

SVOB, T.

Morpho-physiological investigations of the digestive tract of sheat-fisz (Silurus glanis L.) by a rcentgenological method. Bul se Young 8 no.3/4:77 Je-Ag'63.

Some problems of human genetics. 77

1. Bioloski institut Univerziteta, Sarajevo.

SVOB,T.; SVOB,M.

A comparative study of the reactivity towards ultraviolet rays of the larvae of Pelobates fuscus, Rana temporaria and Bufo vulgaris originating from biotopes of different geographical localities. Bul sc Youg 8 no.3/4: 77 Je-Ag'63.

1. Bioloski institut Univerziteteta, Sarajevo

SVOB, T.

The effect of X-rays on the larvae of the frogs *Rana temporaria* (Linne) and *Bufo vulgaris* (Laurenti). Bul se Young 8 no. 3/4:101 Je-Ag'63.

1. Bioloski institut Medicinskog fakulteta u Sarajevu.

*

SVOBODA, A

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Applications. Carbohydrates and Their Processing.

H

Jbs Jour: Ref Zhur-Khim., No 8, 1959, 29180.

Author : Hampl, J., Svoboda, A., and Rasper, V.

Inst :

Title : On the Possibility of the Utilization of Electric Plates in the Determination of Invert Sugar by Reduction Methods.

Orig Pub: Listy Cukrovarn, 74, No 7, 163 (1958) (in Czech)

Abstract: The authors have made a comparison study of various methods for the determination of reducing substances (RS) in mixtures of pure sugars and in sugar industry products (raw sugar, C sugar, molasses). Among the methods tested were those of Ofner, Shorl, and Lein-Eynon [transliterated]. A gas burner and an electric

Card : 1/2

258

COUNTRY : CZECHOSLOVAKIA
 CATEGORY : Chemical Technology. Chemical Products and Their
 Applications. Carbohydrates and Their Processing
 ABS. JOUR. : RZhKhim., No 19, 1959, No. 69433
 AUTHOR : Pasner, V.; Svoboda, A.
 TITLE : Application of the Fischer Method for the Product
 Analyses Encountered in the Sugar Industry
 ORIG. PUB. : Listy cukrovarn., 1958, 74, No 9, 213-214

ABSTRACT : Presented are comparative determinations of water
 content in molasses, unrefined sugar, refined
 sugar, beet seeds and in dry extracted pulp, em-
 ploying gravimetric and Fischers iodometric me-
 thods. The possibility of applying Fischer method
 for the determination of water content in pro-
 ducts of sugar industry in place of the gravimet-
 ric method is established. Fischer method is ra-
 pid and is reproducible at a satisfactory level
 of accuracy. The shortcomings of the method as
 compared with others, are: relatively higher

Cards: 1/2

COUNTRY :
CATEGORY :

H

ABS. JOUR. : RZhKhim., No 10, 1959, No. 69488

AUTHOR :
INSTITUTE :
TITLE :

ORIG. PUB. :

ABSTRACT : cost of analysis and more stringent requirements
Con'd (analysts with greater experience and a more
precise analytical work) in the preparation of
reagents and in the performance of determinations.
An opinion is expressed that for the rapid deter-
mination of dry substances contained in liquid
product of sugar industry it is far simpler to
employ refractometers, while the determination of
water in the extracted dry pulp of beet seeds can
be done with the aid of the "DK-meter" - an inst-
rument whose operation is based on measurment of
the dielectric constant.-- Ye. Shnayder

Card: 2/2

H - 110

SYOBODA, A

Xerography in connection with microfilm. Automatizace 5 no.3:84 Mr
'62.

KASOVA, M.; SVOBODA, A.

Magnetic letter recording and document classification in banks.
Automatizace 6 no.3:74 Mr '63.

SVOBODA, A.

Microfilm projection and reproduction technology. Jemna mech
opt 8 no.10:320-323 0 '63.

1. Prumstav, n.p., Praha.

SVOBODA, ADOLF

JIROVEC, Otto, prof. Dr; SLUKA, Frantisek, MUDr; SVOBODA, Adolf, MUDr;
VALIHRACH, Jan, MUDr; VOJTOVA, Helena, MUDr

Tularemia in Jihlava and Valtice regions in 1945-1952. I. Intra-
cutaneous tests with tularin. Cesk, hyg. epidem. mikrob. 2 no.3:
328-336 June '53.

1. Parasitologicky ustav Karlovy university v Praze (for Jirovec)
 2. Statni okresni nemocnice ve Valticich. (for Sluka) 3. Krajska
hig. epidem. stanice v Brne. (for Svoboda) 4. Krajska hyg. epidem.
stanice v Uherskem Hradisti. (for Valihrach) 5. Krajska hyg. epidem.
stanice v Jihlava. (for Vojtova)
- (TULAREMIA, epidemiology,
Czech.)

SVOBODA, Adolf, MUDr.; FRIED, Karel, MUDr.; KUNC, Zdenek, Doc., MUDr.

Subdural arachnocyte. Cesk. neur. 19 no.3:180-184 Aug 56.

1. Nervove oddeleni OUNZ v Kladne. -Roentgenologicke oddeleni
OUNZ v Kladne. Neurochirurgicke oddeleni UNZ v Praze.

(ARACHNOID, dis.

arachnocyte, subdural, diag. & surg. (Cz))

SVOBODA, ADOLF

"Neurologie. (1. vyd.) Praha, Statni xdravotnicke nakl., 1957. 181 p.
(Neurology 1st ed. illus.)
DNLM Not in DLC

P. 181 (Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 7, July 1958

SVOBODA, A.

Examination & evaluation of pyramidal lapse phenomena. Cesk. neur. 21
no.1:65 Jan 58.

1. Neurologické oddelení OUNZ Kladno, přednosta A. Svoboda.
(PYRAMIDAL TRACT, dis.
pyramidal lapse phenomena (Cz))

SVOBODA, A.; CHULIK, K. [Chulik, K.] (Praga)

Algorithm for solving Boolean equations. Avtom. i telem. 25
no.3:374-381 Mr '64. (MIRA 17:6)

HENNER, K.; BEJISOVEC, M.; LOUCKA, V.; MASAK, A.; POLACEK, L.; PONCA, E.;
SVOBODA, A.; VACEK, M.

Multiple sclerosis in Czechoslovakia. Acta Univ. Carol. [med.]
(Praha) 10 no.7:541-548 '64

1. Neurological Department, Faculty of General Medicine, Charles
University, Prague (Director: Academician Prof. MUDr. K. Henner,
DrSc.).

SVOBODA, Adrienne

Acute respiratory diseases according to data of the pediatric department of the Subotica city hospital from 1956-1960. Med. pregl. 17 no.9:487-489 '64

1. Decije odeljenje Gradske bolnice u Subotici (Sef: Dr. Adrienne Svoboda).

SVOBODA, Ales, inz.

On the problem of runoff variability during the vegetation season. Vodohosp cas 11 no.3:248-259 '63.

1. Ceskoslovenska akademie ved, Ustav hydrologie a hydrauliky, Slovenska akademie vied, Bratislava.

SVOBODA, ALOUIS

GEOGRAPHY & GEOLOGY

SVOBODA, ALOUIS. Prag im Spiegel der Jahreszeiten, A. Svoboda; A. Tuckova.
Illustrationen von Rudolf Mader. 597 p.

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

COMMON ELEMENTS										PROCESSING AND PROPERTY INDEX										COMMON VARIANTS INDEX									
1ST AND 2ND CUBES										3RD AND 4TH CUBES																			
Computing Mechanisms and Linkages. Antonin Svo-boda. 359 pages. 1948. McGraw-Hill, New York. One of the MIT Radiation Laboratory Series. It describes wartime research on linkage computers, most of which was concentrated on practical design methods rather than on a unified and systematic analysis of the subject. The techniques described were, for the most part, developed before the author (a Czechoslovakian) became associated with MIT.																													
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION										FROM MONITOR										2-2000 LITERATURE									
1ST AND 2ND CUBES										3RD AND 4TH CUBES										5TH AND 6TH CUBES									
1ST AND 2ND CUBES										3RD AND 4TH CUBES										5TH AND 6TH CUBES									

SVOBODA, ANTONIN

Svoboda, Antonin. The synthesis of relay networks.

Stroje na Zpracování Informací 2, 157-208 (1954).

(Czech. Russian and English summaries)

A method is described for the synthesis of relay contact networks whose transmissibilities are prescribed tabularly. The contact network formed may have any number of terminals and prescribed transmissibilities for any number of pairs of said terminals.

From the author's summary.

1 - F/W

SVOBODA, ANTONIN

Svoboda, Antonin, and Vyšín, Vlastimil. Three-phase
hysteresis circuits in electronic digital computers.
Stroje na Zpracování Informací 2, 245-259 (1954).
(Czech. Russian and English summaries)

1. - P/W

①
llm

SVOBODA, ANTONIN.

* Svoboda, Antonin. Graphico-mechanical aids for the synthesis of relay circuits. Aktuelle Probleme der Rechentechnik. Bericht über das Internationale Mathematiker-Kolloquium, Dresden, 22. bis 27. November 1955, pp. 43-50. VEB Deutscher Verlag der Wissenschaften, Berlin, 1957.

Syoboda, Antonín

Syoboda, Antonín Application of the Korobov sequence in mathematical machines. Stroje na Zpracování Informací 3 (1955), 61-76 (1956). (Czech. Russian and English summaries)

Theory of the Koborov [Izv. Akad. Nauk SSSR. Ser. Mat. 14 (1950), 215-238; MR 12, 321] sequence is discussed, and it is shown that it can be used for determination of addresses in the dynamic memory of digital computers, such as magnetic drums. A generalisation is made by defining an "extended Korobov sequence". A procedure is given for its construction and its existence is proved. It is then applied to the determination of the addresses on the magnetic drum memory of the Czechoslovak digital computer SAPO.

V. Vand.

July 29, 1959

✓ Svoňáček, Antonín; and Valach, Miroslav. Operational circuits. *Stroje na Zpracování Informací* 3 (1955), 247-295 (1956). (Czech. Russian and English summaries)

The basic theory of generalised calculus of digital computing circuits is discussed. In the design of hardware for multiplication, the product is usually formed as a sum of multiples of the multiplicand. Valach [Stroje na Zpracování Informací 3 (1955), 211-245; MR 19, 1085] has shown that circuits are possible which add and multiply in a single cycle. This work shows that not only multiplication, but also higher operations can be performed in one working cycle of a circuit by comparatively simple means, if they are represented in the physical world of hardware by algorithms derived from number theory.

Number systems are discussed. The number system of remainder classes represents whole numbers mod P , where P is a product of definitely chosen numbers. Transformation of number representations from the system of remainder classes to some polyadic system is discussed. Circuits are much simplified if a concept of an "estimate" is introduced to aid the transformation. The representation of numbers in the system of remainder classes and the representation of operations by the use of operational circuits are described. Relay circuits for the transformation of numbers by the method of "estimates" are described. I. Vand (University Park, Pa.)

3
 $I = F/W$
 $I - CF(x)$

Svoboda, Antonín. Single impulse time dyadic relay adders. *Stroje na Zpracování Informací* 3 (1955), 297-308. (Czech. Russian and English summaries) 25c 2

A purely theoretical paper, in which the basic concepts and theory of binary adding circuits (computer hardware) for single-cycle operation are analysed. Circuits for single-cycle addition of more than two numbers are so comparatively complex and, therefore, expensive that they have not yet found practical application. It is, however, of theoretical interest to discuss the design of such circuits. A single-cycle circuit for the addition of four six-digit numbers is shown in detail. 1- F/W
1- CF(DE)

V. Vand (University Park, Pa.)

MAJDA, A.

A. Majda and O. Vejdelík's Elektrická zařízení ve výbušném prostředí
(Electric Installations in an Explosive Environment): a book review.
p. 428. UHII. (Ministerstvo paliv a energetiky) Praha. Vol. 5, no. 12,
Dec. 1955.

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

SVOBODA, A.

Graphic-mechanical aids for the analysis and synthesis of a contact network.
p. 9. (STROJE NA ZPRACOVANI INFORMACI, Vol. 4, 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

SVOBODA, A. (Praga)

Polarized relay mechanism with spherical armature [with English summary in insert]. Avtom.i telem. 17 no.9:857 S '56. (MLRA 9:11)
(Electric relays) (Servomechanisms)

ZAIGALLER, V.A. (Leningrad); OSTROVSKIY, A.I. (Moscow); NOVIKOVA, V.S.
(Orehovo-Zuyevo); ZHAROV, V.A. (Yaroslavl'); SVOBODA, A.
(Chekhoslovakiya); DYNKIN, Ye.B. (Moscow); BALASH, E.E. (Moscow)

Problems of elementary mathematics. Mat. pros. no.1:219-224 '57.
(MIRA 11:7)
(Mathematics--Problems, exercises, etc.)

SVOBODA, A.

Rational numerical system of residual classes. In English.

p. 9 (STROJE NA ZPRACOVANI INFORMACI) Vol. 5, 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

S/044/62/000/003/077/092
C111/C333

AUTHOR: Syoboda, Antonin

TITLE: Analysis of Boolean functions by logical punch-cards

PERIODICAL: Referativnyy zhurnal, Matematika, no. 3, 1962, 54,
abstract 3V282. ("Stroje na zpracov. inform.", 1960, 7,
13-20

TEXT: To the minimization of Boolean functions with the aid of
contact and oriented grids there belongs the operation of determining
the weight of the vertices of the n-dimensional unit cube. The logical
punch-cards permit to carry out this operation quickly and simply.

[Abstracter's note: Complete translation.]

Card 1/1

SVOBODA, A.

S/271/63/000/001/037/047
D413/D308

AUTHORS: Svoboda, Antonin and Valach, Miroslav

TITLE: An arithmetic unit for a digital computer

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 41, abstract 1B227 (Czech pat., cl. 42 m, 14, no. 99069, Mar. 15, 1961)

TEXT: The patent covers a version of arithmetic unit for a digital computer of series type. The unit is designed to perform operations on numbers represented in a binary-decimal system of numeration with a redundancy of 5, and consists of two registers and an accumulating counter. The operation of multiplication is carried out by parallel transfer of each tetrad through rectifiers controlled by the value of the corresponding digit of the multiplier, followed by summation of the results. 5 figures.
[Abstracter's note: Complete translation]

Card 1/1

L 12229-63

EWI(d)/FCC(w)/BDS

ASL/APGC

Pg-4/Pk-4/Po-4/Pq-4 GG/IJF(C)
S/271/63/000/004/041/045

AUTHOR:

Svoboda, Antonin

TITLE:

A digital computer ^{16c}

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 4, 1963, 54, abstract 4B300 (Czechosl. pat., kl. 42m, 14, no. 101806, 15, 12.61)

TEXT: The text describes a computer of digital type characterized by the fact that, for the purpose of simplifying the arithmetic circuit and reducing the number of its elements, the input information is coded thus: 0-00010, 1-00101, 2-01000, 3-01011, 4-01110, 5-10001, 6-10100, 7-10111, 8-11010, 9-11101. Coded information (see illustration) from the output of coding unit 100 arrives at the arithmetic circuit 200 of the usual sequential type, containing supplemental elements: 5 circuits III 201 - 205, 3 circuits I 206 - 208, 2 inverters 209 and 210, and a delay line 211. The result of summing is taken from the output of circuit 205, while from the output of circuit 203 is delivered the signal for transfer of the column used for operation both as the arithmetic circuit itself and as a normalizer 300, which serves for the transformation of the result of addition into the input code and consists of four units --310, 320, 330, and 340. The logical gate

Card 1/2

L 12229-63

A digital computer

5/27/63/000/004/041/045

310 contains circuit III 313, 2 logical circuits I 311 and 312, and 2 inverters 314 and 315. Depending upon the presence or absence of a control signal 35, gate 310 guarantees transmission to output 38 either of input signal 37 or of its supplement. Gate 330, serving as input of information on column shift, contains two logical circuits III 334 and 335, 3 logical circuits I 331-333, 2 inverters 337 and 338 and a delay line 336. Depending upon the necessity for completing shift from a lower column P to a higher column Q (or in both of these cases), at the output of gate 330 there arise one or two signals 34 and 33 which determine the introduction or erasure of unity in the corresponding column (E is the lowest column). The memory unit contains 3 logical circuits III 325-327, 4 logical circuits I 321-324, an inverter 329 and a delay line 328. The circuit of this unit (320) guarantees the erasure referred to, or the introduction of unity into the circuit of 310. Unit 340 contains a group of delay lines which guarantee the required conditions for operation of the normalizer. There is one illustration. I. P.

[Abstracter's note: A complete plan for the various circuits accompanies the review]

[Abstracter's note: Complete translation]

Card 2/2

SVOBODA, A. (Praga)

Some applications of contact grids. Avtom. i telem. 22 no.8:
1061-1070 Ag '61. (MIRA 14:9)
(Switching theory) (Boolean functions)

SVOBODA, Antonin; VALACH, Miroslav

Decimal arithmetic unit. Stroje na zprac inf 8:11-46 '62.

1. Research Institute of Mathematical Machines, Prague.

ACCESSION NR: AT4040379

Z/2503/63/000/009/0015/0024

AUTHOR: Oblonsky, Jan (Oblonsky*, Yan); Syoboda, Antonin

TITLE: Logical design of a data-processing system with built-in time-sharing

SOURCE: Ceskoslovenska akademie ved. Vyzkumny ustav matematickych stroju. Stroje na zpracovani informaci, no. 9, 1963, 15-24

TOPIC TAGS: data processing system, digital computer, time sharing, process control

ABSTRACT: EPOS is a general-purpose digital computing system designed for applications in data processing, scientific computations, and process control. Its logical design was intended to meet two requirements: a modular structure and time-sharing facilities (internal and external), the latter being achieved entirely through built-in circuitry. The system consists of a central computing-logic unit and peripheral units connected by buses so that practically any number of input-output devices and magnetic tape units can be connected simultaneously to the central unit. Up to five independent

Card 1/5

ACCESSION NR: AT4040379

ENCLOSURE: 01

System with Built-In Time-sharing

TABLE I

The General Characteristics of the EPOS System.

CENTRAL COMPUTER

General purpose stored program digital computer:

Word: One word — sign, 11 decimals

— sign, 9 decimals (mantissa), 2 decimals (exponent)

— 6 alphanumeric characters

— instruction with 1 full and 3 short addresses;

Two words — 12 alphanumeric characters.

Operating possibilities:

— 9 universal registers for address modification

— indirect addressing

— over 100 operations comprising: fixed and floating point arithmetic, accumulation of products with double precision, three-address operations between the universal registers, shifts, normalizations, masking, conditional jumps, subroutine jump, peripheral equipment control etc.

Card 3/5

ACCESSION NR: AT4040379

ENCLOSURE: 02

Table I (Cont'd)

Operation times including access to the working memory:

Internal Time-Sharing: Without:			With:	
Point:	Fixed:	Floating:	Fixed:	Floating:
Addition	52 μ sec	130 μ sec	52 μ sec	130 μ sec
Multiplication	208 μ sec	234 μ sec	65 μ sec	104 μ sec
Division	1196 μ sec	1209 μ sec	52 μ sec	91 μ sec

Operators console: — starting and stopping of programs
— signalling of the states of programs
— assignments of the memory sections to programs.

Working memory: — extendable magnetic core memory from 1000 words up to 40 000 words.

Checking: — automatic error correction during transfers between the memories and the central computer

— automatic error detection in the central computer.

Time-sharing: External — up to five independent programs may be executed simultaneously

Internal — other operations may be performed in parallel with the multiplication or division.

Card 4/5

SVOBODA, Antonin

An algorithm for division. Stroj na zprac inf 9:25-34 '63.

An algorithm for solving Boolean equations. Ibid.:271-282

1. Research Institute of Mathematical Machines, Prague.

ACCESSION NR: AP4033359

S/0103/64/025/003/0374/0381

AUTHOR: Svoboda, A. (Prague); Chulik, K. (Prague)

TITLE: Algorithm for solving Boolean equations

SOURCE: Avtomatika i telemekhanika, v. 25, no. 3, 1964, 374-381

TOPIC TAGS: Boolean equation, Boolean function

ABSTRACT: A set W of n Boolean equations $F_i(x_j, X_k) = G_i(x_j, X_k)$, where F_i and G_i are Boolean functions is considered. From these equations, n Boolean tables $W_i = F_i G_i + \bar{F}_i \bar{G}_i$ ($i=1,2,\dots,n$) are set up. A discriminant $D = W_1 W_2 \dots W_n$ is set up by means of a Boolean intersection W_i and evaluated as an arithmetical product:

$$[D] = \prod_{q=0}^{q=2^Q-1} u_q = s, \text{ in which } u_q \text{ are nonzero elements in the column } q. \text{ The}$$

Card 1/2

CIZ, K.; KOPACOVA, O.; PRIHODA, J.; SVOBODA, A.; BRETSCHNEIDER, R.

Technological properties of decolorized liquors. Listy cukrovar
80 no. 3:58-68 Mr '64.

SVOBODA, Antonin

Copying halftone originals by the diazotype process. Jemna
mech opt 9 no.6:193-194 Je '64

SVOBODA, Antonin

Behavior classification in digital systems. Stroj na zprac inf
10:25-43 '64.

1. Research Institute of Mathematical Machines, Prague.

SVOBODA, Antonin

Foils with self-adhesive layer in diazotype production. Jemna
mech opt 10 no.3:103 Mr '65.

L 23947-66 IJP(c)

ACC NR: AT5027859

SOURCE CODE: CZ/2503/65/000/011/0247/0251

AUTHOR: Svoboda, Antonin; Sedlak, Jan - Sedlak Yan

26

ORG: Research Institute of Mathematical Machines, Prague

13 + 1

TITLE: An algorithm for Boolean algebra in digital computers

SOURCE: Ceskoslovenska akademie ved. Vyskumny ustav matematickych stroju. Stroje na zpracovani informaci, no. 11, 1965, 247-251

TOPIC TAGS: Boolean algebra, decimal computer, algorithm, EPOS computer

ABSTRACT: An algorithm is described which produces fundamental Boolean operations. Operands are economically encoded for the computer, representing ordinary decimal numbers. Each decimal digit contains three bits of logical information. The computer operates with operands using conventional decimal fixed-point arithmetic. A special logical operation is needed for the Boolean sum and product. The operational code of the computer is provided with the following instruction for extraction-insertion: $F(x, y, h) = z$, where x, y are Boolean operands, h is a masking word with m decimal digits, and z is the result of operation F . A flow diagram of the algorithm is presented. The program written in machine language for EPOS contains 46 words, 35 of which are instructions. The program belongs to the interpretative system of programming. Orig. art. has: 1 figure.

[KS]

2

SUB CODE: 09/ SUBM DATE: 17Jan64

Card 1/1 FV

SVOBODA, A.K.

Standard specifications for metal ventilation air ducts and fittings.
Vod. i san.tekh. no.6:25-26 S'55. (MLRA 9:1)
(Ventilation)

SVOBODA, A.K.; ROZENBERG, B.S.

Machinery for ventilating industrial buildings. Vod.i san.tekh.
no.6:27-29 S'55. (MLRA 9:1)
(Factories--Heating and ventilation)

WORODA, R.: VONHICEK, J.; CHUMP, J.

Stamping of steel in the cold state. p. 66. TECHNICKA PRACA. (Statne nakladatelstvo technickej literatury) Vol. 6, no. 2, Feb. 1954.

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

SVOBCDA, B.

"Government Regulation Concerning Chief Power Engineers." p. 115, (ENERGETIKA, Vol. 3, No. 3, March 1953, Praha, Czechoslovakia).

SC: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954, Unclassified.

SVOBODA, B.

"Appointment of Chief Power Engineers and Their Tasks." p. 121, Praha, Vol. 4, no. 3, Mar. 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

SVOBODA, B.

"Economic management of electric-power production."

p. 87 (Energetika) Vol. 8, no. 2, Feb. 1958
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

SVOBODA, B.

CZECH

/Application of combinatorial counting to determine approximate composition of the mixture of partial esters of polyvalent alcohol. B. Svoboda, *Chem. Průmysl* 4(29), 345-7 (1954).—A study of the probable distribution of partial esters in the equil. mixt. of esters after esterification of a fatty acid of mol. wt. 280 with glycerol and with pentaerythritol. Two graphs are given, one for glycerol and one for pentaerythritol. L. A. Helwich

Svoboda, Bohumil

Stabilization of fat-soluble vitamins. Bohumil Svoboda.
Czech. 84,809, Oct. 1, 1965. Soln. of vitamins at 60° in 10-
fold aints. of Bu palmitate and other esters of satd. fatty
with 8-30 C atoms results in a 3-fold improvement in stabil-
ity. L. J. Uhlánek

Svoboda, Bohumil

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and
Their Application. Part 3 - Fats and Oils,
Waxes. Soaps, Detergents, Flotation Agents.

H-24

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12681.

Author : Josef Stejskal, Bohumil Svoboda.

Inst : Not given.

Title : Emulsifiers of Hydrophilic Surface-Acting Substance Group.
I. Emulsifiers of Ionogeneous Structure.

Orig Pub : Ceskosl. farmac., 1956, 5, No 8, 496 - 503.

Abstract : Review. Sources of raw materials and technology of manufacturing some anion and cation active emulsifiers.

Card 1/1

Let the mole % of A be x , the mole % of B be y , the mole % of C be z , and the mole % of D be w . The ratios derive from the polynomial $(1 + B)^4$. Similar ratios for a trivalent acid and univalent acid derive from $(A + B)^3$. Conditions for which these equations have practical value are discussed.

B. W. Hotten

PM MK

SVOBODA, Bohumil; KOLAR, Otakar

Effect of the thickness on the lustre of pigmented coatings.
Chem prum 12 no.7:381-384 JI '62.

1. Vyzkumny ustav syntetickych pryskyric a laku, Pardubice.

SVOBODA, Bohumil

Reflection characteristic of wedgy coating film surface. Chem prum
13 no.3:156-160 Mr '63.

1. Vyzkumny ustav syntetickych pryskyric a laku, Pardubice.

L 05404-67 EWP(t)/ETI EJP(c) JH/JD

ACC NR: AP6032830 (A) SOURCE CODE: CZ/0078/66/000/007/0018/0018 46

AUTHOR: Holecek, Stanislav (Engineer; Prague); Franek, Alexandr (Engineer; Prague); Koritta, Josef (Engineer; Doctor; Prague); Manas, Jaroslav (Tynec nad Sazavou); Svoboda, Bohumil (Tynec nad Sazavou)

ORG: none

TITLE: Composition of super-eutectic aluminum alloys. CZ Pat. No. PV-6003-65

SOURCE: Vynalezy, no. 7, 1966, 18

TOPIC TAGS: aluminum alloy, castability, structure stability, silicon containing alloy, copper containing alloy, nickel containing alloy, manganese containing alloy, calcium containing alloy, zinc containing alloy, magnesium containing alloy, iron containing alloy, eutectic alloy, eutectic aluminum alloy

ABSTRACT: The composition of super-eutectic aluminum alloys having increased structural stability in casting condition is suggested as follows: 18—28% silicon, 0.5—4.0% copper, 0.001—3.0% nickel, 0.3—9.0% manganese, 0.001—0.2% calcium, impurities, a maximum of 0.5% iron, a maximum of 0.1% zinc, and a maximum of 0.1% magnesium.

Card 1/1 SUB CODE: 11/ SUBM DATE: 04Oct65/

CZECHOSLOVAKIA / Chemical Technology. Chemical Products H
and Their Applications. Instruments and Automation.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 12084.

Author : Svoboda, Dalibor.

Inst : Not given.

Title : New Instruments Used in the Production of Plate
Glass.

Orig Pub: Sklar a keramik, 1958, 8, No 5, 142-144.

Abstract: A brief description is given of two instruments
for determining the glass drawing rate. -- Ye.
Stefanovskiy.

Card 1/1

5

CZ/13-60-1-7/26

15(2), 28(3)

AUTHOR: Svoboda, Dalibor, Engineer

TITLE: Erection of the Dukla Works at Olovi by Means of Soviet Automatization

PERIODICAL: Sklář a Keramik, 1960, Nr 1, p 14 (CSR)

ABSTRACT: This is a resume on the construction of a plate glass factory at Olovi near Kraslice, which has fundamentally new features. The plant was built after consultation with the Soviet Ministry for Construction Materials in Moscow. The author points out that all mechanical equipment was furnished by the Soviet Union, as well as all measuring and control instrumentation. In describing some of it he lists an automatically controlled melting tank which has an output capacity of 120 tons per day, which means production increase of 11 per cent. Other advantages of this tank are a 2.3% lower gas consumption and quality improvements of the product. Some measuring and control

Card 1/2

CZ/13-60-1-7/26

Erection of the Dukla Works at Olovi by Means of Soviet Automatization

instruments are also described.

ASSOCIATION: Výzkumný ústav mechanizace skla, Praha (Research Institute for
Mechanization of Glass, Prague) ✓

Card 2/2

SVOBODA, Dalibor, inz.

Measurement of high temperatures. Sklar a keramik 12 no.7:
210-212 JI '62.

1. Statni vyzkumny ustav pro komplexni mechanizaci a automatizaci
prumyslu skla a keramiky, Praha.

SWOBODA, Dalibor, inz.

The 1st International Congress of Chemical Engineering, Design
and Automation CHISA. Sklar a keramik 12 no.10:294-295 0 '62.

SVOBODA, Dalibor

Basic principles and conditions for a successive introduction
of complex mechanization in the glass industry. Sklar a keramik
14 no.2:35-38 F '64

1. Statni vyzkumny ustav pro komplexni mechanizaci a automati-
zaci prumyslu skla a keramiky, Praha.

SVOBODA, Dalibor, inz. (Praha)

"Handbook of automation, computation and control" by
Grabbe, Ramo, Wooldridge. Reviewed by Dalibor Svoboda.
Sklar a keramik 14 no. 3: 104 Mr '64.

SVOBODA, Dusan

Automatic grate control. Energetika Cz 13 no.9:480 S '63.

1. Elektromontazni zavody, Brno.

SVORODA, Eduard

Technical and economic indexes for road transportation
enterprise buildings. Siln doprava ll no.5:7-8 My '63.

1. Ministerstvo dopravy.

SVOBODA
(# 1112)

Klin. neurol., Univ. Palackeho. Nase zkušenosti v lečbě dětské obrny ve Velkých Losinách za rok 1950 Experience in the treatment of poliomyelitis in Velke Losiny in 1950 Lek. listy 1952, 7/4 (110-113)

Of 67 cases 20 had slight, 34 moderate and 13 severe sequelae. Good improvement was obtained with Kenney's method, but the lack of trained personnel made it impossible to reach the expected level.

Prochazka - Prague (KK, 8, 7)

SO: EXCERPTA MEDICA Vol. 5 No. 11 Sec. VIII November 1952

EXCERPTA MEDICA Sec. 6 Vol. 11/6 June 57
SVOBODA E.

3716. SVOBODA E., DUBANSKÝ B., WIEDERMANN M. Neurol. Klin. PU, Olomouc. *Svalové změny u hypothyreos centrálního původu. Muscular changes in hypofunction of thyroid gland VNITŘE. LÉK. 1956, 2/8 (725-733) Tables 2

Muscular changes accompanying myxoedema are mostly of hypertrophic type with different muscular contraction on mechanical stimulation. In 5 patients studied the prolongation of the muscular chronaxies only exceptionally reaches higher values (10 - 20 sigmas). The actual cause lies in the degeneration and disturbed muscular metabolism.

Pojer - Brno

567 1340-7-1
DUBANSKY, B., Dr.; HARTL, J., Dr.; MYSLIVY, M., Dr.; SVOBODA, E., Dr.;
DOLENEK, A., Dr.; ZLAMAL, J., Dr.; ZAHRADNICEK, K., Dr.;
DOLENEK, A., Dr.

Papilledema in verified intracranial tumor. Cesk. ofth. 12 no.5:
334-340 Oct 56.

1. Neurologicka klinika PU v Olomouci, prednosta prof. Dr.
Jaromir Hrbek, Ocní klinika PU v Olomouci, predn. prof. dr.
Vaclav Vejdovsky.

(BRAIN, NEOPLASMS, complications,
papilledema (Cz))

(NERVES, OPTIC, diseases,
papilledema in intracranial tumors (Cz))

SVOHODA, E.; DUBANSKY, B.; MYSLIVY, M.

Muscular changes in hypofunction of thyroid gland. Ces.lek.cesk.
95 no.33-34:912-917 24 Aug 56.

1. Neurol. klin. Palackeho univ. v Olomouci. Predn. prof. MUDr
Jar.Hrbek. E.S.neurol. klin. FU, Olomouc

(MYXEDEMA, manifest.

muscular (Cz))

(MUSCLES, in various dis.

myxedema (Cz))

SVOBODA, E.

DUBANSKY, B.; DOUBRAVA, O.; SVOBODA, E.; VYHNANKOVA, M.

Effect of chlorpromazine on the central nervous system. Cesk. fysiол.
6 no.3:435-442 Aug 57.

1. Neurologické oddelení OUNZ., Prostějov, Neurologická klinika PU,
Olomouc.

(CHLORPROMAZINE, effects,
on CNS, review (Cz))

(CENTRAL NERVOUS SYSTEM, effect of drugs on,
chlorpromazine, review (Cz))

EXCERPTA MEDICA Sec 7 Vol 13/7 Pediatrics July 59

1745. POLIOMYELITIS ANTERIOR ACUTA. STATISTICAL EVALUATION. RELATION OF THE PICTURE IN THE ACUTE STAGE TO THE PROGNOSIS - Poliomyelitis anterior acuta. Statistické zhodnocení a vztah obrazu akutního stadia k prognose úpravy obrn - Svoboda E., Lang B. and Steidl L. Neurol. Klin., Lék. Fak., Palackého Univ., Olomouc - ACTA UNIV. PALACK. OLOMUCENSIS 1957, 13 (215-228) Graphs 8 Tables 2

Reports of 1033 cases treated between 1950 and 1952 in a rehabilitation centre are analysed. Virological confirmation of the diagnosis was not available. The highest incidence was in children under 1 yr. of age, with no difference between the sexes. The incidence rose in the summer, with a peak in July. Sudden appearance of paralysis seemed to have a more unfavourable significance than a gradual development with muscle pain. The muscle spasm is believed to be due to a lesion of the reticular substance of the brain stem.

Chytka - Brno (L, 8, 7)

SVOBODA, Ed.; KOLÉK, Ant.

Value of Weiss' pharmacodynamic test in diagnosis of progressive muscular dystrophy. Cesk. neu.r 20 no.6:416-420 Nov 57.

1. Neurologická klinika, PU, Olomouc.
(PROGRESSIVE MUSCULAR DYSTROPHY, diag.
Weiss' test (Cz))

DUBANSKY, B.; SVOBODA, M., Technická spolupráce J. Kopecký.

Experimental therapy of myotonic syndrome with prednisone (ultracorten Ciba). Česk. neur. 22 no.3:191-202 May 59.

1. Neurologické oddělení OUNZ v Prostějově, přednosta MUDr. B. Dubanský
Neurologická klinika PU v Olomouci, přednosta prof. MUDr. J. Hrbek.

(MYOTONIA, therapy,
prednisone (Cz))

(PREDNISONE, ther.
myotonia (Cz)).

SVORODA, E.; KONIG, B.; DUBANSKY, B.; DOLENEK, A.

Ocular myositis. Cesk.ofth.17 no.1:5-10 Ja '61.

1. Neurologicka klinika PU v Olomouci, prednosta prof. MUDr.
Jar. Hrbek, očni klinika PU v Olomouci, prednosta prof. MUDr.
V.Vejvodsky, neurologické oddeleni OUNZ Prostějov, prednosta
MUDr. B. Dubansky.

(MYOSITIS case reports)
(OCULOMOTOR MUSCLES dis)

HAUPTMAN, Z.; SVOBODA, E.

Correlation between the growth of copper whiskers in the reduction of copper (I)-bromide with hydrogen and the chemical kinetics of this reduction. Coll Cz Chem 30 no.5:1373-1389 My '65.

1. Physikalisches Institut, Tschechoslowakische Akademie der Wissenschaften, Prague und Purkyne-Universität, Brno. Submitted May 4, 1964.

SVOBODA, F.

On the classification of excitatory activity in the central nervous system. Cesk. fysiол. 11 no.4:378-382 '62.

1. Vyzkumny ustav matematickych stroju MVS, Praha.
(CENTRAL NERVOUS SYSTEM physiol)

SVOBODA, F.

"Socialist Competition of Crews of Heavy Building Machines in the Second
Quarter of 1953," p. 349,
(MECHANIZACE, Vol. 2, No. 9, Sept. 1953, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

SVOBODA, F.

Preparation for construction on collective farms. p. 38. (ROLNICKE HLASY,
Vol. 10, No. 7, July 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

SVOBODA, Frantisek, inz.

British experience with experimental bituminous pavements.
Siln doprava 11 no.8:21-22 Ag '63.

1. Stavby silnic a zeleznic, n.p.

SVOBODA, FRANTIŠEK

Svoboda, František. The use of indeterminate two-valued Boolean function for the synthesis of switching circuits. Stroje na Zpracování Informací 2, 209-244 (1954). (Czech. Russian and English summaries)

1 - F/W

SVOBODA, F.

"For Further Development of the Work of the Advisory Council." p. 352,
(MECHANISACE, Vol. 2, No. 9, Sept. 1953, Praha, Czechoslovakia)

30: Monthly List of East European Associations, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

SVOBODA, F.

2d National Conference on Machinery for evaluating information. p.114.
SLABOPROUDY OBZOR, Prague, Vol. 15, no. 3, Mar. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956, Uncl.

JA 11, 2.

Third National Conference on Calculating Machines. p. 255.

STOJIS ILO P. JAVANI BAKHARUKY vol. 80, no. 2, May 1955

Czechoslovakia

SO. LEO. TOUGRAM ADDESSIONS II-V vol. 5, no. 7 July 1956

SVOBODA, F.

A semiautomatic experimental machine for the analysis and synthesis of relay circuits. p. 23. (STROJE NA ZPRACOVANI INFORMACI, Vol. 4, 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

SVOBODA, F.

Establishment of extremes of a discrete function by a compromise method.

p. 49 (STROJE NA ZPRACOVANI INFORMACI) Vol. 5, 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No.3,
March 1958

SVOBODA, F.

PA - 2559

AUTHOR: SVOBODA, F., Prag
 TITLE: Automatic Synthesis of Relay Circuits. (Sintez releynykh skhem pri pomoshchi mashin, Russian).
 PERIODICAL: Avtomatika i Telemekhanika, 1957, Vol 18, Nr 3, pp 240 - 255 (U.S.S.R.).
 Received: 4 / 1957
 ABSTRACT: The paper describes a Czechoslovak semi-automatic experimental machine for the synthesis and analysis of combinatorial relay circuits with n switching variables, p inputs and m outputs ($n+p+m \leq 12$, $n \leq 6$). The machine operates with indeterminate switching functions and can be supplied at most with 384 values 0, 1 or $\sim$. Switching functions can be specified at most on 32 states (various substitutions of n variables). The machine uses a relay arrangement as a circuit model. Switching functions are to be read serially in nodes of the model. The machine has the following units: switching-function generator, circuit model, de-coder and function collator. The use of the machine in conjunction with the combinatorial method of synthesis (Svoboda, Stroje na zpracování informací, t.2, 1954) greatly expedites the circuit design (up to 10 times). Moreover, it is now possible to design circuits with more variables, inputs and outputs could then be obtained manually. (With 19 figures and 7 slavie references)

Card 1/2

SVOBODA, F.

Possibility of John von Neumann's logics, Cesk. fysiol. 7 no.4:321-325
July 58.

1. Ustav matematickych stroju CSAV, Praha.

(CENTRAL NERVOUS SYSTEM, physiol.

J. von Neumann's concept (Cz))

(MATHEMATICS,

J. von Neumann's concept in CNS physiol. (Cz))

31311
S/194/62/000/003/007/066
D230/D301

16.8000

AUTHORS: Martinek, Miloslav, and Svoboda, František

TITLE: A pulsed computer for definitions of not less than two variable quantities

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 3, 1962, abstract 3-1-117p (Chekhoslovak. pat., kl. 42m, 14, 21 c, 46/54, no. 96548, 15.09.60)

TEXT: A device providing a change in not less than two variable quantities according to a definite law is patented. This device may control working machines, such as supports for the motion of a metal-cutting machine etc., having not less than two varying coordinates. The pulsed-type device has considerable accuracy, and it is inexpensive. The computer can regulate the operation time, prepare a program of changing the coordinates, and also control driving engines. Rectangular d.c. pulses are applied via a switching circuit to the input of the main computer; the computer has capacity for storing these pulses depending on the time of a single

Card 1/3

S/194/62/000/003/007/066
D230/D301

A pulsed computer ...

operation. When the number of input pulses corresponds to a fixed volume, a separate signal actuates the switching circuit and the pulses do not reach the input of the main computer. In the main counter, triangular pulses are formed, constant in number, but with the pulse spacing dependent on operation time, or on the given volume of the main computer. These pulses are applied via two switching programmers to two motors and, simultaneously, to two auxiliary counters which, depending on the program, can either add to, or subtract from, the number of pulses at the output of the switching programmers to the servomotors. Thus, for instance, for the required linear dependence between two coordinates of $\tan \alpha = 9/11$, the auxiliary counters are excluded, and the switching circuit admits every 9th and 11th pulse, respectively. When a nonlinear dependence is required auxiliary counters are switched in, these can either add to, or subtract from, the number of the control pulses in relation to the given nonlinear dependence. At the end of the first operation, the main computer is filled again and the operation is repeated, etc. When a change-over of all the blocks takes place at that time, the operation time and the functional dependence vary in

Card 2/3

S/194/62/000/009/005/100
D222/D309

97710

AUTHORS: Martinek, Miloslav and Svoboda, František

TITLE: A method of transmitting readings to a digital counter

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
no. 9, 1962, abstract 9-1-82 zh (Czech. pat., cl. 42m,
14; 21c, 47/54, no. 97879, Jan. 15, 1961)

TEXT: This is a patent of an electronic circuit for the transfor-
mation of data represented in a sequential form read from magnetic
tape into a parallel form. 2 figures. /-Abstracter's note: Complete
translation. /

Card 1/1

24840

S/103/61/022/008/009/015
D274/D302

16,2000 (1031, 112, 1132)

AUTHOR: Svoboda, P. (Prague)

TITLE: On the theory of switching-circuit synthesis

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 8, 1961,
1071-1079

TEXT: An experimental method is described for synthesis of optimum switching circuits. The method is based on successive trials; the first series of trials leads to very uneconomical circuits; the following trials lead to improved circuits until the optimum circuit is obtained. The method is nearly universal and can be applied to a great diversity of conditions of optimum. The final circuit is obtained step by step. Each step is preceded by a sequence of trials for verifying the various alternatives. After a sufficient number of trials, the most convenient alternative is used for implementing the step; the implementing consists in connecting one or several contacts to the circuit. Then the process is repeated until the final circuit is obtained. During any j-th trial of each trial-

Card 1/4

24540

S/103/61/022/008/009/015
D274/D302

On the theory of switching-circuit...

sequence, a certain, predetermined, number of steps is carried out. The choice of alternatives (out of their total number P) is random at each step. At the first step of a trial the alternatives are chosen with probability $p_j^{(R)}$ ($R = 1, 2, \dots, P$); for the first trial of each sequence, $p_1^{(R)} = 1/P$. From the second step on, the probability of choosing any permissible alternative is equal and has the value $1/P$. The circuit obtained after the set number of steps may not be final, but it permits determining the weighting function $f(a^{(j)})$. Two cases may arise. If $f(a^{(j)}) > \bar{f}_j$, where $\bar{f}_j =$

$\sum_{j=1}^j f(a^{(j)})/j$, then at the next trial the probability of choosing the alternative R (used at the first step of the j -th trial) should be increased and the probability of choosing the other alternatives should be reduced. If $f(a^{(j)}) \leq \bar{f}_j$, then the probability of choosing R should be reduced, and of the others - increased (or left unchanged). After a sufficient number of trials, the sequence is considered as terminated and a step is implemented using the alterna-

Card 2/4

24840

S/103/61/022/008/009/015

D274/D302

On the theory of switching-circuit...

tive with greatest (or one of the greatest) probabilities. Then the next trial-sequence starts, which is entirely analogous to the preceding. The weighting function used is characterized by the property that neither the number of its arguments, nor their range of variation can be simply predetermined. The domain of values of the function is also unknown, except that it assumes integral values. If however the first $(\mu - 1)$ arguments are introduced, and the trial-sequence of the next step has started, the range of a_μ can be defined. Moreover, the value of the function $f(a)$ can be determined even if the values of the introduced arguments do not correspond to the final circuit. The feasibility of the experiment which gives the optimum solution is based on the fact that if the weighting function assumes extremal value for a certain variable (i.e. alternative), then it assumes for that same variable a sufficient number of other values which do not differ substantially from the extremal value. The circuits are constructed by the combinatorial method. F. Svoboda (Ref. 2: Sintez skhem pri pomoshchi mashin. Avtomatika i telemekhanika, v. 18, no. 3, 1957). The synthesis step corresponds to either operation ω_1 (inductive step) or to operation

Card 3/4

S/271/63/000/001/038/047
D413/D308

AUTHOR: Svoboda, František

TITLE: A device for multiplication and division

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 41, abstract 1B228 (Czech pat., cl. 42 m, 14, no. 100321, Jul. 15, 1961)

TEXT: The patented multiplication and division device, designed for use in digital computers, is characterized by a reduction in the number of registers, which is achieved by a general simplification of the circuit. The essence of the invention (see figure) lies in the use of coupled shifting registers MR (DD) and PT (QT), switch unit SW, operational unit OU and memory unit MM, which serves to generate the complements of multiples of the number being processed - the multiplicand MD or the divisor DR. The multiplier or dividend is introduced into the register MR (DD). The register PT (QT) is coupled to MR (DD) in such a way that there are a few

Card 1/3

S/271/63/000/001/038/047
D413/D308

A device for multiplication ...

(1. - 2) free positions between the last figure of the multiplier and the first figure of the product. After multiplication by the first figure of the multiplier has been performed and the corresponding position in register MR (DD) is freed, a shift pulse S is fed from the operational unit to the register, causing the multiplier and product to be shifted by one position. The operational unit OU is linked to the control unit CU, which is connected to the logic circuit GM and to the switching elements CH₁ and CH₂ of the switch unit SW, which serve to provide control over the working of the operational unit and registers. The switch SE fixes the end of the processing of a single figure. The multiplicand is fed in by means of selector S. Examples of the carrying out of multiplication and division are given; they elucidate the principle of operation of the device. 1 figure.

[Abstracter's note: Complete translation]

Card 2/3

S/271/63/000/001/039/047
D413/D308

AUTHOR: Svoboda, Frantisek

TITLE: An adder unit for mathematical machines

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 42, abstract 1B230 (Czech pat., cl. 42 m, 14, no. 100719, Aug. 15, 1961)

TEXT: The patent covers a universal adder unit for mathematical machines which has the facility for adding numbers in both the decimal and the binary systems of numeration. Adding of numbers in the decimal system is carried out by the code "5, 1*, 2, 1", while in the binary system the normal binary code is used. The essence of the invention (see figure) lies in the fact that to one of the elements 103 of the first binary stage 100 there is connected a special control unit 300, which is controlled by the carry-over signal from the next lower element 102 of this stage, and acts on the logic circuit 150 connected to the output of the carry-over signal.

Card 1/3

S/271/63/000/001/039/047
D413/D308

An adder unit ...

nal from element 103. The control unit 300 is linked to the selector unit 350, which determines the need to pass correcting numbers from the correction unit 360 to the inputs K1, K2 and K3 of the second binary stage 200. The inputs S_1^1 , S_2^1 , S_3^1 and S_4^1 of this stage are linked to the corresponding elements 101 - 104. The results of addition are obtained at the outputs S_1 - S_4 of elements 201 - 204. The need for a correction device is determined by the use of the "5, 1*, 2, 1" code, in which the second member (1*) has different values according to the system of numeration (4 in the binary system and 1 in the decimal system); because of this the carry-over of numbers both from element 102 to 103 and from 103 to 104 may result in incorrect addition. The operating scheme of the adder is changed over by means of switches 321 and 322. A circuit diagram is given of the adder, which is designed using electromechanical relays. 1 figure.

[Abstracter's note: Complete translation]

Card 2/3