1961) and Ref.4: UFN, v.68, 397 (1959)) has shown that the Cherenkov radiation emitted by a charged particle passing through a crystal at an angle to the optic axis has a number of important properties, e.g. the direction of the energy flux and the direction of the phase velocity are not the same. This suggested to the present authors that the interaction of an

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33204

Interaction of an electron beam ... S/141/61/004/005/006/021  
E032/E114

obliquely incident electron beam with slow waves may also give rise to interesting phenomena. They consider a quasi-neutral electron beam passing through an anisotropic dielectric placed in a strong magnetic field which prevents transverse displacements of the particles. The theory is confined to the case of a uniaxial crystal. The equations of motion and Maxwell's equations can then be shown to yield the following relation:

$$k^2 \underline{E} - \underline{k}(\underline{k}\underline{E}) + n \frac{\omega \Omega_0^2 (\underline{E}\underline{n})}{c^2(\omega - v_o(\underline{k}\underline{n}))} + \frac{\omega^2}{c^2} \left( \frac{\underline{v}_o}{\omega} \underline{n}(\underline{k}\underline{D}) - \underline{D} \right) = 0 \quad (1)$$

where:  $v_{o\underline{n}}$  is the undisturbed velocity of the beam,  $\underline{n}$  is a unit vector,  $\Omega_0 = (4\pi Ne^2/m)^{1/2}$  is the plasma frequency,  $N$  is the particle concentration, and the electric field  $\underline{E}$  and induction  $\underline{D}$  are related by  $D_i = \epsilon_0 k E_k$ . The dependence of all the variables on  $r$  and  $t$  is given by:

$$\exp i(kr - \omega t).$$

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33204

Interaction of an electron beam ...      S/141/61/004/005/006/021  
    E032/E114

The above expression is used to derive the usual dispersion relations for the ordinary and the extraordinary waves. A graphical analysis is then made of the dispersion relations and a classification is derived for the unstable states. The classification is based on the work of P.A. Sturrok (Ref. 8: Phys. Rev., v.112, 1488 (1958)). An analysis is then made of the angular dependence of the generation and amplification coefficients  $\psi = \text{Im } \omega$  and  $x = \text{Im } k$ . It is shown that, depending on the parameters of the beam and the dielectric, the instability may be absolute or convective. It is noted that the instability of a beam which is parallel to the direction of the wave vector can only occur in an anisotropic dielectric when the common direction of the beam and the wave is at an angle to the crystal axis. Acknowledgments are expressed to Ya.B. Faynberg, V.I. Kurliko, V.D. Shapiro and R.V. Polovin who supplied pre-prints of their work in this field prior to publication. There are 8 figures and 9 references; 8 Soviet-bloc and 1 non-Soviet-bloc. The English language reference reads as follows: Ref.8: P.A. Sturrok. Phys. Rev., v.112, 1488 (1958)

X

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Interaction of an electron beam ...

33204  
S/141/61/004/005/C06/021  
E032/E114

ASSOCIATION: Institut radiofiziki i elektroniki AN USSR  
(Institute of Radiophysics and Electronics,  
AS Ukr.SSR)

SUBMITTED: December 29, 1960

Card 4/4

0.9877

42134

**AUTHORS:** Usikov, A. Ya. and Bliokh, P. V.S/203/62/002/002/010/017  
I046/I246**TITLE:** The lens effect in the terrestrial atmosphere**PERIODICAL:** Geomagnetizm i aeronomiya, v. no. 2, 1962, 293-304

**TEXT:** An investigation into the concentration of electromagnetic energy in the visual and the meter range by the atmosphere. Calculations are made in the geometrical-optics approximation on a spherical model with random inhomogeneities; the terrestrial magnetic field is not taken into consideration. The gain in power produced by the atmospheric lens ranges between  $n \cdot 10^0$  and  $n \cdot 10^2$ . The troposphere acts invariably as a focusing lens ( $n_{trop} > 1$ ); all energy penetrating the atmospheric lens at distances  $a < a_1 = 6372$  km from the optical axis (the lower tropospheric layers,  $R = 6370$  km being the radius of the earth) is refracted to meet the surface of the earth. In the ionosphere,  $n_{ion} < 1$ , yet any ray crossing twice the ionization maximum is deflected towards the optical axis: thus the atmosphere acts as a focusing lens in the range  $a_1 < a < a_2 = 6670 - 5.427 \lambda^2$ ; beyond this range, it disperses energy. The condition  $a_1 = a_2$  gives the maximum critical wavelength  $\lambda_{cr} \approx 7.4$  m: for  $\lambda > \lambda_{cr}$ , the refracted beam either meets the surface of the earth ( $a < a_1 = a_2$ ) or is deflected away from the axis by the ionosphere ( $a > a_2 = a_1$ ). There are 4 figures and 3 tables.

**ASSOCIATION:** Institut radiofiziki i elektroniki AN USSR (Institute of Radiophysics and Electronics of AS UkrSSR)**SUBMITTED:** December 2, 1961

Card 1/1

OMELAYENKO, A.S.; BLIOKH, P.V.

Parametric instability of an electron beam in an inhomogeneous  
anisotropic dielectric. Izv. vys. ucheb. zav.; radiofiz. 6  
no.5:946-951 '63.

(MIRA 16:12)

1. Institut radiofiziki i elektroniki AN UkrSSR.

L-71-65 ESD-2/EFT(d)/FSS-2/ENT(1)/ENG(1)/EPD(1)/ESD(1)/SRC(1)/XMA(1)  
Pi-4 P-1 P-2 P-3 P-4 P-5 P-6 P-7 P-8 P-9 P-10 P-11 P-12 P-13 P-14 P-15  
ERC(k)-2 Pi-4/Pi-5/Pi-6/Pi-7/Pi-8/Pi-9/Pi-10/Pi-11/Pi-12/Pi-13/Pi-14/Pi-15  
Pi-4 P-1 P-2 P-3 P-4 P-5 P-6 P-7 P-8 P-9 P-10 P-11 P-12 P-13 P-14 P-15  
ACCESSION NR: AF4044100 S/0141 154 0450/0470  
ESD(ga)/ESD (1) R&P

AUTHOR: Bliokh, P. V.

TITLE: Compression of a radiation pulse in a dispersive medium  
with random inhomogeneities

SOURCE: IVUZ. Radiofizika, v. 7, no. 3, 1964, 460-470

TOPIC TAGS: ionospheric radio wave, electromagnetic diffraction,  
pulse compression, plasma electromagnetic wave, frequency modulation

ABSTRACT: In view of the interest that attaches to the feasibility  
of preventing the time-stretching of a pulse propagating in a plasma,  
such as the ionosphere, the author considers the possible compression  
of a pulse of frequency-modulated signal in a dispersive medium  
with random inhomogeneities, the dispersion being regarded as the  
analog of a filter chain such as used in radar for pulse compression.  
Extensive use is made in the calculations of the analogy between

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L 38102-65 EWT(m) Feb DIAAP  
ACCESSION NR: AP5006019

S/0141/64/007/004, 1004, 1074, 1075

AUTHOR: Alekseyev, G. A.; Blich, P. V.

TITLE: Coherent bremsstrahlung from extended electron bunches

JOURNAL: Sov. Radiofizika, v. 7, no. 6, 1964, 1064-1075

TOPIC TAGS: bremsstrahlung, electron bunching, coherent radiation

ABSTRACT: It is shown that whereas an electron bunch with a finite thickness emits coherent bremsstrahlung, a single electron emits incoherent radiation.

tions, and only the thickness need be limited by the wavelength of the wave. The authors analyze the bremsstrahlung of electron bunches of arbitrary thickness and show that the bunch must lie only outside a plane-parallel waveguide in order to emit coherent bremsstrahlung. Within the waveguide the bunch must lie close to the point of observation. Consideration is given to the case where the bunch has a finite thickness.

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ACCESSION NR: AP5006019

of charges can be located on the coherent-radiation surface, it becomes possible to obtain in a given point coherent radiation from bunches of electrons. The shapes of electron bunches are determined and the form of electron bunches having simple geometrical shapes (straight line segments) are considered. The coherent field being produced by a sequence of electron bunches is then analyzed, and the directional distribution of the power radiated by a sequence of electron bunches in the form of parallelepipeds is calculated. The dependence of the radiation power on the directions of the bunches is shown.

ASSOCIATION: Institut radiofiziki i elektroniki AN UkrSSR (Institute of Radio Physics and Electronics, AN UkrSSR)

SUBMITTED: 14 Feb 84

ENCL: 00

NR KEY Sov: 024

OTHER: 001

Card 2/2

1-63053-65 EWT(d)/FSS-2/SEC(x)-2/SEC-4 Pn-4/Pp-4/Pac-4/Pg-4/Pt-7/  
P1-4 WS-4

ACCESSION NR: AP5013339

UR/0109/65/010/005/0859/0867  
621.371.165 621.395 45

AUTHOR: Bass, F. G.; Bllokh, P. V.; Fuks, I. M.

TITLE: Statistical characteristics of a signal scattered by randomly moving reradiators located on a plane interface

SOURCE: Radiotekhnika i elektronika, v. 10, no. 5, 1965, 859-867

TOPIC TAGS: millimeter wave, radiowave scatter

ABSTRACT: The scattering of radiowaves by vacillating reradiators randomly arranged in a flat high-absorption interface is theoretically considered. At variance with W. H. Peake's work (IRE Nat. Conv. Recv., 1958), the reradiators are approximated by plane perfect-conductance plates whose characteristic dimensions considerably exceed the radius of curvature. The scattering capability of the interface is characterized by the "differential effective scattering cross-section" which is a function of

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ACCESSION NR: AP5013339

scattered into a unit solid angle by a unit area of the interface to the density of the energy flux falling onto the interface. Formulas for calculating the incoherent component of the scattered radiation are derived. The effect of the absorption of the medium on the scattering is taken into account. The absorption coefficient and the refractive index are determined. The transfer function of the receiving antennas. The transfer function of the spectra of the incoherent component of scattered radiation. The absorption coefficient is determined. Orig. art. has: 5 figures and 48 formulas.

ASSOCIATION: none

SUBMITTED: 12Mar64

ENCL: 00

SUB CODE: EC, DC

NO REF SOV: 003

OTHER: 004

*High*  
Card 2/2

L 27853-66 EWT(1)/T/FCS(k) WR  
ACC NR: AP5026898

SOURCE CODE: UR/0109/65/010/010/1783/1791

AUTHOR: Blokh, P. V., Verbitskiy, I. L.

ORG: Institute of Radiophysics and Electronics, AN UkrSSR (Institut radiofiziki i elektroniki AN UkrSSR)

TITLE: Superdirective patterns of linear antennas

SOURCE: Radiotekhnika i elektronika, v. 10, no. 10, 1965, 1783-1791

TOPIC TAGS: linear antenna, antenna directional pattern

ABSTRACT: Parameters of superdirective antennas are unstable to small variations of aperture current distribution as was shown by G. Gilbert and S. Morgan (BSTJ, 1955, 34, 3, 637). The present article analyzes the same problem for the case of linear antennas; the aperture current distribution is represented as a sum of a finite number of Fourier harmonics. This formula

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UDC: 621.396.677

L 27853-66

ACC NR: AP5026898

describes (for  $x \ll A$ ) the superdirective pattern:  $G(x) |x| \ll A \approx \sin 2N \frac{x}{A} / 2N \frac{x}{A}$ . It covers the major and many side lobes. It differs from the conventional directional-pattern formula by the "superdirectivity factor"  $h = 2N/\pi A$ . The directive gain is described by this formula:  $D = D_0 / (1 + D_0 \delta l)$ ,  $D_0 = I_0^{-1}$ , which shows that the narrower the pattern, the less stable it is. Further examination shows that, while the directional pattern may be rather stable to lower-harmonic variations, it is very sensitive to higher-harmonic amplitude or phase disturbances. "In conclusion, the authors wish to thank L. G. Sodin for discussing the above problems." Orig. art. has: 2 figures and 66 formulas.

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Card 212-10

BLOKH, S.S.

Subject : USSR/Medicine AID P - 1418  
Card 1/1 Pub. 37 - 15/23  
Author : Bliokh, S.S., Kand. of Med. Sci.  
Title : All-Russian Conference on the problems of the hygiene  
of drinking water, the water supply of populated  
localities and the protection of reservoirs against  
pollution  
Periodical : Gig. i san., 1, 49-51, Ja 1955  
Abstract : An account of the reports and papers presented  
at this Conference and of the resolutions taken. The  
Conference was called in Moscow, May 25-29, 1954, by  
the Ministry of Public Health, RSFSR, on the  
initiative of the Scientific Research Institute of  
Sanitation im. Erisman.  
Institution: None  
Submitted : No date

*BL/OKH, S.S.*

BELYAYEV, A.M.; IOFFE, E.I.; PERVOZVANSKIY, A.I.; NAVASARDYAN, Ye.N.;  
BLIOKH, S.S.; REVAZASHVILI, B.I.; PROTOPOPOV, M.M.; RAKHMATULLIN,  
K.Kh.; SEMENOV, V.I.; KRIVOSHEIN, S.S.; SHVETSOV, A.P.; MAKAROV, N.P.;  
OTROZHDENNOV, A.I.; ZHUKOV, D.D.; BELYAYEV, A.M.

Speeches. Trudy Mekhanobr. no.93:122-173 '56. (MIRA 11:6)  
(Ore dressing--Equipment and supplies) (Waste products)

BLIOKH, S.S., kandidat meditsinskikh nauk; PERLINA, A.M., kandidat tekhnicheskikh nauk; KOZLOVA, N.L., inzhener

Effectiveness of the new method of purifying drinking water (contract clarification). Gig. i san. 22 no.1:70-72 Ja '57. (MLRA 10:2)

1. Iz Nauchno-issledovatel'skogo sanitarnogo instituta imeni Brismana, Akademii komunal'nogo khozyaystva imeni Panfilova i Laboratorii Ruhlevskoy vodoprovodnoy stantsii.

(WATER SUPPLY,

purification, contact clearing technic (Rus))

BLIOKH, S.S., kand.med.nauk., VIGILEV, N.S., kand.med.nauk.

Sanitary aspects of the discharge of snow and rain water into the  
water supply. Gig. i san. 23 no.8:59-62 Ag '58 (MIRA 11:9)

l. Iz Moskovskogo nauchno-issledovatel'skogo instituta sanitarii i  
gigiyeny imeni F.F. Erishmana Ministerstva zdravookhraneniya RSFSR  
i Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.

(WATER SUPPLY,  
discharge of snow & rain water (Rus))

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CIA-RDP86-00513R000205520013-3

BLICKH, S. S., GUS'KOVA, V. N., BELYAYEV, I. I.

"Hygienic evaluation of new methods of purifying  
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report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists  
and Infectionists, 1959.

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CIA-RDP86-00513R000205520013-3"

BLIOKH, S.S., kand.med.nauk; ZAMYSLOVA, S.D., kand.biolog.nauk

Peculiarities of the effects of effluents of ore-concentration plants on plain and mountain rivers. Gig. i san. 24 no.6:67-69 Je '59. (MIRA 12:8)

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(WATER POLLUTION

by effluents of ore-processing plants, eff.  
on cond. of flat & mountainous rivers (Rus))

BELYAYEV, I.I., prof.; BLIOKH, S.S., kand. med. nauk; GABOVICH, R.D.,  
prof.; GORBOV, V.A., dots.; ZHABOTINSKIY, V.M., prof.;  
ZASLAVSKAYA, R.M., kand. med. nauk; KIBAL'CHICH, I.A., kand.  
med. nauk; KROTKOV, F.G., prof.; MOGILEVSKIY, Ya.A., kand. med.  
nauk[deceased]; TRAKHTMAN, N.N., dots.; CHERKINSKIY, S.N., prof.;  
GOROMOSOV, M.S., doktor med. nauk, red.; RYAZANOV, V.A., prof.,  
red.; BUSHTUYEVA, K.A., dots., red.; SELESKIRIDI, I.G., dots.,  
red.; OSTROVERKHOV, G.Ye., prof., glav. red.; PETROVA, N.K.,  
tekhn. red.

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Moskva, Medgiz. Vol.2. 1962. 763 p. (MIRA 15:12)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for  
Krotkov). 2. Chlen-korrespondent Akademii meditsinskikh nauk  
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(SOIL DISINFECTION) (WATER SUPPLY)

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PAVLOVSKIY, P.V.; VOROSHILOV, L.A.; BLICKOV, Ye.N.

Construction workers' experience with geodetic beacons.  
Geod. i kart. no.8:40-46 Ag '64.

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