

KURAYTIS, S.A., kand.tekhn.nauk; GOLUBEVA, S.K., kand.tekhn.nauk

Synthetic tanning product No.2. Kozh.-obuv.prom. 4 no.8:29-32
Ag '62. (MIRA 15:8)

(Tanning materials)

BABAKINA, V.G.; METELKIN, A.I.; SUCHKOV, V.G.; KURAYTIS, S.A.; GOLUBEVA, S.K.

Method of leather processing; Soviet Certificate of Inventions
No.143957. Kozh.-obuv.prom. 4 no.8:42 Ag '62. (MIRA 15:8)
(Leather industry--Technological innovations)

GOLUBEVA, S.K., kand.tekhn.nauk; KURAYTIS, S.A., kand.tekhn.nauk

New sources of phenol raw materials for the manufacture of
high-quality tanning products. Kozh.-obuv.prom. 4 no.9:24-27
S '62. (MIRA 15:9)

(Tanning materials)
(Phenols)

GOLUBEVA, S. K., kand. tekhn. nauk; KURAYTIS, S. A., kand. tekhn. nauk

Properties of phenol syntans containing sulfur groups in the benzene rings and some characteristics of their synthesis.

Izv. vys. ucheb. zav.; tekhn. leg. prom. no.4:61-70 '62.

(MIRA 15:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti. Rekomendovana kafedroy tekhnologii kozhi Kiyevskogo tekhnologicheskogo instituta legkoy promyshlennosti.

(Tanning materials)

KURAYTIS, S.A., kand.tekhn.nauk

Development of the manufacture of synthetic tanning materials
and auxiliary products. Kosh.-obuv.prom. 5 no.111-16 Ja '63,
(MIRA 16:2)

(Tanning materials)

GOLUBEVA, S.K.; KURAYTIS, S.A.; GETMANSKIY, I.K.

Production of synthetic tanning materials based on phenol and nonsulfonated substances. Trudy NIISHZIMSa no.3:96-98 '62.

(MIRA 16:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevennoy promyshlennosti (for Golubeva, Kuraytis). 2. Nauchno-issledovatel'skiy institut sinteticheskikh zhirozamenitel'nyy i moyushchikh sredstv (for Getmanskiy).

FILIPPOVA, N.B., KURAYTIS, S.A.

Use of ammonium bisulfite in the synthesis of tanning materials.
Nauch.-issl. trudy TSNIKP no.33s57-59 '63 (MIRA 18s1)

KRASUKHIN, M.N., kand.tokhn.nauk; BALBEROVA, N.A., kand.tokhn.nauk;
KURAYTIS, S.A., kand.tokhn.nauk

Artificial drying of spruce bark. Kozh.-obuv.prom. 5 no.10:
15-17 0 '63. (MIRA 17:4)

GLUSHENKOVA, Ye.V.; DYMSHITS, S.A.; KURAYTIS, S.A.; MACHICHEV, I.I.;
SEMENOV, S.S.; SOKHOB, R.A.; FILISTOVA, M.B.

Obtaining tanning agents from the phenols of shale tar. Trudy
VNIIT no.13:101-108 '64.

(MIRA 18:2)

"APPROVED FOR RELEASE: 08/23/2000

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KURAYUMOV, A.P., prof.

Dynamometry as an objective method for determining rigor mortis.
Trudy IMI 2:286-294 '55 (MIRA 11:8)

1. Kafedra sudebnoy meditsyny (zav. - prof. A.P. Kurdyumov)
Pervogo Leningradskogo meditsinskogo instituta imeni akademika
I.P. Pavlova.
(RIGOR MORTIS)

ANDRES, A.G.; KURAZHKOVSKAYA, T.N.

Effect of oxygen deficiency on histopathological changes in
bream. Trudy Inst. biol. vodokhran. no.5:87-109'63.

(MIRA 16:8)

(RYBINSK RESERVOIR--BREAM) (OXYGEN--PHYSIOLOGICAL EFFECT)

KURAZHKOVSKAYA, Ye.A.

"Materialism and empiriocriticism" and the struggle against
revisionism and idealism in natural sciences. Vest.Mosk.un.
Ser.biol., pochv., geol., geog. 14 no.2:3-11 '59.

(MIRA 13:4)

(Science--Philosophy)

KOSHEL'VSKIY, D.I., red.; KURAZHKOVSKAYA, Ye.A., red.; PLATONOV, G.V.,
red.; SOLOV'YEV, A.I., red.; KHAIN, V.Ye., red.; KAPLIN, P.A.,
red.; CHISTYAKOVA, K.S., tekhn.red.

[Philosophical problems of natural science] Filosofskie voprosy
estestvoznaniia. Moskva, Izd-vo Mosk.univ. Vol.3. [Geological
and geographical sciences] Geologo-geograficheskie nauki. 1960.
468 p. (MIRA 13:10)

(Geology)

(Geography)

KURAZHOVSKIY, Yu. N.

Cand. Biolog. Sci.

"Significance of Atmospheric Processes in the Ecology of Mammals and Birds." Sub 25 May 51, Moscow Order of Lenin State U imeni M. V. Lomonosov.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

KURAZHKOVSKIY, YU. N.: KUVAYEV, V. B.

Siberia - Pastures

Changes in the nature of the northern taiga under the effect of grazing. Vest. Mosk. un., 7, no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October, 1952, ~~1958~~, Unclassified.

USSR/Agriculture - Pest destruction

Card 1/1 Pub. 86-17/33

Authors : Kurazhskovskiy, Yu. N., Cand. Biol. Sci.

Title : Combatting pests in irrigated agriculture on the steppes

Periodical : Priroda 43/11, 106-108, Nov 1954

Abstract : Pests, such as insects which harm crops, are found to be more abundant where weeds are allowed to grow and to survive winter weather by burrowing into the ground. This situation is remedied by the deep plowing which is now being adopted in the Soviet Union and the use of certain fertilizers. Four Russian references; (1882-1938). Illustrations.

Institution : ... *VORONEZH* ^{*Preserve*} ~~*State*~~ *MINISTRY* ^{*AGRICULTURAL Economy*} ~~*State*~~

Submitted : ...

1) BOGDANOV, P.K.; KURAZHNSKOVSKIY, Yu.N.

BOGDANOV, P.K.; KURAZHNSKOVSKIY, Yu.N., kandidat biologicheskikh nauk

Appearance of a boar in the Voronezh Preserve. Priroda 44 no.9:120
S '55. (MIRA 8:11)

1. Voronezhskiy goszapovednik
(Voronezh Preserve--Wild boar)

KURAZHNSKOVSKIY, Yu.N.

Combination of measures for controlling the mass propagation of pests in irrigated steppe farm lands. Biul. MOIP. Otd. biol. 60 no.2:25-36 Mr-Apr '55. (Agricultural pests) (MIRA 8:7)

KURAZHSKOVSKIY, Yu.V.

Some problems in studying feeding habits of herbivorous animals.
Biol.MOIP.Otd.biol. 62 no.1:116-117 JAN '52. (MIRA 10:6)
(HERBIVORA)

KURAZHNSKOVSKIY, Yu.N.

Some results achieved and problems in studying the variability of feed composition in the U.S.S.R. Vop.geog.

no.48:165-185 '60.

(MIRA 13:7)

(Feeds--Composition) (Botany--Ecology)

(Zoology--Ecology)

KURAZHE KOVSKIIY, Yu.A.

Founders of Marxism-Leninism on the relationship between man
nature. Okhr. prir. Sib. i Dal'. Vest. no.1 1925 '62.
(MIRA 17.5)

КУРАТСТВО КИЙ, (u.N. (Gorno-Altaysk)

Virgin taiga land. Priroda 53 no.8:61-67 194. (NIP 10:3)

KURAZOV, N.F. [deceased]

Practical applications in the training of students of the natural sciences and geography faculties of pedagogical institutes. *Isv.*
Vses.geog.ob-va 93 no.5:441-444 S-0 '61. (MIRA 14:10)
(Geography--Study and teaching)

VEYKHER, A.A.; KULTYSHEV, N.P.; KURBAKO, Ye.P.; KUTKIN, S.F.;
LEVITSKAYA, D.N.; FARKOVA, T.S.; TROITSKAYA, N.I.;
URBANOVSKAYA, M.A.; KHAUSTOV, I.V.; LIOGEN'KIY, S.Ya.;
NEMANOVA, G.F., red.izd-va; GUROVA, O.A., tekhn. red.

[Prospecting methods and the evaluation of molding materials]
Metodika razvedki i otsenki mestorozhdenii formovochnykh ma-
terialov; sbornik materialov. Moskva, Gosgeoltekhizdat, 1963.
195 p. (MIRA 17:3)

KURBAKOV, F. F.

"Static Testing for Waterproofing of Russian-Leather Boots." Sub 16 Oct 51,
Moscow Technological Inst of Light Industry imeni L. M. Kaganovich.

Dissertations presented for science and engineering degrees in Moscow during
1951.

SO: Sun. No. 480, 9 May 55

KURBAKOV, K.I., inzh.; SMIRNOV, R.V., inzh.

Determination of letter combinations in statistical analysis
of texts. Mekh.i avtom.proizv. 16 no.8:45-46 Ag '62.

(MIRA 15:9)

(Programming languages (Electronic computers))

KURBAKOV, K.I.; SMIRNOV, R.V.

Retrieval of information in a dictionary made by the compressed code method. NTI no.2:46-49 '63. (MIRA 16:11)

ACCESSION NR: AT4026347

S/0000/62/000/000/0091/0112

AUTHORS: Kurbakov, K. I.; Kuznetsov, V. I.

TITLE: Industrially produced magnetic (ferrite) elements

SOURCE: Konferentsiya po obrabotke informatsii, mashinnomu perovodu i avtomatichesk-
omu chteniyu teksta. Moscow, 1961. Vy*chislitel'naya i informatsionnaya tekhnika
(Information processing and computer technology); sbornik materialov konferentsii.
Moscow, 1962, 91-112

TOPIC TAGS: memory, core, circuit design, magnetic element, ferrite

ABSTRACT: The authors discuss the three-cycle magnetic (ferrite) elements, designed and tested during the 1953-56 period at the Laboratoriya elektromodulirovaniya VINITI AN SSSR (Laboratory for Electrosimulation). The fundamental circuits of the magnetic elements are described. Ferrite cores, type K-272, with rectangular hysteresis loop were used as the magnetic material in these elements. A diagram is given to show the pulse characteristics of the K-272 core at temperatures of 20 and 73 C. The authors note the fact that as the temperature rises, the noise voltage increases and the ferrite core hysteresis loop contracts, thus disrupting the stable operation of the element and leading to the appearance of "false" signals. The compensation method of combatting this difficulty is described (in place of one core, a pair of properly chosen cores is used, one of

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ACCESSION NR: AT4026347

which, called the compensating core, is remagnetized only through part of the cycle and is designed to compensate for the interference of the other core, called the working core, which is remagnetized through the full loop). A distinction is drawn between "simple" and "complex" three-cycle magnetic (ferrite) elements: the simple or amplifier element is the name given to a device using magnetic cores with rectangular hysteresis loop and diodes, fed by means of current pulses (precessive pulses); the complex or logical magnetic element is a device similar to the simple element, but differing from it in that it permits the execution of logical operations in accordance with signals reaching its inputs (the presence of the signal at the output is determined, in each individual case, by the logic of the element circuit). Various versions of each of these main elements types are described and discussed. Circuit and block diagrams are provided in most cases to facilitate the explanation. The paper concludes with a discussion of power supply units and their requirements and characteristics and with a section on the design peculiarities of the elements (size, method of fastening, color coding, etc.). The authors claim that the industrially produced magnetic (ferrite) elements maintain their stability of operation in the face of environmental temperature fluctuations to +60 C and precessive current pulses as much as $\pm 20\%$ from the rated value. One element is said to consume no more than 0.15 - 0.2 watts. Orig. art. has: 4 tables and 21 figures.

Card 2/3

BR

ACCESSION NR: AT4026351

S/0000/62/000/000/0133/0157

AUTHOR: Kurbakov, K. I.

TITLE: Long-term memory devices

SOURCE: Konferentsiya po obrabotke informatsii, mashinnomu perevodu i avtomatichesk-
omu chteniyu teksta. Moscow, 1961. Vy*chislitel'naya i informatsionnaya tekhnika
(Information processing and computer technology); sbornik materialov konferentsii.
Moscow, 1962, 133-157

TOPIC TAGS: memory, magnetic core, electrostatic memory, photo-optical memory,
punched card, paper tape, drum memory, disk file, magnetic tape

ABSTRACT: The author discusses in great detail the various kinds of memory devices
presently in use and attempts a classification of them in terms of various criteria or
parameters. There is, in a preliminary section of the paper, a discussion of the charac-
teristics of memories in general, including such factors as: capacity, waiting time,
duration of storage without restoration of information, power consumption, etc. Memories
are then classified as to their physical principle (magnetic, electrostatic, capacitance,
photo-optical, and others), their waiting time (from more than 1 second to less than 1
microsecond), their information storage duration (from more than 1 second to more than

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ACCESSION NR: AT4026351

several years) and their kinetic principle (static, kinetic, wavoguide). There is a discussion of the general characteristics and purpose of long-term memory devices and three fundamental classes are distinguished: (1) Memories used in general purpose electronic computers for the storage of constants, initial data, subprograms and programs (the so-called "internal memory"); (2) memories used to store a large body of information gradually processed by the electronic computer and fed to the computer through input devices (the so-called "external long-term memory"); (3) special-purpose memories, used as the "memory" properly so called (in information-logical, reference machines, etc.). The specifications of these three types are considered. The author has also analyzed the possibilities of employing conventional memories as long-term memory devices. Included among the specific types considered in this section are: perforated cards, perforated tapes, electrostatic memories with cathode-ray tubes, delay-line memories, matrix-type memories using conventional capacitors and diodes, magnetic, magnetic drum and magnetic disk memory devices, magnetic tape memories, matrix-type memories using toroidal ferrite cores with rectangular hysteresis loop, and others. On the basis of a detailed analysis of all these kinds of memories, an assessment is made of the degree to which they lend themselves to performing the functions of long-term memory devices. The article deals with a brief survey of the latest trends in the design of memory elements and long-term memory devices. Here, the author has discussed, among other things, such magnetic memory elements and devices as: transfluxors (magnetic ferrite cores with

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ACCESSION NR: AT4026351

rectangular hysteresis loop and several apertures); blax elements (a magnetic ferrite memory element consisting of a parallelepiped of approximately 2 X 2 X 3 mm with two nonintersecting apertures of about 0.5 X 0.5 mm, running at a right angle to each other; between the apertures lies a common area in the form of a wall about 0.6 mm thick); twistors (a new magnetostriction memory device); long-term memories with magnetic core matrices; thin-film magnetic memory devices. Various versions of the photo-optical type of memory device are also considered. This brief survey of various kinds of memory devices shows that the problem of the creation of a long-term memory, with the properties inherent in such a tool, is still far from solution. Orig. art. has: 6 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: CP

NO REF SOV: 024

OTHER: 046

Card

3/3

KURBAKOV, K.I., inzh.

Industrially produced magnetic elements. Mekh. i avtom. proizv.
17 no.5:37-41 My '63. (MIRA 16:6)

(Magnetic memory(Calculating machines))

L 1299-66 EWT(d)/BXT/EED-2/EWP(1) - IJP(c) BB/GG

ACCESSION NR: AP5021854

UR/0280/65/000/004/0092/0100

AUTHOR: Kurbakov, K. I. (Moscow)

TITLE: The estimate of the nonuniqueness of word code condensation

SOURCE: AN SSSR. Izvestiya, Tekhnicheskaya kibernetika, no. 4, 1965, 92-100

TOPIC TAGS: information storage and retrieval, information processing, compressed word codeforming

ABSTRACT: The design of efficient information-scanning systems is one of the most important tasks of information retrieval. One of the basic functions of such systems is the search for a separate element of information within a certain manifold and, in particular, dictionary scanning. The basic principle of such a search for an element of information is the narrowing of the scanning region within the given bulk of information to a certain minimum. However, even in the case of average dictionary scanning, time is still too long. One of the possible ways of solving the memory addressing problems (and the associated reduction in scanning time) is to transform the initial information directly into the address of the memory. Such a direct transformation requires the mapping of a certain subgroup of all the possible original words of a given alphabet onto a limited number of
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ACCESSION NR: AP5021854

addresses. The author described earlier (K. I. Kurbakov, R. V. Smirnov, Nauchno-tekhn. informatsiya, 1963, no. 2) a direct transformation using condensed word codes. The present paper discusses the probabilistic model which allows the estimate of the nonuniqueness of word code condensation. It outlines also certain results of the statistical modeling. Orig. art. has: 19 formulas, 2 figures, and 3 tables.

ASSOCIATION: None

SUBMITTED: 17Dec64

NO REF SOV: 006

ENCL: 00

OTHER: 007

SUB CODE: DP

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L 2377-66 EWT(d)/BXT/T/EED-2/EWP(1) LJP(c) EB/CG

ACCESSION NR: AP5020822

UR/0020/65/163/004/0841/0844

AUTHOR: Kurbakov, K. I. ^{1/2}

TITLE: A means of addressing using compressed word codes as memory addresses ^{1/2}

SOURCE: AN SSSR. Doklady, v. 163, no. 4, 1965, 841-844 ^{1/2}

TOPIC TAGS: data processing, information storage, information retrieval, binary code, machine translation, computer ^{1/2}

ABSTRACT: The feasibility of immediate transformation of basic information into an address of a memory unit was studied. The study incorporates a means of compressing word codes of a basic dictionary so that the code of each successive letter of a word is shifted relative to the code of the preceding letter. The shift is in the direction of the higher ordered bits and is one bit in length. The letter codes are then summed in modulo 2 addition for each bit location, whereupon the letter codes are selected by taking into account the statistical characteristics of a language (see R. V. Smirnov and K. I. Kurbakov, Author Certificate No. 149264, 1961; Byull. izobreteniy, No. 15, 1962). The method described is a variation which allows the same compressed storage and identification procedure while maintaining the maximum number of bits for single word storage at some predetermined value. The algorithm rests on the premise that shifting need
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ACCESSION NR: AP5020822

occur only for the first letters of a word, continuing up to the point where another shift would cause the loss of a bit by exceeding the register size. For example, if $n = 11$ = the maximum number of bits in the register, and each letter is identified by an eight bit code, then $11-8 = 3$ shifts of letter codes could occur within the limits of the register size. The probability of accurate (non-ambiguous) identification of a word is then a function of the allowed register size: the larger the register size (number of bits), the smaller the probability of ambiguity. A discussion of the variations of this probability is given along with some comments on look-up and cycle times associated with the algorithm. Orig. art. has: 6 equations and 1 figure.

ASSOCIATION: none

SUBMITTED: 24Dec64

ENCL: 00

SUB CODE: DP

NO REF SOV: 002

OTHER: 003

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Card 2/2

KURBAKOV, K.I.

Some characteristics of the distribution of the symbols of
the Russian alphabet. MTI no.9:41-46 '65.

(MIRA 19:1)

L 23956-66 EWT(d)/FSS-2/T/EWP(1) IJP(c)

ACC NR: AP6009910

SOURCE CODE: UR/0413/66/000/004/0107/0107

AUTHOR: Kurbakov, K. I.

40
B

ORG: none

TITLE: A method for generating a compressed word pattern ¹⁶code. ₆ Class 42, No. 179098

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 107

TOPIC TAGS: compressed word codeforming, coding

ABSTRACT: This Author's Certificate introduces: 1. A method for generating a compressed word pattern code in which each word pattern (expressed in letter code) is converted to a certain number given in a word pattern vocabulary. Provision is made for reducing the length of the word pattern code and the time for its generation. The *i*-th word in each word pattern is recorded in the *i*-th column of the word matrix in a preliminary operation. Key digits in which the probability for the appearance of a 0 or a 1 is close to $\frac{1}{2}$ are selected from the resultant word pattern matrix. The necessary number of additional key words is then selected primarily from the columns in the matrix with the greatest number of words. The number of basic key digits is selected from the condition $2^n \geq N_{cc}$. 2. A modification of this method in which all word patterns are considered as "words" which are used to set up an aggregate matrix in a pre-

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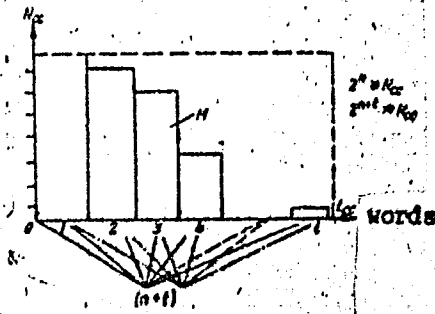
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ACC NR: AP6009910

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liminary operation. The additional key digits are selected primarily from the region of the aggregate matrix which corresponds to minimum-to-median word pattern lengths.



N_{CS} --word pattern vocabulary; L_{CS} --word pattern length; $i = 1, 2, 3, \dots$ --words; M --matrix; n --number of key digits in which the probability for appearance of a 0 or a 1 is closest to $\frac{1}{2}$; t --number of additional key digits.

SUB CODE: 09/

SUBM DATE: 30Apr64/

ORIG REF: 000/

OTH REF: 000

Card 2/2 ✓

ACC NR: AP6033942

SOURCE CODE: UR/0280/66/000/004/0115/0121

AUTHOR: Kurbakov, K. I. (Moscow)

ORG: none

TITLE: Estimate of the average time required for location of a word in a dictionary when a compressed code (in place of words) is also used to address the memory

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1966, 115-121

TOPIC TAGS: data retrieval, information storage and retrieval, machine translation, compressed word codeforming, computer technique

ABSTRACT: Two methods of word location in a dictionary are described. The developed concepts of word coding are used to estimate the average time of search for a word stored in the memory of a machine. The first method for automatic search is to repeatedly divide the memory in two equal parts, until the word is located. The average search time for this method is

$$T_{av} = \log_2 N \text{ cycles,}$$

where N is the number of stored words. The second method is to identify the word through a code according to some characteristic of this word, for instance, the first letter or number of letters in that word. During an automatic search, the memory is

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ACC NR: AP6033942

divided not into equal parts, but rather into sections according to an adapted form of coding. The simplified expression for the average section time with this technique is

$$T_{av} \approx (\psi - 1) + \frac{N_{\psi}}{2}$$

where N_{ψ} is the number of words stored in a particular section. One way for reducing the T_{av} is to use the encoded input data as addresses in the computer memory. A binary code is used for this purpose. To take advantage of reduced search time using a separate word classification by a word characteristic, the code word equivalent to the word to be stored or located consists of three parts: 1) the information related to the original word; for instance its translation into another language; 2) the code identifying a particular chosen characteristic of this word as belonging to a group of words; and 3) the code identifying the word among identically coded words, as the one conveying the required concept. If η is the number of identically coded words in the k -th group of words, then the average search time using this identification method is

$$T_{av} = \frac{\sum_1^{\eta_A} \frac{1}{e\eta!} \frac{\eta(\eta+1)}{2}}{\sum_1^{\eta_A} \frac{1}{e\eta!} \eta} = \frac{\sum_1^{\eta_A} \frac{\eta(\eta+1)}{2\eta!}}{\sum_1^{\eta_A} \frac{\eta}{\eta!}}$$

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ACC NR: AP6033942

The word to be located or translated is first encoded using the compressed code, then entered into the computer for search in the form of an address of a word in computer memory. Thus, the total search time is the sum of the encoding time plus the search time. Orig. art. has: 2 figures, 17 formulas.

SUB CODE: ^{C7 C.5}~~1205/12~~ SUBM DATE: 17Dec64/ ORIG REF: 002

Card 3/3

ACC NR: AR7001758

AUTHOR: Kurbakov, K. I.

SOURCE CODE: UR/0274/66/000/010/V030/V030

TITLE: A possible method of transmitting messages for increasing the effectiveness of the use of communication channels

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 10V209

REF SOURCE: Sb. 2-ya Vses. Konferentsiya po teorii kodir. i yeye prilozh Sekts. 3 Ch. 1. M., 6. B., 3-17

TOPIC TAGS: communication channel, computer memory, ~~message~~ ^{data} transmission, data transmission over communication channels. It consists in transmitting, instead of the message itself (word, combination of words, etc.), a number corresponding to the location of the message in the memory unit. As the number of messages increases, there is an increase in the memory unit scan time. A data compression method is proposed. To this end, each subsequent bit of the word is shifted up by one position in relation to the preceding bit of the same word and is summed up in each bit

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bibliography of 15 titles. [Translation

UDC: 621.391

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SUB CODE: 09/7

Card 2/2

KURBAKOV, Leonid Nikanorovich, dots., kand.tekhn.nauk

"Overtake" speed in a double electric transmission of mechanical power. Izv.vys.ucheb.zav.; elektromekh. 1 no.9:84-87 '58. (MIRA 12:1)

1. Kafedra elektricheskikh mashin Novosibirskogo elektrotekhnicheskogo instituta. (Electric power distribution)

KURBAKOV, L.N., kand. tekhn. nauk

Semi-graphical method for designing the excitation of double-flow
electrical transmission of mechanical energy. Trudy Ural. politekh.
inst. no.90:71-77 '58. (MIRA 13:2)
(Electric machinery)

KURBAKOV, Yu.V.

Experimental determining of the angular coefficients of heat transfer by radiation. Trudy MTIPP 15:193-201 '60. (MIRA 16:2)

(Heat--Transmission)
(Heat--Radiation and absorption)

SURINOV, Yu.A.; KURBAKOV, Yu.V.

Experimental determination of certain basic characteristics of
radiant heat exchange. Izv. vys. ucheb. zav.; Chern. met. 6
no.7:176-182 '63. (MIRA 16:9)

1. Moskovskiy institut stali i splavov i Vsesoyuznyy nauchnyy
institut pishchevoy promyshlennosti.
(Heat—Radiation and absorption)

LOMAZOVA, Nadezhda Zinov'yevna; KURBAKOVA, Galina Mikhaylovna;
NOVIKOVA, Ye.S., red.; SLUTSKIN, A.A., tekhn. red.

[Mass-produced third-class television receivers]Massovye te-
levizionnye priemniki III klassa. Moskva, Sviazizdat, 1962.
46 p. (Biblioteka "Televizionnyi priem," no.3) (MIRA 15:10)
(Television--Receivers and reception)

LOMOZOVA, Nadezhda Zinov'yevna; KURBAKOVA, Galina Mikhaylovna;
TRAVIN, A.A., otv. red.; KONERAT'YEVA, V.P., red.

[Black and white television receivers in the U.S.A. and
the German Federal Republic; survey of network and design
calculations] Televizionnye priemniki cherno-belogo izo-
brazhenia SShA i FRG; obzor skhemnykh i konstruktivnykh
reshenii. Moskva, Izd-vo "Sviaz'," 1964. 47 p. (Biblio-
teka televizionnykh priem, no.14) (MIRA 17:8)

KURBAKOV, V.
~~KURBAKOV, V.~~

Five "good". Rabotnitsa 36 no.2:20-21 F '58.
(China--Women)

(MIRA 11:2)

PASHOV, T.V., kand.veter. nauk; KUREBALA, M.Ya., nauchnyy sotrudnik; SEREDA, D.I.,
nauchnyy sotrudnik

Adaptation of the pathogen of infectious atrophic rhinitis of swine to
rats, rabbits and other animals. Veterinariia 40 no.5:34-37 My '63.
(MIRA 17:1)

1. Poltavukaya nauchno-issledovatel'skaya veterinarnaya stantsiya.

ACC NR: AP6035752

SOURCE CODE: UR/0413/66/000/019/0124/0124

INVENTOR: Kovalevskiy, B. Ye.; Lotsmanov, S. N.; Zadvornov, M. G.; Khryukina, N. V.;
Kurbala, Ye. I.; Makarkin, A. Ya.

ORG: none

TITLE: Brazing alloy for vacuum-tube instruments. Class 49, No. 186836

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 124

TOPIC TAGS: brazing alloy, vacuum tube instrument, ~~brazing~~ vacuum tube, electronic
manufacturing machinery

ABSTRACT: This Author Certificate introduces a copper-base brazing alloy, containing germanium and palladium, for brazing vacuum-tube instruments. To improve the strength and ductility of brazed joints and to lower the melting temperature of the alloy, its composition is set as follows: 8—12% germanium, 2—12% palladium, 80—90% copper

SUB CODE: 11, 13⁰⁹/SUBM DATE: 16Nov65/

Card 1/1

UDC: 621.791.36:621.385.002.2

KURBALEK, J., dr.

Independent suction device for the VZP-2 aircraft apparatus. Rudy
13 no.2:71-72 F 165.

1. Institute of Mining of the Czechoslovak Academy of Sciences,
Prague.

KURBALEV, A.M.; LEVSHIN, I.I., starshiy agronom

Potato wart in Khmel'nitskiy Province. Zashch. rast. ot
vred. i bol. 5 no. 8:47-48 Ag '60. (MIRA 13:12)

1. Nachal'nik Khmel'nitskoy karantinnoy inspektsei (for
Kurbalev).
(Khmel'nitskiy Province--Potato wart)

KURBANOV, V. YA.

"1. Specific Heat of Fluids. 2. Specific Heat and Relation of Specific Heats to the Temperature of Halogen-Derived Acyclic Hydrocarbons." (p. 372)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1948, Volume 18, (80), No. 3

SOV/84-58-11-20/58

AUTHOR: Kurban, A. Kolkhoz worker

TITLE: Aid Arrived on Wings (Pomoshch' prishla na kryl'yakh)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 11, p 10 (USSR)

ABSTRACT: The author, a kolkhoz worker from the Bryansk oblast, expresses her gratitude to the pilot of a special services aircraft who saved her life by delivering to the village hospital blood urgently needed for transfusion.

Card 1/1

GADZHIIYEV, M.A.; VANTSIOR, R.I.; ABASOV, R.I.; KURBANALIYEV, A.K.

Device for telemetering deep well parameters in the exploitation of wells with electric sinking pumps. Mash. i neft. obor. no.10:25-28 '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy i proyektnyy institut po kompleksnoy avtomatizatsii proizvodstvennykh protsessov v neftyanoy i khimicheskoy promyshlennosti.

KURBANALIYEV, D.S., dots.

Effect of the endocrine glands on the connective tissue system;
from a doctoral dissertation. Azerb.med.zhur. no.11:67-71 N '58
(MIRA 11:12)

1. Iz kafedry gistologii i embriologii (zav. kafedroy - prof. N.M.
Kolesnikov) Azerbaydzhanskogo gosudarstvennogo meditsinskogo
instituta im. N.Narimanova.
(EDOCRINE GLANDS)
(CONNECTIVE TISSUE)

KURBANALIYEV, D.S.

Effect of drug-induced sleep on the reactivity of the connective
tissue. Uch.zap.AGU.Biol.ser. no.2:67-70 '59. (MIRA 13:6)
(SLEEP)
(CONNECTIVE TISSUE)

KURBANALIYEV, D.S., dotsent

Changes in the connective tissue system following experimental
removal of the adrenal glands. Report No.3. Azerb.med.zhur.
no.2:33-36 P '60. (MIRA 13:5)
(CONNECTIVE TISSUES) (ADRENAL GLANDS--EXCISION)

KURBANALIYEV, D.S.

Changes in the connective tissue system following adrenalectomy.
Uch. zap. AGU. Biol. ser. no. 3:49-51 '60. (MIRA 14:5)
(CONNECTIVE TISSUES) (ADRENAL GLANDS)

KURBANALIYEV, I.G.; RZAYEV, S.D.

Rare case of the formation of a pathological anastomosis
between the gallbladder and the pylorus of the stomach.
Azərbaycan tıbbi jurnalı. №6:43-45 İyul 1962. (MIRA 17:8)

KUREV N. I. 1964

Method of the conditional minimum of a quadratic functional used in solving the second boundary value problem in the mathematical theory of elasticity. Vop. vych. mat. i tekhn. no.1:52-65 '64. (MIRA 18:8)

SHIKHIYEV, I.A.; ALIYEV, M.I.; SADYKHZADE, S.I.; SHCHEGOL', Sh.S.;
AKHUNDOVA, G.Yu.; KRASNOKUTSKIY, V.P.; GUSEYNOVA, M.A.;
MUKHARAMOVA, Kh.F.; KURBANALIYEVA, T.Kh.; NIKOLAYEVA, L.

Synthesis and use of silicon naphthenic acids in the production
of butadiene-styrene rubber. Azerb.khim.zhur. no.5:65-68
'61. (MIRA 15:5)
(Naphthenic acids) (Silicon organic compounds)
(Rubber, Synthetic)

PATALAKHA, G.B.; KURBANAYEV, M.S.; IS'KIV, B.M.

Comparison of some methods of the statistical processing of
spectral analysis in geochemical studies. Izv. AN Kazakh. SSR
Ser. geol. 22 no. 6:69-74 N-D '65 (MIRA 19:1)

1. Institut geologicheskikh nauk imeni K.I. Satpayeva, Alma-Ata,
i Kazakhskiy filial Vsesoyuznogo instituta razvedochnoy geo-
fiziki, Alma-Ata.

KURBANAYEVA, S.S., assistant

Surgery in perforating ulcer of the stomach and the duodenum.
Kaz.med.zhur. 40 no.3:12-18 My-Je '59. (MIRA 12:11)

1. Iz kafedry khirurgii i neotloshnoy khirurgii (zav. - prof.
P.V.Kravchenko) Kazanskogo instituta usovershenstvovaniya
vrachey im. V.I.Lenina.

(ALIMENTARY CANAL--ULCERS)
(SURGERY)

KURBANAYEVA, S. S., CAND MED SCI, ^{data for} "MATERIAL ~~ON~~ SURGICAL
TREATMENT OF GASTRIC AND DUODENAL ULCER." KAZAN', 1961.
(MIN OF HEALTH RSFSR, KAZAN' STATE MED INST). (KL, 3-61,
233).

430

ANPILOGOV, I., elektrosvarshchik; MAYMUSHIN, P.; CHISTOV, S., inzh.;
KURBANGALEYEV, A.; TRET'YACHENKO, B.

Worker correspondents of the periodical of the All-Union
Central Council of Trade Unions "Okhrana truda i sotsial'noe
strakhovanie" make a surprise inspection. Okhr.truda i sots.
strakh. 3 no.6:46-50 Je '60. (MIRA 13:7)

1. Reydovaya brigada zhurnala "Okhrana truda i sotsial'noye
strakhovaniye" (for all). 2. Ufimskiy neftepererabatyvayushchiy
zavod (for Anpilogov). 3. Otvetstvennyy sekretar' gazety
"Neftepererabotchik" (for Maymushin). 4. Tekhnicheskii inspektor
oblastnogo soveta profsoyuzov Bashkirskogo sovnarkhoza (for
Kurbangaleyev). 5. Spetsial'nyy korrespondent zhurnala
"Okhrana truda i sotsial'noye strakhovaniye" (for Tret'yachenko).
(Bashkiria--Industrial hygiene)

OKHRIMENKO, N.I., gornyy inzh.; KARPOV, A.P., gornyy inzh.;
KURBANGALEYEV, I.Kh., gornyy inzh.; AMIROV, M.I., gornyy inzh.

Improving boring and blasting operations in the Uchaly Mine.
Gor. zhur. no.6:39-40 Je '62. (MIRA 15:11)

1. Uchalinskiy rudnik.
(Uchaly region--Blasting)
(Boring)

Kurbangaleyev, R.M.

S/137/60/000/006/004/015
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 6, p. 277,
13676

AUTHORS: Gavrilov, P.D., Kurbangaleyev, R.M., Alentov, A.N., Markovich,
Yu.N.

TITLE: The Effect of Iron on Magnetic Properties of a Copper-Cobalt
Alloy

PERIODICAL: Tr. Kazansk. khim.-tekhrol. in-ta, 1957 (1959), No. 22, pp. 161-
171

TEXT: The authors studied the effect of Fe admixtures (~2%) on the magnetic properties of a 50% Cu - 20% Ni 30% Co-alloy. Tests wer made with cast, cast-annealed specimens (850°C, 8 - 32 hrs) and specimens subjected to heat treatment to improve their magnetic properties (oil and water quenching at 1,150°C, tempering at 650°C for 3 and 6 hours); and rolled specimens. Best deformability was revealed in specimens annealed for 16 hours. B_r of 4100 gauss and H_c of 560 oersted were obtained after oil quenching and temper..

Card 1/2

S/137/60/000/006/004/015
A006/A001

The Effect of Iron on Magnetic Properties of a Copper-Cobalt Alloy

ing for 6 hours. Magnetic characteristics of an alloy containing up to 2% Fe are by 20-40% below the maximum values attainable for this alloy without Fe. It is recommended to clean the crucible carefully, if a Fe-alloy was previously melted in it, and to use a quartz mixer instead of an iron one. ✓

Ye.V.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

KURBANCALEYEV, S.M.

Intradural temporal approach to the sensory root of the trigeminal nerve in neuralgias. Vop.neirokhir. 19 no.4:21-27 J1-Ag '55. (MLRA 8:10)

1. Iz gosptial'noy khirurgicheskoy kliniki Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(TRIGEMINAL NERVE, surgery, intradural temporal approach)

YERMOLENKO, A.L., professor; KURBANALYEV, S.M., professor; ML'BERG, G.A.,
doktor meditsinskikh nauk

Seventieth birthday of Aleksandr Vasil'evich Smirnov. Vest.khir.
78 no.2:154-155 F '57. (MLRA 10:3)
(SMIRNOV, ALEKSANDR VASIL'YEVICH, 1886-)

EXCERPTA MEDICA Sec.8 Vol.11/5 Neuro-Psychiat.May 58
KURBANGALYEV, S.M.

2451. AN INTRADURAL TEMPORAL APPROACH FOR RADICOTOMY OF THE TRIGEMINAL NERVE IN CASES OF ITS NEURALGIA (Russian text) - Kurbangaleev S. M. - VESTN.KHIR. 1957, 78/3 (78-87) Tables 2

The operation's technique has been previously described at the 4th All-Russian Neurosurgical Meeting on 25th June, 1953. Seventeen patients have been operated upon up to date. This new method's main advantage is an ample view over the operating field with the opportunity of interrupting the single trigeminal branches more selectively, without any pareses of oculomotor or facial nerves. Using this route the protection of the motor portion appears to be easier. The only complication, i. e. transient cerebral oedema, is due to the elevation of the temporal lobe. When for the purpose of visualizing Meckel's cave the brain retractor presses upon the basal temporal structures, the patients complain of general discomfort, nausea, painful sensations, vertigo and bradycardia. In 2 instances unconsciousness of several hours duration occurred with normal pulse rate, blood pressure and respiration.

Heppner - Graz

KURBANGALEYEV, S.M., prof.

Late results of intradural temporal radicotomy of the 5th nerve
in severe neuralgias. Vest.khir. 85 no.11:8-15 N '60.

(MIRA 14:2)

1. Iz gospi'tal'noy khirurgicheskoy kliniki (zav. - zasl. deyatel'
nauki prof. A.V. Smirnov) Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta i gospi'tal'noy khirurgicheskoy kliniki
(zav. - prof. F.G. Uglov) 1-go Leningradskogo meditsinskogo
instituta im. akad. I.P. Pavlova.

(NEURALGIA, TRIGEMINAL)

KURBANGALEYEV, Salikh Mukhutdinovich, prof.; ABRKOV, L.V., red.;
KHARASH, G.A., tekhn. red.

[Radical surgical treatment of trigeminal neuralgia]Radikal'-
noe khirurgicheskoe lechenie nevrал'gii troinichnogo nerva. Le-
ningrad, Medgiz, 1961. 255 p. (MJRA 16:2)
(NEURALGIA, TRIGEMINAL)

UGLOV, F.G.; KUF-BANGALEYEV, S.M.; BOKAREV, Yu.N.; VORONOV, A.A.; DEGTYAREVA,
Z.Ya.; KRASNOSHCHKOVA, L.I.; MURSALOVA, F.A.; POTASHEV, L.V.;
RASSVETAYEV, I.L.; SIMBIRTSEV, S.A.; SOKOLOV, S.S.

Use of the artificial blood circulation apparatus built by the
Research Institute for Experimental Surgical Apparatus and Instru-
ments in an experiment. Trudy NIIEKHAI no.5:132-137 '61.

(MIRA 15:8)

(PERFUSION PUMP (HEART))

UGLOV, F.G., professor; KURBANGALEYEV, S.M., professor; KRASNOSHCHKOVA,
L.I., kand.med.nauk

Diagnosis and surgical treatment of mitral stenosis in valvular
calcinosi. Vest.khir. no.1:7-13 '62. (MIRA 15:1)

1. Iz gospi'tal'noy khirurgicheskoy kliniki (zav. - prof. F.G.
Uglov) 1-go Leningradskogo meditsinskogo instituta im. I.P.
Pavlova.

(MITRAL VALVE--CALCIFICATION)

KURBANGALEYEV, S.M.

Some experimental data on the exclusion of the heart from
blood circulation. Trudy Inst. klin. i ekspan. kard. AN
Gruz. SSR 8:591-601 '63. (MIRA 17:7)

1. Gospiatal'naya khirurgicheskaya klinika 1-go Leningradskogo
meditsinskogo instituta.

КАЛЕЧИТС, I.V.; САЛИГАРЕЙЕВА, F.G.; ПОПОВА, N.I.; КУРБАН-ГАЛЕЙЕВА, D.Kh.;
КЛИКОВА, G.G.

Chemical composition of primary tar from Chermkheve coal. Part 3.
Detailed group and functional composition of neutral compounds.
Trudy Vost.-Sib.fil.AN SSSR. no.3:19-24 '55. (MIRA 9:4)
(Chermkheve Coal Basin--Coal-tar products) (Chromatographic analysis)

POPOVA, N.I.; SALIMGAREYNEVA, F.G.; KLYKOVA, G.G.; SHOROKHOVA, M.V.; KURBAN-
GALEYEVA, D.Kh.; KALECHITS, I.V.

Chemical composition of primary tar from Chermkhovo coal. Part 4.
Detailed group and functional composition of neutral compounds in
the liquid-phase hydrogenated tar. Trudy Vost.-Sib.fil.AN SSSR, no.3:
25-29 '55. (MLRA 9:4)
(Chermkhovo Coal Basin--Coal-tar products)(Chromatographic analysis)

POPOVA, N.I.; KURBAN-GALEYEVA, D.Kh.; SHOROKHOVA, M.V.

Chemical composition of primart tar from Cherenkhevo coal. Part 6.
Group composition of the crude fraction of medium-temperature tar
from Cherenkhevo coal. Trudy Vest.-Sib.fil.AN SSSR no.3:35-39 '55.
(MLRA 9:4)
(Cherenkhevo Coal Basin--Coal-tar products)(Chromatographic analysis)

POPOVA, N.I.; KURBAN-GALEYVA, D.Kh.

Determination and possible separation of paraffin from primary tar
of Chermkovo coal. Trudy Vost.-Sib.fil.AN SSSR no.3:63-71 '55.
(MIRA 9:4)
(Chermkovo Coal Basin--Coal-tar products)(Paraffin wax)

L 06463-67 EWP(j)/EWT(m) RM

ACC NR: AP6029340

SOURCE CODE: UR/0316/66/000/002/0081/0084

AUTHOR: Salimov, M. A.; Aliyev, M. I.; Kurbanaliyeva, T. K.

37
13

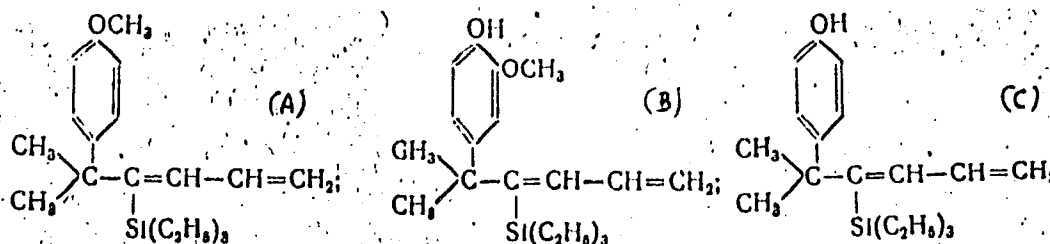
ORG: INKhP AN SSR

TITLE: Structure of silicodiene derivatives of substituted aromatic hydrocarbons

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 2, 1966, 81-84

TOPIC TAGS: organosilicon compound, IR spectrum, *AROMATIC HYDROCARBON*

ABSTRACT: The structure of the compounds



was studied by means of IR absorption spectra taken with an IKS-14 unit. The data make it possible to postulate that the triethylsilyl radical in the molecules of (A)

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I. 06463-67

ACC NR: AP6029340

and (B) is in the γ position relative to the terminal double bond. Compound (C) consists of a mixture of the two structural formulas, i. e., the triethylsilyl radical in the molecules of compound (C) is in both the β and γ position relative to the terminal double bond. Orig. art. has: 3 figures and 1 table.

SUB CODE: 07/ SUBM DATE: 27Aug64/ ORIG REF: 001/ OTH REF: 004

Card 2/2 PE

L 3508-66 EWT(m)/EPF(c)/EWP(j)/T RM

ACCESSION NR: AP5017131

HR/0219/65/021/004/0026/0028

AUTHORS: Aliyev, M. I.; Shikhiyev, I. A.; Salimov, H. A.; Kurbanaliyeva, T. K.

44.55 44.55 44.55 44.55 40 B

TITLE: Synthesis of silcondiene derivatives of aromatic substituted hydrocarbons

SOURCE: AN AzerbSSR. Doklady, v. 21, no. 4, 1965, 26-28

TOPIC TAGS: silicon organic compound, triethylsilane, silcondiene derivative

ABSTRACT: The reaction between triethylsilane and vinylacetylphenol, anisole, guaiacol, and o-cresol was investigated. The reaction yielded silcondiene derivatives of benzene substituted hydrocarbons I to IV respectively as shown by Table 1 on the Enclosure. Physical properties and percent yield of the compounds synthesized are tabulated. Orig. art. has: 1 table.

44.55

ASSOCIATION: Institut neftekhimicheskikh protsessov (Institute for Petrochemical Processes)

SUBMITTED: 28Jan64

ENCL: 01

SUB CODE: 00, G-C

NO REF SOV: 007

OTHER: 003

Card 1/2

L 3508-66

ACCESSION NR: AP5017131

ENCLOSURE: 01

0

Table 1.

No.	Formula
I	
II	
III	
IV	

Card 2/2

SP

KURBANALINA, R. Kh. Cand. Chem. Sci.

Dissertation: "Detonation of Liquid Explosives Near an Ultimate Diameter."
Inst of Chemical Physics, Acad Sci USSR, 29 Dec 47.

SO: Vechernyaya Moskva, Dec, 1947 (Project #17836)

191 AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX

F KURBANALINA, R. KH.

5570. LIMITING DIAMETER FOR "STABLE" DETONATION OF HYDROGEN PEROXIDE AND METHYL ALCOHOL MIXTURE AND PERCHLORIC ACID AND ETHYL ALCOHOL MIXTURE. Kurbanalina, R. Kh. (Zhurnal Fizicheskoi Khimii (J. Phys. Chem.), January, 1948, vol. 22 49-51). Refers to diameter of the tube in which such mixtures are detonated. Limiting diameters were found to be 3 m. m. in the case of low velocity and 20 m. m. in the case of high velocities. The detonation velocities were also measured. Includes photographs showing the propagation of detonation.

Int. Chem. Phys. AS USSR

ASB-314 METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

BELYAYEV, A.F.; KURBANGALINA, R. Kh. (Moskva)

Determination of the relative power output of explosives by the
method of equivalent charges according to the expansion rate of
Trautzel's bomb. PMTF no.2:116-119 J1-Ag 60. (MIRA, 14:6)
(Explosives--Testing)

2.1000

AUTHORS:

Belyayev, A. F., Kurbangalina, R. Kh.
(Moscow)

69137
S/076/60/034/03/017/038
B115/B016

TITLE:

The Effect of the Initial Temperature on the Value of the
Critical Diameter of Nitroglycerin and Trotyl

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol 34, Nr 3, PP 603 - 610
(USSR)

TEXT: The critical diameter of an explosive charge is the minimum diameter at which a continuous propagation of the detonation wave is still possible. If the diameter of the charge is smaller than the critical one, the detonation dies. The physical importance of the critical diameter was clarified by Yu. B. Khariton, Academician, in reference 1. According to this author the value of the critical diameter is proportional to the time of the chemical reaction on the front of the detonation wave. The authors of the present paper investigated the effect of the initial temperature on the value of the critical diameter of liquid nitroglycerin, and liquid and powdered trotyl. In a detailed experimental part the performance of these investigations is described separately for both explosives. In trotyl, propagation and dying out of the detonation were checked by means of a mirror photorecorder of the type SFR-2M for velocities. The standard electrical detonator Nr 8 was used for ignition

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The Effect of the Initial Temperature on the Value of the Critical Diameter of Nitroglycerin and Trotyl S/076/60/034/03/017/038
B115/B016

of the nitroglycerin charges. Figures 1 and 2 show graphically the results obtained for the two explosives investigated. From these curves the values for the critical diameters of the two explosives at different initial temperatures were calculated (Tables 1,2). The initial temperatures of nitroglycerin were between -20 and $+70^{\circ}\text{C}$, of trotyl between $+81^{\circ}$ (melting point of trotyl) and $+240^{\circ}\text{C}$. The value of the critical diameter decreases rapidly with increasing initial temperature in both cases. The authors found for the critical diameter of liquid trotyl at 100°C a considerably higher value than A. Ya. Apin and V. K. Bobolev (Ref 3). Table 3 presents the detonation velocity of liquid trotyl near the critical diameter at 3 different initial temperatures, table 4 the values of the critical diameter of powdered trotyl at 3 different initial temperatures. The mechanism of the chemical reaction in powdered trotyl obviously differs from that in liquid trotyl. The critical diameter of liquid trotyl near its melting point is about the 30-fold of the critical diameter of nitroglycerin at room temperature; accordingly, the explosive properties of both explosives are quite different. Near the flash point of liquid trotyl ($\sim 240^{\circ}\text{C}$) the value of the critical diameter is only the threefold of the value for nitroglycerin at room temperature. In this case the agreement of the explosive properties of both explosives (detonation capacity, sensitivity, etc.)

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The Effect of the Initial Temperature on the Value of the Critical Diameter of Nitroglycerin and Trotyl S/076/60/034/03/017/038 B115/B016

is better. If one assumes that the two explosives explode in consequence of a heat evolution occurring on their compression, and of a subsequent homogeneous gas reaction, then the initial temperature of the chemical reaction, i.e. the temperature which causes a shock wave, will have to be in the range of 1100-1200°K. In connection with the evaluation of the experimental data, to which the major part of the paper is devoted, A. I. Serbinov (Ref 4) and S. B. Ratner (Ref 7) are mentioned. There are 4 figures, 4 tables, and 8 references, 6 of which are Soviet. X

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki (Academy of Sciences of the USSR, Institute of Chemical Physics)

SUBMITTED: June 14, 1958

Card 3/3

YAKOVLEVA, G. S.; APIN, A. Ya.; KURBANGALINA, R. Kh.; STESIK, L. N.

Detonation velocity of liquid hydronitric acid. Dokl. AN
SSSR 156 no. 1:152-153 My '64. (MIRA 17:5)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V. N. Kondrat'yevym.

ACCESSION NR: AP4033397

S/0076/64/038/003/0579/0582

AUTHOR: Belyayev, A. F. (Moscow); Kurbangalina, R. Kh. (Moscow)

TITLE: Realization of detonation conditions for black powder

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 3, 1964, 579-582

TOPIC TAGS: black powder, detonation, steady state detonation, critical diameter, combustion rate, nonsteady state convective burning, explosive

ABSTRACT: Conditions for the steady-state detonation of black powder have been realized for the first time. Since the critical diameter of black powder is large and its rate of combustion at high pressures is relatively low, it is impossible to cause detonation with a capsule detonator or with a detonating fuse passed through the powder. Detonation of considerable masses of loose black powder requires an intermediate detonator of large weight, e. g., a charge of finely ground low-density (0.6—0.7 gm/cc) trinitrotoluene. The detonation rates of

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black powder and ammonium nitrate were similar. In experiments run with black powder of different densities (0.9 and 1.1 gm./cc), when the diameter of the charge was greater than critical, the rate of detonation increased almost linearly with density. The value of about 400 m/sec given earlier (G. Kast, Vzryvchaty* e veshchestva i sredstva vosplamneniya, 1932) for the rate of detonational conversion of black powder is apparently that for non steady-state convective burning.

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AUTHOR: Yakovleva, G. S.; Apin, A. Ya.; Kurbangalina, R. Kh.; Stesik, L. N.

TITLE: The rate of detonation of liquid hydrazoic acid

SOURCE: AN SSSR. Doklady*, v. 156, no. 1, 1964, 152-153

TOPIC TAGS: hydrazoic acid, explosive, detonation, detonation rate, liquid hydrazoic acid

ABSTRACT: HN_3 is not used in practice as an explosive, nevertheless, it is of interest to determine its detonation characteristics in the liquid state. Measurement of the detonation characteristics are frequently used in the studies of the equation of the state of gases at high pressures (hundreds of thousands of atmospheres) and at high temperatures (several thousand degrees). In treating experimental data one is involved with multicomponent systems, since the majority of explosives consist of at least four types of atoms. Consequently, the explosion products contain several types of molecules. In this respect HN_3 differs favorably from other explosives because one might expect that products of detonation of liquid HN_3 will consist primarily of molecular nitrogen and hydrogen. The rates

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