

AFONICHEV, N.A.

Devonian of the Dzungarian Ala-Tau. Trudy VSEGEI 74:37-57  
'62. (MIRA 15:9)  
(Dzungarian Ala-Tau--Geology, Stratigraphic)

AFONICHEVA, A. I.

"Utilization of Horses in the Agriculture of the Ramenskiy District, Moscow Province," Konevodstvo, 22, No.8, 1952

AFONICHEVA, A.I. (Kaluzhskaya obl.); DOMAKHINA, Ye.V. (Kaluzhskaya obl.)

Baryatino station. Zashch.rast. ot vred. i bol. 9 no.11:41 '64.  
(MIRA 18:2)

KOTSAGA, I.N. (Kuybyshev); AFONICHKIN, N.I., dorozhnyy dispatcher  
(Kuybyshev); KOROVIN, N.I., dorozhnyy dispatcher (Kuybyshev)

Efficient routing of car flows. Izv. Sov. transp. 47 no.3:  
14-16 Mr '65. (MIRA 18:5)

1. Nachal'nik sluzhby dvizheniya Kuybyshevskoy dorogi (for Kotsaga).

KUDRIN, V.A.; AFONIKOV, S.M.; NECHKIN, Yu.M.; SOROKIN, S.P.; TYURIN, Ye.I.;  
LAPSHOVA, M.P.; YUDSON, A.A.; POPOV, Ye.S.

Performance of a 30 ton open-hearth furnace with a roof gas  
and oxygen burner. Metallurg 10 no.1:14-16 Ja '65.

(MIRA 18:4)

1. AFONIN, A.
2. USSR (600)
4. Pipe Fittings
7. Hydraulic stopper for mine seals. Mast. ugl. 2. No. 2, 1953.

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

*A FONIN, A.A.*

AUTHORS: Afonin, A.A. and Kanterman, L.B.

65-7-12/14

TITLE: From Experience of the Kuybyshev Refinery (Iz opyta  
Kuybyshevskogo neftepererabatyvayushchego zavoda)

PERIODICAL: Khimiya i Tekhnologiya Topliva i Masel, 1957, No.7,  
pp. 63 - 65 (USSR)

ABSTRACT: The organisation of work on improvement of instrumentation  
and automation on the refinery by the works' technical staff  
is outlined. The poor quality of manufacture of instruments  
in the USSR is stressed.

ASSOCIATION: Kuybyshev Refinery (Kuybyshevskiy neftepererabatyvayushch-  
iy zavod)

AVAILABLE: Library of Congress  
Card 1/1

KOZHEVIN, V.G.; AFONIN, A.A.; FAT'YANOV, N.M.; SOLLOGUB, V.P.; KOZYUBERDA, A.F., gornyy inzhener; PRYAKHIN, V.A.; SHINKOVSKIY, A.V.; SUKHACHEV, D.A.

Let's be ready for the tenth celebration of Miners' Day with new industrial achievements. *Spol'* 32 no.8:4-17 Ag '57. (MLRA 10:9)

1. Kemerovskiy Sovetskoye (for Kozhevin).
2. Glavnyy inzhener tresta Pervomayskugol' (for Afonin).
3. Glavnyy inzhener tresta Nesvetay-antratsit (for Fat'yanov).
4. Glavnyy inzhener tresta Kopeyskugol' (Sollogub).
5. Ayutinskoye shakhtoupravleniye (for Kozyuberda).
6. Shakhta im. Rumyantseva tresta Kalininugol' for Pryakhin).
7. Nachal'nik ordena Lenina shakhty No.9 tresta Snezhnyantratsit (for Shinkovskiy).
8. Nachal'nik shakhty No.22 "Lomintsevskaya tresta Shchekinugol' (for Sukhachev).

(Coal mines and mining)

L 13642-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3003118

S/0056/63/044/006/1896/1900

AUTHOR: Afonin, A. A.; Granovskiy, Ya. I.

TITLE: Concerning one model of pion-pion interaction 19

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1896-1900

TOPIC TAGS: pion-pion interaction, intermediate vector meson, asymptotic cross section, angular distribution

ABSTRACT: Pion interaction via an intermediate vector meson is considered. The amplitude of pion-pion scattering is determined by making theoretically justified assumption concerning the mass and binding constant of the vector meson. A model is formulated for the description of pion-pion resonance, from which asymptotic values are obtained for the total cross section and the diffraction angular distribution. In this model it is possible to satisfy the main requirements imposed on the scattering amplitude, such as crossing symmetry, unitarity in all channels, etc. The results obtained with this model imply that the P-wave has a resonance accompanied by a Castillejo-Dalitz-Dyson pole (Phys. Rev. 101, 453, 1956), that the asymptotic plot of the cross section has a plateau, satisfies the Pomeranchuk theorem, and is independent of the spin, the angular distribution assumes a diffraction character with increasing energy, and the P-phase has the

Card 1/2

52  
51

L 13642-63

ACCESSION NR: AP3003118

properties necessary for the description of the nucleon form factor. Reasons for obtaining more precise results are advanced. Orig. art. has 3 figures and 22 formulas.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR (Institute of Nuclear Physics, Academy of Sciences, Kazakh SSR)

SUBMITTED: 16Jul62

DATE ACQ: 23Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 005

OTHER: 006

Cord 2/2

L 32204-66 EWT(m)

'ACC NR: AP6020800

SOURCE CODE: UR/0386/66/003/012/0501/0504

AUTHOR: Afonin, A. A.

ORG: Institute of Nuclear Physics, Academy of Sciences, Kazakh SSR (Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR)

TITLE: Allowance for the influence of  $\pi\pi$  scattering annihilation channels in the reaction  $N(\pi, 2\pi)N$

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 12, 1966, 501-504

TOPIC TAGS: pion, meson, pion pion interaction, particle annihilation, differential cross section, scattering cross section, resonance scattering

ABSTRACT: The author shows that when calculating the pion production reaction in  $\pi N$  collisions, in accord with the Chew-Low method (Phys. Rev. v. 113, 1640, 1959), it is necessary to take into account, besides the direct interaction channel, also the annihilation channels, and that the presence of the latter noticeably alters the expected characteristics of  $\pi\pi$  scattering. Annihilation is taken into account by using the model of  $\pi\pi$  interaction via  $\rho$ -meson exchange, as described by the author elsewhere (with Ya. I. Granovskiy, ZhETF v. 44, 1896, 1963). The specific

Card 1/2

L 32204-66

ACC NR: AP6020800

reaction analyzed is  $\pi^+\pi^- \rightarrow \pi^+\pi^-$ . Calculation of the cross section of this reaction with and without the annihilation channels shows that in the latter case the cross section does not reach the unitary limit. The value of the cross section at the resonance point found by this method is 32 mb, and the resonance width is 180 mb; neither of these values contradict available experimental data obtained by the Chew-Low method. Further arguments in favor of including the annihilation channels of  $\pi\pi$  scattering is the presence of an S wave in the  $\rho$ -meson resonance region. This causes the differential cross section at  $90^\circ$  not to be equal to zero, as would be the case if only the direct channel were taken into account, but to have the form of a broad peak with a maximum on the order of 2 mb, located very slightly below the  $\rho$ -meson resonance, in qualitative agreement with experiment. The author thanks P. A. Usik for a useful discussion. Orig. art. has: 2 figures and 3 formulas.

SUB CODE: 20/    SUBM DATE: 10Apr66/    ORIG REF: 002/    OTH REF: 004

Card 2/2

APONIN, A.F., inzh.

Highways should have a modern traffic sign system. Avt.dor. 28  
no.6:26 Ja '65. (MIRA 18:3)

AFONIN, A.G., KOSTENKO, T.P.

Using metal molds in making ceramic pipes. Stek. 1 ker. 17 no.6:  
38-39 Je '60. (MIRA 13:6)

(Pipe, Clay)

AFONIN, A.M.; FROLOV, V.I.

Servicing automatic block systems. Avtom., telem. i svyaz' 2 no.1:  
21-23 Ja '58. (MIRA 11:1)

1. Starshiy inzhener Bogotol'skoy distantzii signalizatsii i svyazi  
Krasnoyarskoy dorogi (for Afonin). 2. Nachal'nik tekhnicheskogo  
otdela sluzhby signalizatsii i svyazi Krasnoyarskoy dorogi (for  
Frolov).

(Railroads--Signaling--Block system)



L 61412-65

ACCESSION NR: AP5019108

3

Orig. art. has: 1 diagram.

ASSOCIATION: Vsesoyuzny nauchno-issledovatel'skiy institut pod'yemno-transportnogo mashinostroyeniya (AI) Union Scientific Research Institute of Hoisting and Conveying Machine Construction 1/4 35

SUBMITTED: 12Aug63

ENCL: 01

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

Card 2/3

ACCESSION NR: AP5019108

ENCLOSURE: 01

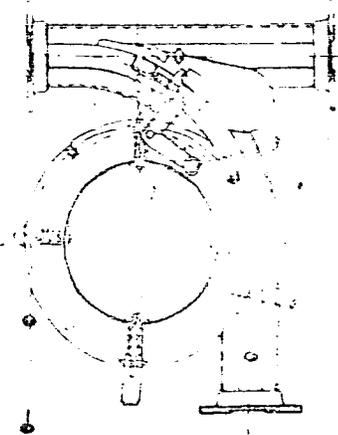


Fig. 1. 1- spring-supported vanes; 2- two-armed lever;  
3- roller; 4- circular template; 5- carriage; 6- opening  
in the circular template

Card 3/3



1965  
1965

Author: A. J. ...

Title: Instrument for dynamic damping of ...

Abstract: This Author Certificate presents an instrument for dynamically damp-

ing a piston filled ...

NO REF GOV 000

Card 1/1

AFONIN, A.P.

Elements of the dynamics of transient processes of electric step-by-step motors. Elektrichestvo no.11:67-71 N '62. (MIRA 15:11)

1. Institut mashinovedeniya Gosudarstvennogo komiteta Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu.  
(Electric motors)

AFONIN, A.P.

Unsteady motion of an electric step-by-step motor. Teor.  
mash. i mekh. no.92/93:153-168 '62. (MIRA 16:11)

AFONIN, A.P.; BABITSKIY, V.I.; BORISOV, D.S.; KOBRINSKIY, A.Ye.;  
KOZHIN, V.D.; SAKAYAN, A.R.

Experimental investigation of the dynamics of an electric  
step-by-step motor. Teor. mash. i mekh. no.94/95:127-141  
'63. (MIRA 16:11)

AFONIN, A.P.; BORISOV, D.S.; KOBRINSKIY, A.Ye.

Subharmonic motion conditions of electric step-by-step  
motors. Teor. mash. i mekh. no.94/95:34-40 '63.  
(MIRA 16:11)

AFONIN, A.P. (Moskva); BORISOV, D.S. (Moskva); KOBRINSKIY, A.Ye. (Moskva)

A nonlinear effect in a pulse excited vibrating system. Izv.AN  
SSSR. Mekh. i mashinostr. no.4:18-22 J1-Ag '63. (MIRA 17:4)

AFONIN, A.P.; BORISOV, D.S.; KOBRIISKIY, A.Yo.

Pickup of an electric step-by-step motor. Teor. mash. i mekh.  
no.103/104:87-92 '64. (MIRA 17:11)

L 48492-65

EMT(m)/EMF(w) EM

ACCESSION NR: AP5008227

S/0286/65/000/005/0096/0096

AUTHORS: Afonin, A. P., Klimov, A. K., Shulyako, A. A.

TITLE: Method for dynamic damping of vibrations. Class 47, No. 168965

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 96

INDEX TAGS: vibration damping, vibration, oscillation amplitude

ABSTRACT: This Author Certificate describes a method for dynamic damping of vibrations by means of a discrete action on the vibrating system, excluding the possibility of simultaneous action of the stabilizing forces. This method is used to limit the vibration amplitude of the mechanical systems.

ASSOCIATION: none

SUBC FIELD: 206ep63

EDC: 00

SUB CODE: A5

NO REF SOT: 000

OTHER: 000

Card 1/1

L 20924-66 EWT(m)/T/ETC(m)-6 WW/DJ

ACC NR: AP6002580

SOURCE CODE: UR/0286/65/000/023/0072/0072

AUTHOR: Afonin, A. P.

ORG: none

50  
B

TITLE: A hydrostatic bearing. Class 47, No. 176756

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 72

TOPIC TAGS: automatic regulation, bearing, hydrostatic pressure, vibration damping

ABSTRACT: This Author Certificate presents a hydrostatic bearing. The bearing contains a channel for the delivery of a liquid to the bushing chambers and a device for automatically regulating the pressure in the chambers. It is designed to increase the vibration resistance of the bearing and to provide for dampening the shaft oscillations which arise. The device for automatically regulating the pressure in the chambers is made in the form of a cylinder with a spring-loaded piston (see Fig. 1). The piston acts on the liquid in the channel for delivering the liquid to the chambers and is actuated by sensing elements located in the chamber. These sensing elements operate through a filter, a pulse-amplifier,

Card 1/2

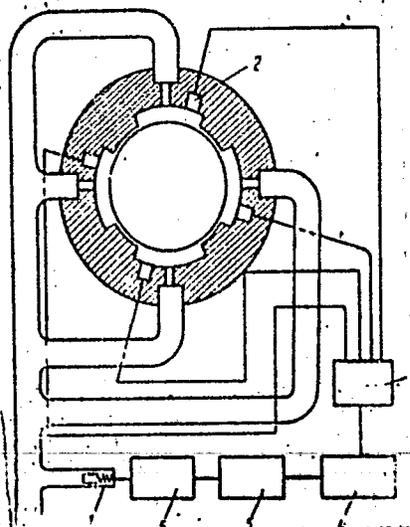
UDC: 621.822.5--543.67

2

L 20924-66

ACC NR: AP6002580

Fig. 1. 1 - cylinder with spring-loaded piston; 2 - sensing elements; 3 - filter; 4 - amplifier; 5 - shaping unit; 6 - vibrator.



a unit for shaping opposite phase pulses, and a vibrator. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 05Feb64

Card 2/2 *FW*

AFONIN, F.

Reliable assistants. Mest prom.i khud.promys. 3 no.2:5 F '62.  
(MIRA 15:2)

1. Zaveduyushchiy orgmassovym otделom Moskovskogo gorodskogo  
komiteta profsoyuza rabochikh mestnoy promyshlennosti i kommunal'nogo  
khozyaystva.

(Moscow Province--Trade unions)

18.3200,25.5000

77426

SOV/130-60-1-9/22

AUTHORS: Vikhrev, I. D. (Candidate of Technical Sciences),  
Afonin, I. A. (Engineer)

TITLE: Construction of Open-Hearth Shops With Insular-  
Like Furnace Bank Layout

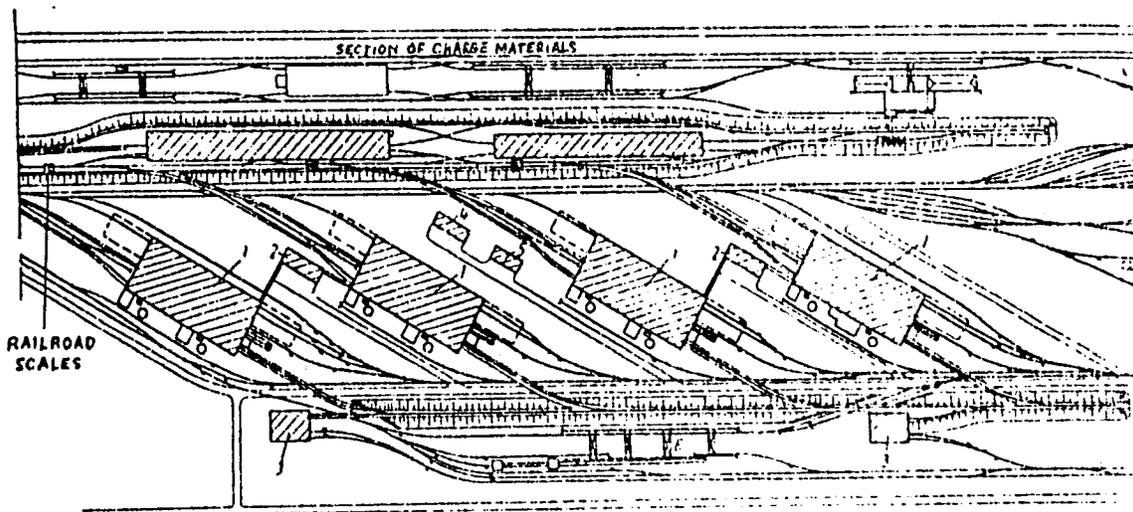
PERIODICAL: Metallurg, 1960, Nr 1, pp 18-22 (USSR)

ABSTRACT: In view of the current trend toward the building of  
open-hearth furnaces with a minimum capacity of  
500 tons, the authors recommend an appropriate change in  
plant layout. An insular-like arrangement of furnace  
banks has already been introduced in an unnamed  
metallurgical plant now being built (see Fig. 1).  
According to a survey conducted by the State Institute  
for the Design and Planning of Metallurgical Plants  
(Gipromez), more service personnel are required than in  
standard open-hearth shops. Absolute investment in  
labor is approximately the same. However, the productiv-  
ity of a shop with an "insular" layout of eight 500-ton

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Construction of Open-Hearth Shops With  
Insular-Like Furnace Bank Layout

77426  
SOV/130-60-1-9/22



Card 2/4

See card 3/4 for caption.

Construction of Open-Hearth Shops With  
Insular-Like Furnace Bank Layout

77426  
SOV/130-60-1-9/22

Caption to Fig. 1 on Card 2/4

Fig. 1. Planned layout of an open-hearth shop with insular-like furnace banks: (1) main building bank; (2) rest rooms; (3) mixer building; (4) repair workshop; (5) field laboratory; (6) slag yard.

furnaces and one pouring bay exceeds that of a standard shop with linear furnace arrangement by 3.2% because of shortened melting period (by 18 min). A further 10% increase in productivity is achieved by adding a second pouring bay per bank. The shop under construction comprises four individual two-bay banks. The trains with the charge move directly into the furnace bay; charge box buggies are stored in the lean-to. The installation of a second pouring bay required an elongation of the bay by 48 m on one side and by 36 m on the other. Advantages: (1) possibility of load delivery from both ends of the building, regardless

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Construction of Open-Hearth Shops With  
Insular-Like Furnace Bank Layout

77426  
SOV/130-60-1-9/22

of the number of working furnaces and furnaces being built; (2) elimination of temporary end walls after blowing in furnaces; (3) elimination of manual labor for excavation work; (4) decreased width of main building facilitates mounting installations and allows servicing by only one tower crane. The authors recommend the layout as an advanced method in technology and construction. There are 3 figures; and 3 tables.

ASSOCIATION: State Institute for the Design and Planning of  
Metallurgical Plants (Gipromez)

Card 4/4

VIKHEV, I.D.; AFONIN, I.A.

Open-hearth plants with island-type furnace arrangements.  
From.stroi. 38 no.6:39-43 '60. (MIRA 13:7)

1. Gosudarstvennyy institut proyektirovaniya metallurgicheskikh  
zavodov (for Afonin).  
(Open-hearth furnaces)

AFONIN, I.A., inzh.

Building large-capacity open-hearth furnaces. Mont.i spets.rab.v  
stroi. 23 no.6:12-14 Je '61. (MIRA 14:7)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu  
metallurgicheskikh zavodov.  
(Open-hearth furnaces).

AFONIN, I.A., inzh.

Efficient construction of converter plants. Prom. stroi.  
40 no.5:21-23 '62. (MIRA 15:5)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu  
metallurgicheskikh zavodov.  
(Iron and steel plants)

AFONIN, I.A., inzh.

Some problems of shortening the assembly time of elements of steel smelting shops. Prom. stroi. 40 no.2:12-17 '62. (MIRA 15:7)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.  
(Iron and steel plants)

AFONIN, Igor' Aleksandrovich; LEVIN, Yu.I., nauchn. red.

[Building of higher capacity steel smelting plants]  
Stroitel'stvo staleplavil'nykh tsekhov bol'shoi proiz-  
voditel'nosti. Moskva, Stroiizdat, 1965. 220 p.  
(MIRA 18:4)

FADDEYEV, E.V., kand. tekh. nauk; AFONIN, I.A., inzh.

Continuous coal conveying at the Korkino Mine. Hold. 1  
avton. proisv. 19 no. 5:13-14, My '65. (MIRA 18:11)

AFONIN, I. P.; GAVRILOV, B. I.; ZAVOYSKIY, Ye. K.; KARMANOV, F. V.;  
MAKSIMOV, G. P.; PLAKHOV, A. G.; CHEREMNYKH, P. A.;  
SHAPKIN, V. V.

The experimental plasma apparatus C-1 with screw magnetic  
fields. Atom. energ. 14 no.2:143-150 F '63.  
(MIRA 16:1)

(Plasma(Ionized gases)) (Magnetic fields)

ALBYAKOV, M.P., kand.tekhn.nauk; ALBYAKOVA, Yo.V., mladshiy nauchnyy  
sotrudnik; AFONIN, I.S., starshiy inzh.-instruktor

SLK-1A horse-drawn combined forest plow and planter. Trakt.i  
sel'khoz mash. no.6:37-38 Ja '59. (MIRA 12:9)  
(Forests and forestry--Equipment and supplies)

POLOSIN, I.A.; CHERNENKO, Ye.I.; AFONIN, K.B.

Heating of truck engines with infrared burners. Stroil. truboapprov.  
9 no. 11:17-20 N 164. (MIRA 18:2)

I. Yehgl'rogas, Donetsk.

FIL'CHRNKO, Nikolay Vasil'yevich; AFONIN, L., red.; NEMYTOV, V.,  
tekhn.red.

[The seven-year plan of Orel Province] Semiletka Orlovskoi  
oblasti. Orel, Orlovskoe knizhnoe izd-vo, 1959. 120 p.

(MIRA 13:5)

(Orel Province--Economic policy)

SHABLEVSKIY, V., kand.tekhn.nauk; VORONOV, V., inzh.; YAKOVLEV, O., inzh.;  
AFONIN, L., inzh.

Making and using cold asphalt mastics. Stroitel' no.1:18-19 Ja '61.  
(MIRA 14:2)

(Asphalt)

AFONIN, L.A.; ZOZULYA, P.I.; MANEN'KOV, P.I.

Organizing communication channels in 6/04 kv. power-distribution networks on oil fields. Mash. i neft. obor. no.4:17-19 '65.  
(MIRA 18:5)

1. Groznenskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i proyektno-konstruktorskogo instituta kompleksnoy avtomatizatsii neftyanoy i gazovoy promyshlennosti.

AFONIN, L.A.

Reliability of communication systems using oil-field branched power networks. Mash. i nef. obor. no.7:35-37 '65.

(MIRA 18:12)

1. Groznenskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i proyektno-konstruktorskogo instituta kompleksnoy avtomatizatsii neftyanoy i gazovoy promyshlennosti.

AFONIN, M. I.

AFONIN, M. I. -- "Basis of Optimum Period of Sowing Long Flax." Latvian Agricultural Academy, 1948 (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Izvestiya Ak. Nauk Latvyskoy. SSR, No. 9, Sept., 1955

AFONIN, M.I.

(Experience of progressive kolkhozes of Iiubchenskii Rayon in obtaining high fiber flax yields) Minsk, Gos. izd-vo BCSR, 1954. 62 p.

1. Flax - Russia.

AFONIN, M.I.

[Every collective farmer in the Korelich District is a millionaire]  
Use kalhasy Karelitskaha raiona mil'ianery; vopyt razvitsatsia  
il'navodstva. Minsk, Dziarzh. vyd-va BSSR, 1956. 50 p. (MIRA 11:1)  
(White Russia--Collective farms)

USSR/Cultiva. of Plants - Commercial. Oil-bearing. Sugar-bearing. H.

Abstr Jour : *Red Star* - Biol., No 10, 1958, 44218

Author : Alonin, M.I., Koshelova, L.L.

Inst : Belorussian Scientific Research Institute for Agriculture

Title : Organic Mineral Fertilizers under Flax.

Orig Pub : *Syl. nauchno-tekhn. inform. Belorussk. n.-i. no del.*,  
1957, No 1, 33-36.

Abstract : No abstract.

Card 1/1

- 115 -

Reliability of Electric Power Supply

SOV/1239

plants in various branches of industry due to power shutdowns. He also describes the basic principles of plotting load-relief graphs. He thanks V.I. Veyts, Corresponding Member, AS USSR, for his help and I.Ya. Sherstnev, Lecturer, Moskovskiy Ordena Lenina Energeticheskoy Institut, for reading the manuscript and helping with the graphs. There are 67 references, of which 57 are Soviet, 7 English, 2 Swiss, and 1 Swedish.

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Reliability of Electric Power Supply

SOV/1239

19. Measures for emergency power supply during major and minor shutdowns in industrial plants	252
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AVAILABLE: Library of Congress

JP/mtl  
3-23-59

Card 4/4

GIMEL'SHTEYN, L. Ya., inzh.; ZAIKA, A.A., kand. ekonom. nauk; AFONIN, N.S.,  
kand. tekhn. nauk

Losses, reliability, and reserve. Prom. energ. 21 no. 1:30-39  
Ja '66 (MIRA 19:1)

1. Kemerovskiy gornyy institut (for Gimel'shteyn). 2. Kiyevskiy  
politekhnikheskiy institut (for Zaika).

37795

S/120/62/000/002/020/047  
E192/E382

21,6000.

AUTHORS: Afonin, C.F. and Gal'perin, L.N.

TITLE: A simple system of binary-decimal counting for a multichannel amplitude-analyzer with a potential-barrier storage tube

PERIODICAL: Pribory i tekhnika eksperimenta, no. 2, 1962.  
89 - 92

TEXT: An auxiliary circuit designed for operation with an amplitude-analyzer based on the tube, type AMA, is described (Ref. 1 - PTE, 1959, no. 4, 161). The operation of the binary adding system in the analyzer, type AMA, is as follows. Assuming that 19 pulses (code 10011) are recorded in a given channel (vertical line on the target of the tube) and that another pulse is added, the latter actuates the unblanking multivibrator which produces a train of rectangular pulses which open the beam of the barrier tube and actuate the time base Y in such a manner that up to the termination of each pulse the beam is displaced to the successive vertical element on the target. The time base Y is in the form of a binary counter

Card 1/8 <

A simple system of ....

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consisting of 6 binary circuits with an adding circuit whose output resistance produces a steplike potential function which is applied to the vertical deflection plates of the tube. During the first unblanking pulse, the beam deletes the recorded "1" on the first element, i.e. the "1" is replaced by "0". A reading pulse appears on the signal plate during the deletion; this is amplified and shaped and then applied to the input of an anti-coincidence circuit together with the unblanking pulses. The ray is then shifted to the second element, where the same process takes place and then to the third element. "1" is recorded on the third element, this being due to the fact that a "0" was recorded in this position; the reading pulse does not appear in this position and the output of the anti-coincidence circuit produces a recording pulse and this is applied to the signal plate. The falling edge results in the generation of a re-set pulse which returns the binaries of the time base Y into their initial state and interrupts the operation of the unblanking multivibrator; recording of the successive elements is therefore unchanged. The code 10011 is therefore replaced by 10100, which

Card 2/B 5

A simple system of ....

S/120/62/000/002/020/047  
E192/E382

corresponds to an addition of a "1". The code obtained from the auxiliary circuit of the system differs from the binary in "8" and "9". The block diagram of the auxiliary equipment is shown in Fig. 5. The principal element of this system is the binary  $\mathcal{N}_1$  (see the figure). When this binary is in its initial position the binary counter of the time base Y operates as an adding circuit since its second binary is triggered from the anode of the second tube of the first binary. The reversing binary  $\mathcal{N}_1$  is in its initial state until the

appearance of the 8th input pulse. When the 8th pulse appears the ray of the barrier-grid storage tube is shifted to the 4th element of the vertical line. This transition and the transitions to the 8th, 12th and 16th elements produce a coincidence of the pulses of the first and second binaries of the counter. A "1" is recorded on the 4th element and the reversing binary is actuated by the anode pulse from the coincidence circuit  $\mathcal{N}_2$ . During the changeover the reversing binary performs the following functions:

a) switches over the second binary of the binary counter so that

Card 3/8

S/120/62/000/002/020/047

E192/E582

A simple system of ....

the counter begins to operate as a subtracting device;  
b) disconnects the third binary from the preceding units;  
c) disconnects the re-set pulse of the binary counter by means of the diode  $\Delta_1$ , and

d) permits the passage of a pulse from the first binary of the counter through the tube  $\mathcal{N}_3$  in order that the binary  $\mathcal{N}_1$  can be returned into its initial position.

When the binary  $\mathcal{N}_1$  is actuated, the unblanking pulse transfers the beam from the 4th element to the preceding element, where a "1" is recorded and then to the 2nd element when another "1" is recorded. During transition to the 2nd element, the positive pulse of the first binary of the counter returns the binary  $\mathcal{N}_1$

to its initial state. Simultaneously, the binary counter is again "converted" into an adding circuit and re-set into its initial position by the re-set pulse which simultaneously interrupts the operation of the unblanking multivibrator. A detailed circuit diagram of the auxiliary equipment is given.

Card 4/8

A simple system of ....

S/120/62/000/002/020/047  
E192/E382

The system was reliable in operation even when its supply voltage (except the anode supply which was stabilized) was varied by  $\pm 10\%$ . There are 6 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR  
(Physicotechnical Institute of the AS USSR)

SUBMITTED: June 21, 1961

Legend to Fig. 3: 1 - Coin.circuit for pulses of 1 and 2 binaries;  
2 - Binary counter timebase "Y"; 3 - Coincidence circuit;  
4 - Recording pulse; 5 - Anticoincidence circuit; 6 - Unblank pulse from multivibrator; 7 - Recording pulse to storage tube; 8 - Anti-reset pulse; 9 - Reversing binary; 10 - Delay; 11 - Coincidence circuit; 12 - Hached lines indicate usually open valves; 13 - Unblanking pulse; 14 - Binaries; 15 - reading pulse; 16 - Re-set pulse.

Card 5/85

S/056/62/043/005/007/058  
B163/B186AUTHORS: ~~Afonin, O. F.~~, Gangrskiy, Yu. P., Lemberg, I. Kh.,  
Nabichvrishvili, V. A.TITLE: Cascade Coulomb excitation of rotational levels with  
4<sup>+</sup> and 6<sup>+</sup> spinsPERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,  
no. 5(11), 1962, 1604-1610

TEXT: Cascade Coulomb excitation of some of the levels of the basic rotational band is possible in a deformed nucleus if the energy of the primary particles is sufficient. The measurement of the excitation cross sections makes it possible to check the theory of cascade Coulomb excitation and to gain information on the induced transition probabilities for the excited states. Targets enriched with Sm, Gd, Er, and W isotopes (Sm, Gd, and Er as oxides, W metallic) were bombarded with

50 Mev N<sup>14+++++</sup> ions from a cyclotron. The  $\gamma$  spectra and coincidences of  $\gamma$  quanta emitted in consequence of Coulomb excitation and inelastically scattered ions were measured. The quanta were recorded by means of a  
Card 1/3

Cascade Coulomb excitation of ...

S/056/62/043/005/007/058  
B163/B186

scintillation spectrometer with a NaI (Tl) crystal. The scattered  $N^{14}$  ions were recorded by silicon p-n-detectors arranged at an angle corresponding to  $135^\circ$  scattering. Their voltage was so chosen that  $\alpha$  particles and protons could easily be separated from the  $N^{14}$  ions. Table 1 gives the energy differences for the observed  $0 \rightarrow 2$ ,  $0 \rightarrow 4$ , and  $0 \rightarrow 6$  transitions of a number of even-even-nuclei. Most of them were already known, but the second and third level of  $Sm^{154}$ , the second level of  $Er^{170}$  and the third level of  $Gd^{160}$  were not yet known. In Table 2 the yield ratios of the  $0 \rightarrow 2$ ,  $0 \rightarrow 4$ , and  $0 \rightarrow 6$  transitions are listed and compared with the theory of Alder and Winter (Mat. Fys. Medd. Dan. Vid. Selsk. 32, 8, 1960). The agreement is good except for the cases of the W isotopes and  $Gd^{154}$  for which the observed yields are lower. There are 6 figures and 2 tables.

ASSOCIATION: Leningradskiy fiziko-tehnicheskii institut im. A. F. Ioffe  
Akademii nauk SSSR (Leningrad Physicotechnical Institute  
imeni A. F. Ioffe of the Academy of Sciences USSR)

Card 2/3

Cascade Coulomb excitation of ...

S/056/62/043/005/007/058  
B163/B186

SUBMITTED: June 5, 1962

Legend of Table 1: First column: Isotope.

Legend of Table 2: First column: Isotope, 3<sup>rd</sup> and 5<sup>th</sup> column: experiment, 4<sup>th</sup> and 6<sup>th</sup> column: theory

Изотоп	$\Delta E(0 \rightarrow 2)$ , keV	$\Delta E(0 \rightarrow 4)$ , keV	$\Delta E(0 \rightarrow 6)$ , keV
Sm <sup>154</sup>	82	270	534
Gd <sup>154</sup>	123	370	
Gd <sup>156</sup>	89	285	
Gd <sup>158</sup>	79	260	503
Gd <sup>160</sup>	75	246	
Er <sup>164</sup>	90	290	
Er <sup>166</sup>	81	266	
Er <sup>168</sup>	80	263	
Er <sup>170</sup>	79	261	
W <sup>182</sup>	100	326	
W <sup>184</sup>	111	357	
W <sup>186</sup>	123	393	

Смрл 373

Table 1

Изотоп	q	Y(0 → 2)/Y(0 → 4)		Y(0 → 4)/Y(0 → 6)	
		опыт	теория	опыт	теория
Sm <sup>154</sup>	2,13	5,85	5,02	16,2	14,0
Gd <sup>154</sup>	1,72	12,60	8,25		
Gd <sup>156</sup>	1,99	5,12	6,17		
Gd <sup>158</sup>	2,18	6,40	4,92	11,4	13,9
Gd <sup>160</sup>	2,25	4,25	4,61		
Er <sup>164</sup>	1,87	7,00	6,86		
Er <sup>166</sup>	1,99	8,10	6,17		
Er <sup>168</sup>	2,00	6,67	6,11		
Er <sup>170</sup>	1,96	7,40	6,39		
W <sup>182</sup>	1,52	16,67	11,35		
W <sup>184</sup>	1,49	20,7	11,70		
W <sup>186</sup>	1,35	28,9	14,65		

Table 2

S/056/62/043/006/003/067  
B163/B186

AUTHORS: Afonin, O. F., Gangrskiy, Yu. P., Lemberg, I. Kh.,  
Nabichvrishvili, V. A., Udralov, Yu. I.

TITLE: Investigation of Coulomb excitation of the first Mo<sup>92</sup> level

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,  
no. 6(12), 1962, 1995 - 1997 .

TEXT: The Coulomb excitation cross section of Mo<sup>92</sup>, which is an even-even nucleus with a closed neutron shell (N = 50), is so small that direct observation of the Coulomb excitation by recording the  $\gamma$  spectrum is impeded by the background  $\gamma$  radiation from nuclear reactions with light impurity atoms such as C and O. To reduce this background, coincidences were counted of inelastically scattered bombarding particles and  $\gamma$  quanta emitted in the decay of the first excited state. A metallic target enriched with the Mo<sup>92</sup> isotope to more than 5 times its natural content was bombarded with N<sup>14</sup> ions accelerated to 40 Mev in the FTI AN SSSR cyclotron. The scattered ions were recorded by means of 4 silicon pn-detectors with  
Card 1/2

Investigation of Coulomb ...

S/056/62/043/006/003/067  
B163/B186

a total surface of 100 mm<sup>2</sup>. More details of the experimental procedure were given in an earlier paper (O. F. Afonin et al., ZhETF 43, 1604, 1962). The first level 2<sup>+</sup> of Mo<sup>92</sup> is at 1.52±0.03 Mev. The reduced transition probability B(E2) is found to be (0.19±0.08) e<sup>2</sup>·10<sup>-48</sup> cm<sup>4</sup> by comparison with the  $\gamma$  yield of the decay of the first excited level of Mo<sup>98</sup> at 0.78 Mev, which is well observable in the direct  $\gamma$  spectrum as well as in the  $\gamma$ -N coincidence spectrum. There are 2 figures. ✓

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute imeni A. F. Ioffe of the Academy of Sciences USSR)

SUBMITTED: June 5, 1962

Card 2/2

ACCESSION NR: AP4018378

S/0120/64/000/001/0121/0123

AUTHOR: Anufriyev, G. S.; Afonin, O. F.; Mamy\*rin, B. A.

TITLE: Suppression of noise accompanying the nuclear-magnetic-resonance signal of a magnetic-field meter

SOURCE: Pribory\* i tekhnika eksperimenta, no. 1, 1964, 121-123

TOPIC TAGS: nuclear magnetic resonance, magnetic field meter, IMI-2 meter, noise suppression, stroboscopic noise suppression, magnetic field measurement

ABSTRACT: The use of a synchronous detector enhances the accuracy of the magnetic-field measurement but impairs the signal shape. To avoid the latter shortcoming, a stroboscopic method of noise suppression is advanced. The stroboscopic device (its functional and simplified electrical diagrams are supplied) ensures a 5-50 times higher signal-to-noise ratio and yields an output signal whose shape corresponds to the shape of the original signal but in a

Card 1/2

ACCESSION NR: AP4018378

different time scale. A provision is made for turning the stroboscopic device into a synchronous detector when warranted by experimental conditions. An IMI-2 magnetic-field meter and an ENO-1 oscilloscope are used. The maximum repetition frequency at the IMI-2 output is 270 kc. Orig. art. has: 3 figures and 1 formula.

ASSOCIATION: Fiziko-tehnicheskii institut AN SSSR (Physico-Technical Institute, AN SSSR)

SUBMITTED: 22Mar63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: NS

NO REF SOV: 002

OTHER: 000

Card 2/2

GAL'PERIN, L.N.; AFONIN, O.F.; TKACH, I.I.

Amplitude analyzer for three-dimensional recording of nuclear spectra with the use of a digital magnetic recorder. Prib. i tekh. eksp. 9 no.3:67-77 My-Je '64 (MIRA 18:1)

1. Fiziko-tekhnicheskij institut AN SSSR.

AFONIN, P.

At tractor plants. Vnesh. torg. 42 no.10:40-42 '62. (MIRA 15:10)  
(Tractor industry)

AFONIN, P. G.

AFONIN, P. G.: Foot and mouth disease and the measures of the fight against it. Stalinabad, 1952. 41 pages. Free. (Administration of Agricultural Propaganda, Ministry of Agriculture, Tadzhik SSR). 2,000 copies. In Uzbekian.

SO: Veterinariya; 30; (3); March 1953; Uncl. TABCCN

PINAYEV, A.K.; FEL'METSGER, V.I.; POLETAYEV, G.S.; MARCHENKO, V.G.;  
Prinimali uchastiye: RABICHEVA, L.M.; SYROVEGINA, K.V.; AFONIN,  
P.I.; SHNAYDER, I.F.; BOLOTIN, L.G.

Electrothermic method of obtaining zinc. TSvet.met. 36 no.2:  
25-30 F 63. (MIRA 16:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh  
metallov (for Rabicheva, Syrovegina, Levin). 2. Belovskiy  
tsinkovyy zavod (for Afonin, Shnayder, Bolotin).  
(Zinc---Electrometallurgy)

RABICHEVA, L.M.; SLONIMSKIY, B.I.; LAZAREV, V.I.; ALYUSHIN, Ye.I.;  
POLETAYEV, G.S.; Primali uchastiye: TARASOV, Ye.I.;  
AFONIN, P.I.; SYROVEGINA, K.V., nauchnyy sotrudnik.

Electrothermal method of obtaining zinc dust. Sbor. nauch.  
trud. Gintsvetmeta no.18:165-174 '61. (MIRA 16:7)

1. Nachal'nik elektrotermicheskoy ustanovki Belovskogo tsinkovogo zavoda (for Tarasov).
  2. Starshiy master elektrotermicheskoy opytnoy ustanovki Belovskogo tsinkovogo zavoda (for Afonin).
  3. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Syrovegina).
- (Zinc---Electrometallurgy)

RABICHEVA, L.M.; LAZAREV, V.I.; ALYUSHIN, Ye.I.; POLETAYEV, G.S.;  
Prinimali uchastiye: TARASOV Ye.I.; AFONIN, P.I.; SYROVEGINA,  
K.V., nauchnyy sotrudnik; LEVIN, I.Kh., nauchnyy sotrudnik

Obtaining liquid zinc in the electric smelting process. Sbor.  
nauch. trud. Gintsvetmeta no.18:175-186 '61. (MIRA 16:7)

1. Nachal'nik elektrotermicheskoy opytной ustanovki Belovskogo tsinkovogo zavoda (for Tarasov).
2. Starshiy master elektrotermicheskoy opytной ustanovki Belovskogo tsinkovogo zavoda (for Afonin).
3. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Syrovegina, Levin).

(Zinc—Electrometallurgy)

(Liquid metals)

YEVDOKIMENKO, A.I.; KOTLYARENKO, V.V.; Primali uchastiye: RABICHEVA, L.M.; SYROVEGINA, K.V.; LEVIN, I.Kh.; GAVRILENKO, A.F.; RYABOV, A.V.; ALYUSHIN, Ye.I.; MARCHENKO, V.G.; BOLOTIN, L.G.; AFONIN, P.I.; SEVER'YANOV, G.N.

Heat exchange and the condensation of zinc vapor in drop condensers. Sbor. nauch. trud. Gintsvetmeta no.19:536-549 '62.

(MIRA 16:7)

1. Sotrudniki Gosudarstvennogo nauchno-issledovatel'skogo instituta tsvetnykh metallov (for Rabicheva, Syrovegina, Levin, Gavrilenko, Ryabov). 2. Belovskiy tsinkovyy zavod (for Alyushin, Marchenko, Bolotin, Afonin, Sever'yanov).

~~AFONIN, Petr Tikhonovich~~; ANDRIANOV, Aleksandr Pavlovich; NIKITIN, L.I.,  
redaktor; GORYUNOVA, L.K., redaktor izdatel'stva; KARASIK, N.P.,  
tekhnicheskiy redaktor

[Repair of narrow-gage locomotives in the Suslonger lumber industry]  
Remont uzkokoleinykh parovozov v Suslongerskom lespromkhozе. Moskva,  
Gos.selbumizdat, 1957. 50 p. (MLRA 10:9)  
(Locomotives--Maintenance and repair)

*AFONIN, P. I.*  
IL' IN, Boris Afanas'yevich; AFONIN, P.T., red.; NIKOLAYEVA, I.I., red.  
izd-va; SHITS, V.P., tekhn.red.

[Mechanization of lumber transportation in the U.S.A.] Mekhanizatsia  
transporta less v SSHA. Moskva, Goslesbumizdat, 1957. 179 p.

(MIRA 11:5)

(United States--Lumber--Transportation)

AFONIN, P.V., mashinist ekskavatora, Geroj Sotsialisticheskogo Truda.

Highly efficient operation of excavating machinery. Gor.khoz.Mosk.  
31 no.8:35-37 Ag '57. (MLRA 10:9)

(Excavating machinery)

RITOV, M.N., kand.tekhn.nauk; Primal uchastiye AFONIN, P.V., Geroy Sotsialisticheskogo.Truda, ekskavatorshchik. ROGOVSKIY, L.V., inzh., nauchnyy.red.; AZRILYANT, Ya.M., red.izd-va; EL'KINA, E.M., tekhn.red.; OSENKO, L.M., tekhn.red.

[Earthwork] Zemlianye raboty. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 175 p. (MIRA 13:3)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. (Earthwork)

AFONIN, Pavel Vasil'yevich, ekskavatorshchik, Geroy Sotsialisticheskogo  
Truda; GUROV, S., red.; SHLYK, M., tekhn. red.

[How we operate excavators] Kak my rabotaem na ekskavatore.  
Moskva, Mosk.rabochii, 1960. 36 p. (MIRA 13:9)  
(Excavating machinery)

AFONIN, S., kand.tekhn.nauk

Hydraulic dismounting device. Avt.transp. 40 no.12:24-25  
D '62. (MIRA 15:12)  
(Power tools)

AFONIN, V.

*Handwritten:*

Combination of occupations is the basis for efficient use of  
manpower at grain storage centers. Muk.-elov.prom. 20 no.1:29  
Ja '54. (MLRA 7:7)

*Standardization*  
1. Moskovskaya normativno-issledovatel'skaya stantsiya Zagot-  
zerno.

(Granaries)

*Grain Storage*

DOROKHOV, M.; AFONIN, V.; REYNGARD, D.M., red.; USHENKO, V.S.,  
red. izd-va; MAYOROV, V.V., tekhn. red.

[Guaranteed and compensatory payments in communal housing] Garantii nye i kompensatsionnye vyplaty v zhilishchno-kommunal'nom khoziaistve. Moskva, Izd-vo M-va kommun. khoz.RSFSR, 1963. 61 p. (MIRA 16:12)  
(Wages--Building--Service employees)

L 8789-66 ETC(m) WW  
ACC NR: AP5028030

SOURCE CODE: UR/0119/65/000/011/0012/0015

AUTHOR: Afonin, V. A. (Candidate of technical sciences); Yeramov, I. A.  
(Engineer)

18  
B

ORG: none

TITLE: Pneumatic-scanning generator with a high-accuracy digital output

SOURCE: Priborostroyeniye, no. 11, 1965, 12-15

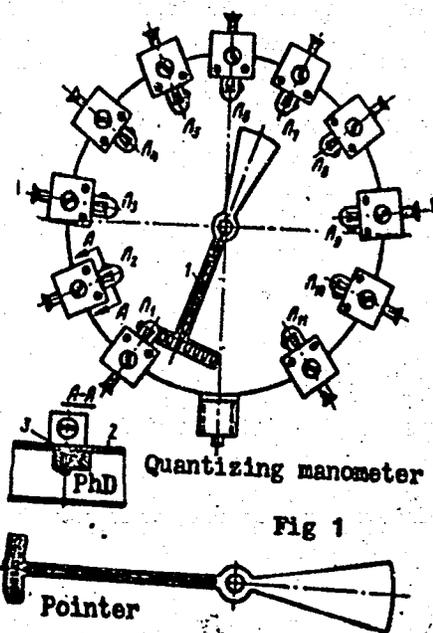
TOPIC TAGS: pneumatic scanning generator, pressure measurement qm

ABSTRACT: A new pneumatic-scanning generator intended for measuring pressure by a dynamic-compensation method is described. The generator is based on a quantized-scale manometer, see Fig. 1, equipped with many sensors and a special 10-slot pointer. As the pointer moves over the sensors, a sequence of pulses formed by photodiodes PhD is fed to a scaler, see Fig. 2, which turns

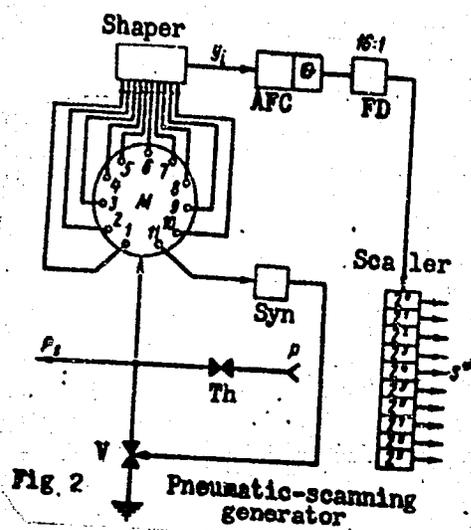
Cord 1/3

Z

L. 8789-66  
ACC NR: AP5028030



Card 2/3



L 8789-66

ACC NR: AP5028030

them into a code S\*. A 10 OR-gate shaper amplifies the photodiode signals and includes a single-shot multivibrator and an emitter follower. Pulse generator G is started by a pulse  $y_i$ . Synchronizer Syn operated by the eleventh (special) photodiode opens valve V connecting the manometer with the atmosphere for the time needed for the pointer to return; all elements are cleared. "Th" is a feed-pressure throttle. The instrument has a frequency output. Some results of an experimental verification are reported. Orig. art. has: 6 figures and 8 formulas.

SUB CODE: 13 / SUBM DATE: 00 / ORIG REF: 004  
09

*gc*  
CofA 3/3

[The central portion of the page contains a large, extremely faint and illegible document. The text is too light to be transcribed accurately.]

SECRET

CLASSIFICATION

... and the first part of the  
another throttle. Simplified circuit diagrams using semiconductor devices are  
... a BB diagram as required by the Vennberg & ... OKB

REF CODES: DP, IE

ENCLOSURE

Card 2 / 2

AFONIN, V.A., kand.tekhn.nauk; YERAMOV, I.A., inzh.

Generator of pneumatic scanning with a high-precision  
digital output. Priborostroenie no.11:12-15 N '65.

(MIRA 18:12)

DYATLOVA, V.P., kand. tekhn. nauk; AFONIN, V.B., inzh.

KI-2 coumarone-rubber mastic. Stroi. mat. 11 no.7:27 JI '65.  
(MIRA 18:8)

AFOENIN, S.M., elektromekhanik

Addition of a washer to the acknowledgement lever. Avtom. telem.  
i sviaz' 4 no.9:41 S '60. (MIRA 13:9)

1. Uzlovskaya distantziya signalizatsii i svyazi Moskovskoy dorogi.  
(Railroads--Signaling)

AFONIN, V., komandir vertoleta Mi-4.

Flying a helicopter in winter. Gradzh.av. 17 no.2:22-23  
F '60. (MIRA 13:6)

(Helicopters—Cold weather conditions)

AFONIN, V., inshener.

Efficient use of sectional conveyers. Muk.-elev.prom. 20 no.8:  
24 Ag '54. (MIRA 7:9)  
(Conveying machinery)

GORSKIY, Stanislav Petrovich; AFONIN, V.A., inzh., retsenzent;  
KON'KOV, A.S., dots., red.; DUGINA, N.A., tekhn. red.

[Steam-hammer forging] Svobodnaia kovka na pressakh. Pod  
red. A.S.Kon'kova. Moskva, Gos. nauchno-tekhn. izd-vo  
mashinostroit. lit-ry, 1961. 62 p. (Nauchno-populiarnaia  
biblioteka rabochego kuznetsa, no.8) (MIRA 15:3)  
(Forging)

S/119/63/000/002/003/014  
A004/A127

AUTHOR: Afonin, V.A.

TITLE: Using cutoff zero-elements in multiplied circuits

PERIODICAL: Priborostroyeniye, no. 2, 1963, 7 - 9

TEXT: The author analyzes multiplied circuits which are used in time-base methods of measuring parameters. He points out that one of the main drawbacks of multiplied circuits is the interrelation of the measuring channels dependent on the final input resistance of the zero-elements which is usually considerably lower than the resistance of the commutator change-over elements in the interruption condition. A simplified block diagram of the measuring portion of the "Tsentrrotekhnika - Minutka" system is presented and described, a system of centralized gathering and processing of information designed by MEI, in which the principle of multiplied circuits with cutoff zero-elements has been realized. The multiplied circuit in this system is combined with a commutation in series of the measuring circuit. There are 5 figures.

Card 1/1

L 17889-63

BDS

ACCESSION NR: AP3004279

S/0119/63/000/007/0001/0002

AUTHOR: Afonin, V. A.; Temnikov, F. Ye.

50  
49

TITLE: Pneumatic multiple scheme

SOURCE: Priborostroyeniye, no. 7, 1963, 1-2

TOPIC TAGS: industrial automation

ABSTRACT: A new electropneumatic scheme for multiple supervision or control of industrial processes is described. It is based on standardized 0.2-1 kg/cm<sup>2</sup> pneumatic primary elements that measure the various process parameters simultaneously; they are connected to balance-type saw-toothed-pressure-fed detectors. The detector contacts are connected to an electronic contactless sequence switch. A train of time pulses appears in the switch output line.\* A simplified functional diagram, a time-pulse diagram, a connection diagram of a stepped-saw-tooth voltage generator, a scheme of the pneumatic balance detector and its

Card 1/2

L 17889-63

ACCESSION NR: AP3004279

appearance are supplied. Orig. art. has: 5 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power-  
Engineering Institute)

SUBMITTED: 00

DATE ACQ: 08Aug63

ENCL: 00

SUB CODE: IE

NO REF SCY: 002

OTHER: 000

Card 2/2

AFCNIN, Vladimir Aleksandrovich, assistant

Elements of the design of measuring networks with disconnecting  
zero components. Izv. vys. ucheb. zav.; elektromekh. 6 no.11:  
1244-1250 '63. (MIRA 17:4)

1. Kafedra avtomatiki i telemekhaniki Moskovskogo energeticheskogo  
instituta.

SHVED, V.I.; AFONIN, V.D.; BOLDINSKIY, Z.I.; YAKOVENKO, Ye.F.,  
red.

[Repair and testing of heavy electrical equipment at the  
Chirchik Electrochemical Combine] Remont i ispytanie krup-  
nogo elektrooborudovaniia na Chirchikskom elektrokhimiche-  
skom kombinata. Tashkent, Gosizdat UzSSR, 1962. 115 p.  
(MIRA 18:3)

AFONIN, V.G.

Effective form of the explosive charge in deep seismic sounding  
of the earth's crust. Geofiz. sbor. no.8:97-100 '64.

(MIRA 18:6)

1. Ukrainskiy Sovet narodnogo khozyaystva.

L 09247-67 FWD(1) QW

ACC NR: AT6025361

(A)

SOURCE CODE: UR/3169/65/000/003/0107/0110

AUTHOR: Afonin, V. G.

54

ORG: Ukrsovnarkhoz

B+1

TITLE: Intensity of seismic oscillations as a function of explosive charge magnitude

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 3(14), 1965. Stroyeniye nefte-gazonosnykh provintsiy po geofizicheskim dannym (The structure of oil and gas yielding provinces according to geophysical data), 107-110

TOPIC TAGS: seismology, geologic exploration, explosive charge, detonation wave, elastic deformation

ABSTRACT: A comparison of initial velocity fields of extended and concentrated explosive charges has shown that an increase in weight of the concentrated charge causes the amount of energy traveling downward to increase, whereas an increase in weight of an extended charge leaves this value constant. On the basis of this, the stage of action of a concentrated explosive charge in a medium whose particles begin to move after having received initial velocity is studied. The period and amplitude of the oscillations are established as functions of the charge magnitude. Analysis shows that an increase in charge weight causes the period and amplitude of oscillations to increase both on the charge surface and on the surface dividing the zone

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of plastic deformations from the zone of elastic deformations. The frequency of these theoretically calculated oscillations decreases with increasing charge. Consequently, concentrated charges are best for increasing the intensity of the low frequency harmonics of the oscillation spectrum excited by an explosive. Orig. art. has: 6 formulas and 2 figures.

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