

VASIL'YEV, L. (g. Tyumen'); CHICHKO (g. Kiyev); STARODUB, D. (g. Kiyev);  
KALUZHSKIY, G. (g. L'vov); SMIRNOV, V.; HEBENIN, A.; ORLOV, I.;  
FERUK, V. (Kuybyshev); BYCHININ, I. (Kuybyshev); HASHKO, V.;  
SHEVKUN, Yu. (Khar'kov); ISTYUFYEV, V. (Leningrad); GATSANYUK, P.  
(Chernigovskaya obl.); SKURKO, L.; BABYUK, M.; GURANOV, L.  
(Krasnodar); TISHCHENKO, D. (st. V. Sadovaya); YEFIMOV, M.S.  
(Leningrad); FEDOROV, V.; SUKHOV, A.; TIMOSHENKO, I. (Omskaya  
oblast'); KRIVTSUN, B. (Khar'kov); BARANTSEV, N. (Fedosiya).

Exchange of experience. Radio no.1:31,32,35,39,40. Ja '59..  
(MIRA 12:3)

(Radio)

VIL'NYANSKIY, Ya. Ye.; SAVINKOVA, Ye. I.; BYCHIKHINA, L. S.

Rapid method for the determination of hydrogen in dehydrated  
carnallite. TSvet. met. 35 no.10:80-81 0 '62.

(MIRA 15:10)

(Carnallite—Hydrogen content)

SAVINKOVA, Ye.I.; BYCHIKHINA, L.S.; VIL'NYANSKIY, Ya.Ye.

Effect of the composition of carnallite on its hydrolysis in the atmosphere of hydrogen chloride and water vapor. Zhur. prikl. khim. 37 no.6:1356-1358 Je '64.

(MIRA 18:3)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

BYCHIN, A.I.; KUDINOV, B.Z.

Prospects for the complete metallurgical processing of red muds.  
TSvet.met. 36 no.2:49-52 F '63. (MIRA 16:2)  
(Aluminum industry--By-products)  
(Cast iron--Metallurgy)

LOMAKA, N.F.; BAYEV, S.V.; BYCHIN, A.I.; KOSHKIN, Yu.G.; URYAVIN, G.A.

Characteristics of blast furnace operation in the making of  
alumina slag from bauxite. Metallurg 10 no.3:6-9 Mr '65.

(MIRA 18:5)

1. Alapayevskiy metallurgicheskiy kombinat.

MATIN, N.Ye., gornyy inzh.; BYCHIN, A.S., gornyy inzh.

Using air spaces in ore breaking at the "Kiialykh-Uzen"  
Mine. Vzryv. delo no.54/11:383-386 '64. (MIRA 17:9)

1. Tuimskoye gornopromyshlennoye upravleniye.

SYROGHEV, V.M., inzh.; MATIN, N.Ye., inzh.; BYCHIN, A.S., inzh.

Making upraises from a hanging scaffold. Bezop. truda v prom. 8 no.  
10:23-24 0 '64. (MIRA 17:11)

1. Tuimskoye gornopromyshlennoye upravleniye.

BYCHKIN, F.V.

In the Department of Technology of the Academy of Sciences of the U.S.S.R.  
Izv. AN SSSR Otd. tekhn. nauk no. 2:238-239 '47. (MLRA 6:12)  
(Academy of Sciences of the U.S.S.R.)



BYCHKIN, F. V.

PA 76T2

USSR/Academy of Sciences  
Bibliography

May 1948

"Bibliography of Works Published in September-December 1947, by Academicians, Corresponding Members of Academy of Sciences, and Other Workers in Department of Technical Sciences, Academy of Sciences USSR," edited by F. B. Bychkin, G. A. Teplitskiy, 12 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 5

Articles and books cover: automatics, telemechanics, geology and petrography, hydrology and hydrotechnology, mining, machine studies, history of science and technology, metallurgy and metal studies,

76T2

BYCHKIN, F. V.

158T1

USSR/Academy of Science  
Engineering - Literature

Mar 50

"Works Published in 1949 by Academicians and Corresponding Members of the Academy of Sciences USSR, and Other Scientific Co-Workers of the Department of Technical Sciences, compiled by F.V. Bychkkin, 27 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 3

List of about 1,000 articles indexed by author's name, giving title and periodical, under 21 categories: automatics, telemechanics, wire communication, geology, geochemistry, petrography, hydrotechnics, mining, machines, metallurgy, mechanics and mathematics, scientific-technical terminology, ore

158T1

USSR/Academy of Science (Contd)

Mar 50

enrichment, radio, calculating instruments, thermo-technics, fuel, transportation, chemistry, electro-technics, electric welding, power, and bibliographies. Also lists 127 periodicals from which articles were taken.

158T1

BYCHKIN, Pavel Vasil'yevich, kand. veter. nauk; GITEL'SON, Sara  
Samuilovna, kand. veter. nauk; AGABABOVA, Nina  
Beniaminovna, kand. veter. nauk; ZELEPUKIN, V.S., red.

[Laboratory manual on microbiology] Praktikum po mikrobio-  
logii. Moskva, Izd-vo "Kolos," 1964. 141 p. (MIRA 17:6)

GURVICH, Sokrat Solomonovich; PETLENKO, Viktor Porfir'iyevich;  
TSAREGORODTSEV, Gennadiy Ivanovich; FEDERENKO, Ye.G.,  
doktor fil. nauk, prof., red.; BYCHKO, I.V., kand. fil.  
nauk, otv. red.; KRYMSKIY, S.B., kand. fil. nauk, otv.  
red.

[Problems of dialectical materialism; for lectures on  
philosophy for medical institutes] Voprosy dialekticheskogo  
materializma; k lektsiam po filosofii dlia neditinskikh  
institutov. Pod red. E.G.Fedorenko. Kiev, Gosmedizdat USSR  
1964. 361 p. (MIRA 17:6)

BYCHKO, I.V.

Under the mask of realism. Nauka i zhyttia 11 no.2:61-62 P 161.

(1911. 11:3)

(Realism)

IVANOV, A.; BYCHKO, M.; LAVRIKOV, G. (Kalinin); DISKIN, Ye. (Kiyev);  
RUFANOV, G.; SUKHANOV, A. (Tashkent)

Preparing for the anniversary. Za rul. 16 no.8:2-3 Ag. '58.

(MIRA 11:9)

1. Nachl'nik avtomotokluba, Orekhovo-Zuyevo (for Ivanov). 2. Nachal'nik avtomotokluba, Chelyabinsk (for Bychko). 3. Predsedatel' Kalininskogo obkoma Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu (for Lavrikov).

(Automobile drivers) (Communist youth league)

BYCHKO, M.F., kand. sel'skokhozyaystvennykh nauk

Fall plowing in Eastern Siberia. Zemledelie 27 no.8:44-46  
Ag '65. (MIRA 18:11)

1. Tulunskaya gosudarstvennaya selektsionnaya stantsiya.

BYCHKO, S. N., dorozhnyy master (st. Verkhovtsevo, Fridneprovskoy  
dorogi)

Saving rail joint fiber insulation material. Put' i put. khoz.  
6 no.8:33 '62. (MIRA 15:10)

(Railroads--Rails)



BYCHKO, Ye.V., assistant

Pathogenesis of congenital cleft plate and modification of the individual stages of surgery according to the first results of dispensary work. Uch. zap. Stavr. gos. med. inst. 12: 440-441 '63. (MIRA 17:9)

1. Kafedra khirurgicheskoy stomatologii (zav. dotsent M.M. Slutskaya) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

SLUTSKAYA, M.M. , kand.med.nauk; BYCHKO, Ye.V.

Some indices of the work of a regional stomatological hospital.  
Stomatologiya 40 no.4:90-91 JI-Ag '61. (MIRA 14:11)

1. Iz stomatologicheskogo otdeleniya (zav. - kand.med.nauk  
M.M.Slutsкая) Stavropol'skoy krayevoy klinicheskoy bol'nitsy  
(glavnyy vrach Yu.P.Zotov).  
(STOMATOLOGY)

BYCHKO, Ye.V., assistant

Rare localization of a congenital cleft. Stomatologiia 42  
no.4:84-85 JI-Ag'63 (MIRA 17:4)

1. Iz kafedry khirurgicheskoy stomatologii ( zav. - dotsent  
M.M. Slutskaya) Stavropol'skogo meditsinskogo instituta.

BYCHKOV, A.

A generous heart. Prof.-tekh. obr. 17 no.7:26 J1 '60.

(MIRA 13:8)

(Children--Management)

BYCHKOV, A.

State Bank business and people. Den. i kred. 19 no.4:61-62 Ap '61.  
(MIRA 14:3)

1. Zamestitel' nachal'nika otdela inkassatsii Rostovskoy oblastnoy  
kontory Gosbanka.

(Rostov—Banks and banking)

BYCHKOV, A.

USSR/Radio - Receivers

Dec 51

"An O-V-1 Receiver Using Variometers," A. Bychkov,  
Mikhaylovka, Stalingrad Oblast

"Radio" No 12, pp 32, 33

Describes receiver in which variometer is used instead of variable capacitor for tuning. The receiver operates on the long- and medium-wave bands (from 300 to 1,800 m). The receiver has two 2Zh2M tubes and its output is fed into a telephone headset, although powerful stations can be heard on a Rekord loud-speaker.

208T91

USSR/ Miscellaneous - Radio clubs

Card 1/1 : Pub. 89 - 7/26

Authors : Bychkov, A.

Title : In the Ul'yanovsk radio club

Periodical : Radio 12, page 10, Dec 1954

Abstract : The activities developed by the Ul'yanovsk radio club are described. At present the club is training 300 members as radio technicians and radio-telegraph operators. Other activities include technical consultations to local radio centers, and arranging local exhibitions. Several of the more interesting inventions of club members are listed, and the names of winners and prizes awarded are mentioned. Illustrations.

Institution : .....

Submitted : .....

Bychkov, A.

Subject : USSR/Radio AID P - 4451  
Card 1/1 Pub. 89 - 18/20  
Author : Bychkov, A.  
Title : The "ARZ" receiver set with subminiature tubes  
Periodical : Radio, 5, 53, My 1956  
Abstract : The design of a modernized portable radio set, of the "ARZ-51" and "ARZ-52" type is explained with 3 diagrams.  
Institution : None  
Submitted : No date



BYCHKOV, A., kapitan tekhn. sluzhby

This helps in testing radio tubes. Starsh'-serzh. no.7:30 J1  
'62.

(Radio--Equipment and supplies)

(MIRA 16:6)

BYCHKOV, A.

"Facts on the condition of U.S.A. workers, 1959-1960" [Labor  
fact book, 15]. Reviewed by A. Bychkov. Sots. trud 8 no. 5:  
153-157 My '63. (MIRA 16:6)

(United States--Labor and laboring classes)

BYCHKOV, A.

"Facts on the condition of the workers in the U.S.A., 1957-1958". Reviewed by A. Bychkov. Sots. trud 6 no.6:154-159  
Je '61. (MIRA 16:8)

BYCHKOV, A. A.

Experience in mechanization of loading and unloading at the  
Odessa Canning Combine. Kons. i ov. prom. 13 no.11:43 N 158,  
(MIRA 11:11)

1. Zamestitel' glavnogo inzhenera Odesskogo konservnogo kombinata.  
(Odessa--Loading and unloading)

BYCHKOV, A.A.

Using the B-2 washing machine for No.58-1 glass jars. Kons. 1 ov.  
prom. 14 no.5:14-15 My '59. (MIRA 12:6)

1. Odesskiy konservnyy kombinat.  
(Canning industry--Equipment and supplies)  
(Glass containers)

BYCHKOV, A.A.; SHNAYDER, B.Ya.

Organizing the production of canned baby food at the Odessa  
Canning Combine. Kons. i ov. prom. 14 no.8:20-22 Ag '59.  
(MIRA 12:9)

1.Odesskiy konservnyy kombinat (for Bychkov). 2.Odesskiy  
sovnarkhoz (for Shnayder).  
(Odessa--Food, Canned) (Infants--Nutrition)

BYCHKOV, A.A. ; SHUKLER, A.S.

Preparation of tomato juice without sterilization. Kons.1 ov.  
prom. 15 no.2:6-7 F '60. (MIRA 13:5)

1. Odesskiy konservnyy kombinat.  
(Tomato juice)

BYCHKOV, A.A.

Our tasks in the current year. Kons.i ov.prom. 17 no.10:3-4  
0 '62. (MIRA 15:9)

1. Odesskiy konservnyy zavod imeni V.I.Lenina.  
(Odessa--Canning industry)



CHERNYY, A., inzh.; BYCHKOV, A., inzh.

What's new in the organization of construction of industrial  
buildings. Stroitel' no.3:5 Mr '59. (MIRA 12:6)  
(Factories--Design and construction)  
(Precast concrete construction)

Bychkov, A.A.

BYCHKOV, A.A.; TYAPKIN, B.G., redaktor izdatel'stva; BOROVNEV, N.K.,  
tekhnicheskiy redaktor

[Safety manual for assemblers of reinforced concrete structures]  
Pamiatka po tekhnike bezopasnosti dlia montazhnika zhelezobeton-  
nykh konstruktsii. Izd. 2-oe, ispr. Moskva, Gos.izd-vo lit-ry po  
stroit. i arkhit., 1956. 22 p. (MIRA 10:8)  
(Reinforced concrete construction--Safety measures)

BYCHKOV, A.A., inzhener

Jig for erecting reinforced concrete columns on socket-type bases.  
Nov.tekh.i pered.op.v stroi. 19 no.10:23-24 0 '57. (MIRA 10:11)  
(Columns, Concrete)

BYCHKOV, A. A., Cand Tech Sci (diss) -- "Investigation of the causes of injury in construction work, and its prevention in the assembly of a prefabricated reinforced-concrete single-story industrial building". Moscow, 1959. 14 pp (Min Higher and Inter Spec Educ RSFSR, Moscow Order of Labor Red Banner Construction Engineering Inst im V. V. Kuybyshev), 300 copies (KL, No 10, 1960, 130)

BYCHKOV, A.A.

Using jigs in mounting reinforced concrete columns. Suggested by  
A.A.Bychkov. Rats.i izobr.predl.v stroi. no.13:23-28 '59.

(MIRA 13:6)

1. Po materialam Stroitel'nogo upravleniya Koksokhimstroy tresta  
Chelyabmetallurgstroy.

(Columns, Concrete)

BYCHKOV, A.A.

Securing the stability in assembling reinforced concrete  
columns on socket footings. Prom.stroi. 8 no.7:54-57 '60.

(MIRA 13:7)

(Columns, Concrete)

BYCHKOV, A.A.

Assembling frame supports of industrial buildings. Prom. stroi.  
38 no.5:42-43 '60. (MIRA 14:5)

1. Ural'skiy filial Akademii stroitel'stva i arkhitektury SSSR.  
(Ural Mountain region—Factories—Design and construction)

BYCHKOV, A.F., insh.

Duplex automatic machine for making bar-type parts. Der.prom. ? no.11:  
21-23 N '58. (MIRA 11:11)

(Woodworking machinery)



BYCHKOV, A.F., inzh.

Processing of gravel in the United States. Stroi.mat. 6 no.5:  
38-40 My '60. (MIRA 13:7)  
(United States--Sand and gravel plants)

BYCHKOV, A.F.

Use of models in designing. Obog. rud 6 no.2:38-42 '61.  
(Metallurgical plants--Models) (MIRA 14:8)

BECHKOV, A.F., inzh.

New developments in screening equipment and methods. Stroi.  
mat. 7 no.7:37-40 J1 '61. (MIRA 14:7)  
(Screens (Mining))

BYCHKOV, A.F., inzh.

From the pages of magazines (from "Mining Congress Journal," no.4, 1959).  
TSement 28 no.6:24-3 of cover N-D '62. (MIRA 15:12)  
(Milling machinery)

SASON, N.S.; BYCHKOV, A.F.

Exhibition of crushing and ore dressing equipment in Essen (German Federal Republic) [from Zeitschr. f. Erzbergbau and Metallhüttenwesen no. 11, 1958]. Obog. rud 4 no.4:53-55 '59. (MIRA 14:8)  
(Germany, West--Crushing machinery--Exhibitions)

SASON, N.S.; BYCHKOV, A.F.

Combination lining of ball mills. Obog. rud 4 no. 535-39 '59.  
(MIRA 14:8)

(Crushing machinery--Maintenance and repair)

SASON, N.S.; BYCHKOV, A.F.

New type of cone crusher; an abstract. Obog. rud 4 no.6:50-53  
'59. (MIRA 14:8)

(Germany, West--Crushing machinery)

SASON, N.S., referent; BYCHKOV, A.F.

Gyratory ball mill. Gor.zhur no.5:64-65 My '60.

(MIRA 14:3)

(Crushing machinery)



BYCHKOV, A.F., inzh.

Air-swept for autogenous grinding. Stroi.mat. 9 no.3840-3 of  
cover. Mr '63. (MIRA 16:4)

(Milling machinery)

BYCHKOV, A. G.

Osevye ventilatory TSAGI Serii U. Moskva, 1938. 93 p., tables, diags. (TSAGI. Trudy, no. 362)

Title tr.: Series U of the CAHI axial fans.

QA911.M65 no.362

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

KHALUGA, A.K., inzhener; VEBER, R.Ya., inzhener; BYCHKOV, A.G., kandidat  
tekhnicheskikh nauk; KHANZHONKOV, V.I., kandidat tekhnicheskikh  
nauk.

Pneumatic ridger for milled peat. Mekh.trud.rab. 10 no.6:40-41  
Je '56. (MLRA 9:8)

(Peat machinery)

*BYCHKOV, A. G.*  
BYCHKOV, A.G.; MAZMANYANTS, P.O.

New types of centrifugal ventilating fans designed by the Central  
Aero-Hydrodynamical Institute. Vod.1 san.tekh. no.9:1-7 S '57  
(MIRA 10:11)

(Fans, Electric)

SOV/124-58-11-12448

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 72 (USSR)

AUTHOR: Bychkov, A. G.

TITLE: Centrifugal Fans for Pneumatic Transport of Fibrous Materials  
(Tsentrobezhnyye ventilyatory dlya pnevmaticheskogo  
transportirovaniya voloknistykh materialov)

PERIODICAL: V sb.: Prom. aerodinamika. Nr 9. Moscow, Oborongiz, 1957,  
pp 91-108

ABSTRACT: The paper studies the practical problems connected with the selection of centrifugal fans of pneumatic systems for intra-plant handling of fibrous materials (cotton, wool, flax, etc.). On the basis of investigations conducted by the TsAGI (Central Aero-hydrodynamic Institute) on fan models TsP6-20, TsP6-28, TsP6-35, and TsP6-46, the paper presents the aerodynamic configurations, characteristic performance curves, and diagrams which help in the selection of fans operating under peripheral speeds of  $\sim 70 - 90$  m/sec and delivering a pressure  $\sim 200 - 500$  kg/m<sup>2</sup>. The author presents the experimental characteristics of fan models TsP6-20, TsP6-28 and TsP6-35 with various numbers of impeller blades

Card 1/2

SOV/124-58-11-12448

Centrifugal Fans for Pneumatic Transport of Fibrous Materials

( $Z_{ib}$  = 6, 4, and 3). The specific requirements as well as the manufacturing and engineering features of fans for the pneumatic handling of fibrous materials are analyzed. An example is given for the selection of a fan for an actual specific assignment.

B. S. Dorogov

Card 2/2

BYCHKOV, A.G.

General regularities in changes of aerodynamic characteristics  
of centrifugal machines having spiral casings. Prom. aerodin.  
no.10:77-110 '58. (MIRA 11:8)  
(Fans, Mechanical) : (Centrifugal pumps)

BYCHKOV, A.G., kand. tekhn. nauk, referent; CHEBYSHEVA, K.V., insh.

High capacity fan (from "Proceedings of the Australian Institute  
of Mining and metallurgy" no. 178, 1956). Gor. zhur. no.12:51-52  
D '58. (MIRA 11:12).

(Australia--Mine ventilation)  
(Fans, Mechanical)



Бучков, А.Г.

14(1) ПЛАН I БУКЪ ЕКСПЛУАТАЦИОН 807/2685

Централ'ны аэро-гидродинамически институт  
Ventilatory i vozdukhoprovody (Ventilators and Air Ducts) Moscow, Gornograd, 1959. 249 p. (Series: Prognal'maya aerodinamika, sbornik No. 12)  
Number of copies printed not given.

24. (Title page); K.A. Ushakov, Professor; Ed. (Inside book); A.S. Givernykh, Candidate of Technical Sciences; Ed. of Publishing House; I.A. Shchibine; Tech. Ed.; I.M. Zhdankin; Managing Ed.; A.S. Zayonchkova, Engineer.

ПУРОЦЕ: This book is intended for engineers, technicians and scientific workers specializing in the field of industrial aerodynamics and ventilation.

СОДЪНОЕ: This collection of 11 articles deals with problems of ventilation technology. Results of experimental and theoretical investigations of the aerodynamic characteristics of axial and centrifugal fans are described. Some designs of new, highly economical centrifugal fans are presented and the drag coefficients of various ducts and elements of ventilation systems are given. 10 personalities are mentioned. References follow most articles.

6. Korolenko, V.M. and K.V. Chubryakova. Regulation of Centrifugal Fans With Inlet Guide Vanes 70  
The article presents experimental materials on regulating centrifugal fans by means of axial and simplified guide apparatus. On the basis of these materials and data of flow investigations behind typical guide vanes and centrifugal impellers, a method for calculating the characteristics of fans with axial guide vanes is elaborated.

7. Chubryakova, K.V. Centrifugal Fan Volume Regulation by Changing the Passage 110  
The article describes the design of the body of a centrifugal fan with a flat inclined blade developed by TsAGI. This fan has good aerodynamic characteristics and is now mass-produced as a general purpose fan. Comparative results of tests are given.

8. Babikov, A.G., I.L. Izhigin, and P.O. Muzumayeva. New Types of TAMI Centrifugal Fans 115  
This article describes ten types of new centrifugal fans. These fans were designed by TsAGI in 1956-1957 and have a high efficiency coefficient 0.76-0.85. It is suggested that some of them with a high efficiency fan, now in production. The article states that 150,000 fans are currently produced in the USSR per year and operation of these fans requires 500,000 kw.

9. Givernykh, A.S. and Ye.Ye. Golodits. Aerodynamic Characteristics of the Initial Sector of a Circular Section Duct During Turbulent Flow in the Boundary Layer 135

The authors describe an approximate method for calculating the turbulent boundary layer in the initial sector of an annular duct. The influence of the influence of the transverse curvature of the internal and external convex and concave surfaces of given ducts on the shape of the velocity profile and on other characteristics of the turbulent boundary layer.

10. Golodits, Ye.Ye. and A.S. Givernykh. The Influence of Initial Turbulent Flow on the Characteristics of Diffuser Ducts 168  
The article describes a theoretical investigation of the influence of initial turbulence of flow in the inlet section of a plume diffuser with straight walls on diffuser characteristics above: coefficient of full pressure losses, efficiency coefficient, maximum degree of diffuser expansion, etc.

BYCHKOV, A.G., LOKSHIN, I.L; MAZMANYANTS, P.O.

Designs of centrifugal ventilators developed by the Central  
Aero-Hydrodynamical Institut in 1957-1958. Vod. 1 san.tekh.  
no.1:27-31 Ja '59. (MIRA 12:1)  
(Fans, Mechanical)

BYCHKOV, A.G.; LOKSHIN, I.L.; MAZMANYANTS, P.O.

New types of centrifugal fans designed at the Central Aero-Hydrodynamical  
Institute. Prom. aerodin. no.12:125-154 '59.      (MIRA 13:1)  
(Fans, Mechanical)

BYCHKOV, A.G.

Aerodynamic characteristics of the field of action and graphs  
for selecting centrifugal and axial flow fans. Prom.aerodin.  
no.17:102-121 '59.

(MIRA 14:3)

(Fans, Mechanical)

BYCHKOV, A.G.

Comparing various types of mine ventilation units according to  
their economic efficiency. Prom.aerodin. no.17:126-135 '59.  
(MIRA 14:3)

(Mine ventilation)

BYCHKOV, A.G.; MAZMANYANTS, P.O.

The KTS3-90 centrifugal roof ventilator designed by the Central  
Aero-Hydrodynamic Institute. Prom.aerodin. no.17:81-101 '60.  
(MIRA 14:3)

(Fans, Mechanical)

BYCHKOV, A.G.; LOKSHIN, I.L.

Ways to improve mine ventilation systems with centrifugal fans. Ugol' 35 no.3:44-50 Mr '60. (MIRA 13:6)

1. TSentral'nyy aerogidrodinamicheskii institut.  
(Mine ventilation) (Fans, Mechanical)

BYCHKOV, A.G.

Selecting the inlet diameter for centrifugal fans and pumps. From.  
aerodin. no.21:88-105 '62. (MIRA 15:4)  
(Fans, Mechanical) (Centrifugal pumps)



BYCHKOV, A.G.

Normal operation range of general purpose centrifugal fans with  
low and medium pressure. Prom.aerodin. no.21:106-115 '62.  
(MIRA 15:4)

(Fans, Mechanical)

BYCHKOV, A.G.

Selecting a normal series of basic dimensions for centrifugal fans. Prom.aerodin. no.21:116-150 '62. (MIRA 15:4)  
(Fans, Mechanical) (Preferred numbers)

BYCHKOV, A.G.; KOROVKIN, A.G.

Diametral fans. Prom.aerodin. no.24:110-124 '62.  
(Fans, Mechanical)

(MIRA 16:7)

BYCHKOV, A.G.

Power losses of rotating impeller disks of centrifugal fans by  
friction. Prom. aerodin. no.25:96-107 '63.      (MIRA 16:7)

(Fans, Mechanical)

L 4442-66 EWT(l)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/AT

ACC NR: AP5020691

UR/0185/65/010/008/0867/0872

AUTHOR: Bychkov, O. H. (Bychkov, A. G.); Horyunova, N. O. (Goryunova, N. A.);  
Kesamanly, F. P.; Mityu'ov, V. K. (Mityurev, V. K.); Rud', Yu. V.; Slobodchikov,  
S. V. (Slobodchikov, S. V.)

TITLE: Electrical and photoelectric properties of  $ZnSiP_2$ 

SOURCE: Ukrayins'kyi/fizychnyy zhurnal, v. 10, no. 8, 1965, 867-872

TOPIC TAGS: electric conductivity, Hall constant, photoconductivity, zinc compound, temperature dependence, forbidden band

ABSTRACT: The temperature dependence of the electric conductivity, the Hall constant in the temperature range 80--670K, and the photoconductivity (its spectral distribution, dependence on the electric field, intensity of illumination, and temperature in the range 80--295K) were studied in n-type  $ZnSiP_2$  crystals. The average size of the crystals was 8 x 1.5 x 0.3 mm. The investigated samples had an electron concentration of  $1--2 \times 10^{17} \text{ cm}^{-3}$  and a Hall mobility of 70--100  $\text{cm}^2/\text{v-sec}$ . The Hall and conductivity measurements were carried out with dc current with the aid of an ordinary potentiometer in a constant magnetic field. The photoconductivity was investigated by a compensation method utilizing unmodulated constant radiation. A type M 195/3 galvanometer was used to register the signal. The electric conductivity decreased sharply and the Hall constant increased sharply with decreasing temperature. This, together with the small electron mobility, indicates the presence of impurity com-

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L 4442-66

ACC NR: AP5020691

2

pensation. The Hall electron mobility changes between 350 and 670K like  $T^{-1}$ . On lowering the temperature the mobility increases sharply. The ionization energy of the donor impurities was found to be 0.08 ev. Intrinsic photoconductivity was found to predominate at all investigated temperatures. Its maximum is shifted to the short-wavelength side with decreasing temperature. The width of the forbidden band, its variation with temperature, and the coefficient dependence of the photoconductivity on the electric field is linear up to fields of 20 v/cm when heating apparently becomes appreciable. At room temperature an acceptor level has been noted at 0.32 ev above the valence band. The activation energies of the donor and acceptor levels were also determined from the temperature dependence of the photoconductivity. Large relaxation times of the photoconductivity have been observed. An energy level diagram of the impurity transitions is proposed. "In conclusion the authors express their gratitude to Professor D. M. Naslyedov for support and discussion of the work." Orig. art. has: 5 figures.

ASSOCIATION: Kyivskyy pedinstytut im. O. M. Hor'koho [Kiyevskiy pedagogicheskiy institut im. A. M. Gor'kogo] (Kiev Pedagogical Institute)

SUBMITTED: 19Sep64

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 007

OTHER: 004

Card 2/2

ACC NR: AP6036797

(A)

SOURCE CODE: UR/0363/66/002/011/2078/2079

AUTHOR: Bychkov, A. G.; Flechko, R. L.; Valov, Yu. A.; Goryunova, N. A.

ORG: Physico-technical Institute im. A. F. Ioffe, AN SSSR (Fiziko-tekhnicheskii institut AN SSSR)

TITLE: Some physical properties of the semiconducting compound  $CdSiP_2$

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 11, 1966, 2078-2079

TOPIC TAGS: semiconductor alloy, cadmium containing alloy, silicon containing alloy, phosphorus alloy

ABSTRACT: Experiments were carried out on the production of single crystals of  $CdSiP_2$  from metallic solution melts, as well as with the aid of chemical transport reactions, in which the source of the material was a ternary compound obtained from the solution melt, and in which the transport agent was iodine. By the solution method there were produced concretions of thin flat crystals, from which were cut single crystal samples with dimensions of  $2 \times 1.5 \times 0.1$  mm. By chemical transport reactions, there were produced thin needles with a length up to 10 mm, and thin plates ( $4 \times 1.5 \times 0.05$  mm). The crystals of  $CdSiP_2$  are soluble in concentrated acids and have a rather low thermal stability (their dissociation in vacuum at a pressure of  $5 \times 10^{-4}$  mm Hg starts at a

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UDC: 546.48'28'181:537.311.33

ACC NR: AP6036797

temperature of 450°C). All of the samples were found to have a conductivity of the n-type. In the samples grown from the solution melt, the following properties were determined (at room temperature): conductivity  $\sigma \approx 5 \times 10^{-3} \text{ ohm}^{-1}\text{-cm}^{-1}$ ; mobility of the electrons  $u = 150 \text{ cm}^2\text{-v}^{-1}\text{-sec}^{-1}$ ; concentration of current carriers  $n = 10^{15} \text{ cm}^{-3}$ . With an increase in temperature there is a sharp drop in the Hall constant. With an increase in temperature, the conductivity increases, but the mobility of the current carriers falls, starting at 400°K. The samples obtained with the aid of chemical transport reactions had a conductivity of the order of  $10^{-6} - 10^{-7} \text{ ohm}^{-1}\text{-cm}^{-1}$ . An investigation of the spectral distribution of the photoconductivity at room temperature was made for both types of samples. For crystals grown from a solution melt, the maximum of photoconductivity was observed at a photon energy of 2.5 ev, while for crystals produced by chemical transport reactions, it was at 2.38 ev. The width of the forbidden zone for  $\text{CdSiP}_2$  was determined, respectively, as 2.34 ev for crystals grown from solution melts, and 2.25 for crystals produced with the aid of chemical transport reactions. Orig. art. has: 1 figure.

SUB CODE: 20, 07/ SUBM DATE: 25Jan66/ ORIG REF: 003/ OTS REF: 002

Card 2/2



BYCHKOV, A. I. Doc Cand Vet Sci -- (diss) "Analysis of ~~the~~  
anti-brucellosis measures in kolkhozes of Chelyabinskaya  
Oblast and ~~the~~ study of <sup>the</sup> effectiveness of ~~the~~ serologic and  
allergic methods of diagnosis<sup>tics</sup> of brucellosis in cattle."  
Mos, 1957. 17 pp 20 cm. (Min of Agr USSR. Moscow <sup>Vet</sup> Academy. ~~of~~  
~~veterinary~~. <sup>Chair</sup> Dept of Epizootology), 140 copies  
(KL, 21-57, 104)

COUNTRY : USSR  
CATEGORY : Diseases of Farm Animals. Diseases Caused by  
          : Bacteria and Fungi  
APR. FORM. : ZhBiol., No. 6 1959, No. 1968  
AUTHOR : Dyckhov, A.I.  
INST. : ~~SIBERIAN~~ Scientific Research Veterinary Institute  
TITLE : Allergic Method of Diagnosis of Brucellosis in  
          : Cattle with the Use of Corpuscular Allergen of  
          : the All-Union Institute of Experimental Veteri-  
ORIG. PUB. : nary Medicine from the Strain V-1.  
          : Sb. nauchn. rabot Sibirsk. n.-i. vet. in-ta, 1957,  
ABSTRACT : vsp. 7, 199-212  
          : As a result of the comparative study of the ocu-  
          : lar\* prepared by the Rostov Veterinary Experiment  
          : Station and corpuscular allergen made by All-  
          : union Institute of Experimental Veterinary Medi-  
          : cine from the strain V-1, the author arrived at  
          : the conclusion that the latter preparation is  
          : more active, specific and more convenient for  
          : use.--A.D. Kusin.  
          :  
          : \*allergen  
CARD: 1/1

USSR/Diseases of Farm Animals - Diseases Caused by Bacteria and Fungi. R-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50165

Author : Bychkov, A.I.

Inst : ~~Moscow Academy of Veterinary Sciences.~~

Title : The Effectiveness of Seroallergic Diagnostic Methods in Brucellosis Sanitation of Large Horned Cattle Farms.

Orig Pub : Tr. Msok. vet. akad., 1957, 19, No 1, 258-272.

Abstract : Comparative studies of seroallergic diagnostic methods have demonstrated that the agglutination reaction (AR) and the blood serum reaction (BSR) do not assure detection of all animals afflicted with brucellosis. With the help of Rostov V.S.D. [Veterinary Sanitation Department] chief allergen used in addition to AR and BSR, large numbers of sick animals were detected. The corpuscular allergen

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USSR/Diseases of Farm Animals - Diseases Caused by Bacteria  
and Fungi.

R-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50165

of VIEV /All-Union Institute of Experimental Veterinary  
Sciences/proved to be the most accurate and active aller-  
gen, and it is recommended by the author for control exami-  
nations of farms free of brucellosis and for rendering  
brucellosis afflicted herds sanitary, for the testing of  
newly acquired animals, as well as for the examination of  
animals before giving them brucellosis vaccinations.

Card 2/2

- 9 -

BYCHKOV, A.I.

The TGM3 diesel switcher. Biul.tekh.-ekon.inform. no.2:  
65-66 '60. (MIRA 13:6)  
(Diesel locomotives)

BYCHKOV, A. I.

Bychkov, A. I. - "The Starting of Asynchronous Motors from Low-Capacity Agricultural Hydroelectric Power Stations." Min Higher Education USSR. Leningrad Electrical Engineering Inst imeni V. I. Ul'yanov (Lenin). Leningrad, 1956 (Dissertation for the Degree of Candidate in Technical Sciences).

So: Knizhnaya Letopis', No. 10, 1956, pp 116-127

SOV/112-59-2-3118

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 2, p 126 (USSR)

AUTHOR: Bychkov, A. I.

TITLE: Tentative Use of Electricity in Poultry Farming  
(Opyt primeneniya elektrichestva v ptitsevodstve)

PERIODICAL: Tr. nauchno-tekhn. soveshchaniya po vopr. primeneniya elektr.  
energii v s.-kh. L., 1956, pp 64-74

ABSTRACT: 1. Umbrella-type electric incubators have been tested in actual operation at poultry farms of Leningrad-oblast kolkhozes and sovkhoses; wire-wound enameled PE-50 resistors have been used as heating elements. Automatic maintenance of temperature is realized by means of a bimetal-strip pickup. Four umbrellas (for 1,000 chickens) cost 900-1,000 rubles if manufactured by industrial methods. Electric-energy consumption cost is 30 kopeks per chicken for 45 days in April-May, in the Leningrad oblast. Survival of young fowl has been 94-99%. 2. An outfit for ultraviolet illumination of

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SOV/112-59-2-3118

Tentative Use of Electricity in Poultry Farming

chickens and for additional illumination of hens in chicken houses during the fall-winter period is described in detail. The mercury-quartz outfit costs about 600 rubles. Cost of electric energy per one chicken is 2-3 kopeks for 45 days of irradiation. Additional illumination of hens increases their egg-laying capacity by 15-20%. The power required for illuminating the chicken-house floor is  $4 \text{ w/m}^2$ . During the October-December period, 30 eggs per one laying hen were obtained.

L.G.

Card 2/2



BYCHKOV, A.I.

Electric brooder for incubator chicks. Biul. nauch.-tekh. inform.  
po elek. sel'khoz. no.1:11-15 '56. (MLRA 10:9)  
(Electric heating) (Poultry houses and equipment)

8(5)

AUTHORS:

Basharin, A. V., Professor, Doctor of Technical Sciences, Vinogradov, I. N., Candidate of Technical Sciences, Bychkov, A. I. Candidate of Technical Sciences, Byval'kevich, I. B., Engineer SOV/105-58-11-12/28

TITLE:

Motor-Generator Drive With Amplidyne and Magnetic Amplifier (Elektroprivod po sisteme generator-dvigatel' s elektromashinnyim i magnitnym usilitelyani)

PERIODICAL:

Elektrichestvo, 1958, Nr 11, pp 51 - 55 (USSR)

ABSTRACT:

This is a description of an electric drive system developed at the kafedra elektrifikatsii promyshlennykh predpriyatiy Leningradskogo elektrotekhnicheskogo instituta imeni V.I.Ul'yanova (Lenina)(Chair of Electrification of Industrial Enterprises at the Leningrad Institute of Electrical Engineering imeni V.I.Ul'yanov (Lenin)) by order of the Uralmashzavod. The system is based upon a utilization of magnetic amplifiers and of symmetrical non-linear ceramic semiconductor resistances, which were developed under the supervision of N.P.Bogoroditskiy (Ref 4). The

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Motor-Generator Drive With Amplidyne and Magnetic Amplifier

SOV/105-58-11-12/28

main problem was the creation of an automatically controlled electric drive system, the qualitative service factors of which are not below those of the power system (Ref 1), which, however, is capable of controlling starting, reversing and braking operation without contact elements. This paper includes an illustration of the circuit diagram of the electric drive. This system is capable of automatic and manual control. The system was tested with a sufficiently powerful model. The different modes of operation, starting, braking and reversing, are described. In order to compute the transients in this system a graphic method developed in the LETI (Ref 5) was used. The calculated and the experimental characteristic curves for the transient processes from motor starting to maximum speed showed a satisfactory agreement. The system is distinguished from others by good qualitative service factors and good static and dynamic characteristics. The circuit diagram is simple, it incorporates only a minimum of contacts and it

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Motor-Generator Drive With Amplidyne and Magnetic  
Amplifier

SOV/105-58-11-12/28

guarantees a reliable braking without "creeping" speeds".  
There are 8 figures and 5 Soviet references.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut imeni V.I.  
Ul'yanova (Lenina) (Leningrad Institute of Electrical  
Engineering imeni V.I.Ul'yanov (Lenin)

SUBMITTED: May 29, 1958

Card 3/3

S/124/63/000/001/005/080  
D234/D308

AUTHORS: Bychkov, A.I., Rutman, A.Sh. And Sergeyeu, P.V.

TITLE: Comparison of indirect methods of analysis of automatic control systems on the basis of I.A. Vyshnegradskiy's problem

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 1, 1963, 18, abstract 1A117 (Tr. Omskogo mashinostroit. in-ta, 1959, no. 3, 33-47)

TEXT: For the choice of optimum parameters of a system of direct control, methods are applied which become widely popular for estimation of the quality of the transient process: the method of distribution of roots, integral criteria and the method of choice of parameters, based on minimizing the deviations. The results obtained are compared with the data of direct numerical computation. In this way I.A. Vyshnegradskiy's problem is used for verifying the indirect methods of quality estimation. Comparison shows that all methods give the general tendency in the position of the zone of

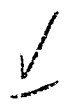
Card 1/2

Comparison of indirect methods ...

S/124/63/000/001/005/080  
D234/D308

optimum parameters with sufficient accuracy. The largest inaccuracy is found in a version of the method of root distribution which uses the notion of relative damping. 13 references.

[ Abstracter's note: Complete translation ]



Card 2/2

BASHARIN, Artemiy Vasil'yevich, doktor tekhn. nauk, prof.; GOLUBEV,  
Feodosiy Nikolayevich; KEPPERMAN, Vasiliy Georgiyevich;  
BYCHKOV, A.I., red.

[Design examples of an automated electric drive] Primery  
raschetov avtomatizirovannogo elektroprivoda. Moskva, Izd-  
vo "Energia," 1964. 389 p. (MIRA 17:5)

BYVAL'KEVICH, Igor' Borisovich; BYCHKOV, Aleksandr Ivanovich;  
GOLOVANOV, Aleksandr Viktorovich; POL', Aleksey Yul'yevich;  
BASHARIN, A.V., doktor tekhn. nauk, prof., red.; YEVSEYEV,  
V.I., red.

[Theory of electric drives; manual for independent design  
work] Teoriia elektroprivoda; uchebnoe posobie k samo-  
stoiatel'nym raschetam. Leningrad, Leningr. elektrotekhn.  
in-t, 1964. 80 p. (MIRA 18:8)



БИЧКОВ, А.И., канд. ветер. наук

Diagnosis of pasteurellosis and Newcastle disease in poultry.  
Veterinarija 41 no.6:28 Je '64. (MIRA 18:6)

1. Chelyabinskaya oblastnaya veterinarnaya laboratoriya.

YUKHNOVICH, A.N., veter. vrach (Yel'ninskiy rayon, Smolenskoj oblasti);  
RUDOMETKIN, Ya.S., veter. vrach; EVENTOV, M.Z., veter. vrach;  
SOBOLEV, A.S., dotsent (Estonskaya SSR); DOL'NIKOV, Yu.Ya., kand.  
veter. nauk; PALIMPSESTOV, M.A., prof.; SIMONENKO, N.M., dotsent;  
GONCHAROV, A.P., assistant; BEZRUKOV, A.A.; FROLENKOV, N.A., veter.  
vrach (Serov, Sverdlovskoj oblasti); KOSHCHHEYEV, P.M.; VOROB'YEV,  
M.M., kand. veter. nauk; YANCHENKO, P.Kh., veter. vrach;  
AMELIN, I.P.; BYCHKOV, A.I., kand. veter. nauk; SHVYREV, G.I.,  
veter. vrach (Stavropol'skiy kray); DANILIN, N.F.; TRUSHIN, A.Z.,  
veter. vrach; SKRYPNIKOVA, T.K., veter. fel'dsher; MIKHEYEV, A.D.;  
KARMANOVA, Ye.M., kand. biol. nauk; REMIZOV, Ye.S., mladshiy  
nauchnyy sotrudnik; ANTIPIN, D.N., referent

From helminthological practice. Veterinariia 38 no.7:55-58  
Jl '61. (MIRA 16:8)

1. Reshetovskiy veterinarnyy uchastok, Novosibirskoj oblasti  
(for Rudometkin). 2. Sovkhoz "Buda-Koshelevskiy" Gomel'skoj  
oblasti (for Eventov). 3. Sibirskiy nauchno-issledovatel'skiy  
veterinarnyy institut (for Dol'nikov). 4. Khar'kovskiy veteri-  
narnyy institut (for Palimpsestov, Simonenko, Goncharov).  
5. Blagoveshchenskiy sel'skokhozyaystvennyy institut (for  
Bezrukov). 6. Novo-Nikolayevskiy veterinarnyy uchastok Krasno-  
darskogo kraya (for Lochkarev). 7. Karpilovskiy veterinarnyy  
uchastok Chernigovskoj oblasti (for Ponomarenko). 8. Kamalinskiy  
veterinarnyy uchastok Krasnoyarskogo kraya (for Koshcheyev).

(Continued on next card)

YUKHNOVICH, A.N.—(continued) Card 2.

9. Novgorod-Severskaya mezhrayonnaya veterinarnaya laboratoriya, Poltavskoy oblasti (for Vcrob'yev).
  10. Braginskaya rayonnaya veterinarnaya lechebnitsa, Gomsel'skoy oblasti (for Yanchenko).
  11. Nachal'nik veterinarnogo otdela Chelyabinskogo oblastnogo sel'skokhozyaystvennogo upravleniya (for Amelin).
  12. Chelyabinskaya oblastnaya veterinarnaya laboratoriya (for Bychkov).
  13. Kaliningradskaya nauchno-issledovatel'skaya veterinarnaya stantsiya (for Danilin).
  14. Sovkhoz "Rodina" Kikvidzenskogo rayona, Stalingradskoy oblasti (for Trushin, Skrypnikova).
  15. Zaveduyushchiy Kirovo-Chepetskoy myaso-molochnoy i pishchevoy kontrol'noy stantsiyey, Kirovskoy oblasti (for Mikhayev).
  16. Gel'mintologicheskaya laboratoriya AN SSSR (for Karmanova).
  17. Zapadno-Kazakhstanskaya nauchno-issledovatel'skaya veterinarnaya stantsiya (for Remizov).
- (Veterinary helminthology)

BYCHKOV, A.M., inzh.

KRVN-2,5 cultivator and fertilizer spreader. Trakt. i sel'khoz mash.  
31 no.1:35 Ja '61. (MIRA 14:1)

1. Gosudarstvennoye spetsial'noye konstruktorskoye byuro "Krasnyy  
Aksay" (Cultivators) (Fertilizer spreaders)

BYCHKOV, A.M., inzh.; OVANESYAN, A.A., arkhitektor

Automobile passenger and service stations of vibrated and rolled  
reinforced concrete. Avt. dor. 27 no. 3:21-22 Mr '64. (MIRA 17:5)

BYCHKOV, A.M.

The KPG-4 cultivator with a hydraulic drive. Biul. tekhn.-ekon.  
inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform. 18 no.2:  
52-53 F '65. (MIRA 18:5)

BELOV, S.V.; BYCHKOV, A.P.

Determining the mean energy of  $\beta$ -radiation from low-activity  
samples. Atom. energ. 16 no.6:5 p Je '64. (MIRA 17:7)

KARPACHEVA, S.M., doktor khimich. nauk; CHEMARIN, N.G., kand.tekhn.nauk;  
BYCHKOV, A.Ye., inzh.; ZAKHAROV, Ye.I., inzh.; DEVIATKIN, V.I., inzh.;  
~~ZHDANOV, B.V., inzh.~~

Study of the operation of a pulsating extraction sieve plate  
column. Khim. i nef. mashinostr. no.1:24-27 Ja '65.

(MIRA 18:3)



SIPYAGIN, A. S.; A. A. MILYUTIN; N. A. BAKANOV; B. K. BYCHEV; S. F. KRAVCHENKO;  
E. A. VEKSELEP; V. I. LUKOYANOV; ED.

Tekhnologiya Krakhmalopatochnogo Proizvodstva. (Technology of Starch-  
Syrup Production). Moskva, Pishchepromizdat, 1950.  
423 p. Illus., Tables, Diagr.  
At Head of Title: A. S. Sipyagin, etc.  
"Literatura": p. 420-(421)

So: N/5  
722.31  
.56

BYCHKOV, B.K., inzhener.

Production of corn extract. Study TSNIIKPP no.2:23-46 '55.  
(MIRA 10:1)

(Corn products)

*BYCHKOV, B.K.*

BAKANOV, N.A.; BURMAN, M.Ye.; BYCHKOV, B.K.; VEKSIER, B.A.; LUKOYANOV, V.I.;  
MALYZHEV, A.A.; MILYUTIN, A.A.; PRITYKINA, L.A., red.; KISINA, Ye.I.,  
tekh.n.red.

[Technology and control of starch and molasses production] Tekhno-  
logiia i tekhnokhimicheskii kontrol' krakhmalo-patochnogo proizvod-  
stva. Pod red. M.E.Burmana. Moskva, Pishchepromizdat, 1957. 402 p.  
(Starch) (Molasses) (MIRA 11:2)

BYCHKOV, B.K.

Separation of starch and gluten in high-speed centrifugal separators. Sakh.prom. 33 no.3:57-62 Mr '59. (MIRA 12:4)

1. Beslanovskiy maisovyy kombinat.  
(Starch) (Gluten) (Separators (Machines))