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П.Н. Шаронин

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STUDY OF THE EFFECT OF SIMULTANEOUS CONTRAST FOR ITS ACCOUNTING IN MACHINE VISION SYSTEMS	3
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The paper considers the effect of the visual differences of the same objects on a different background. The authors studied the influence of various parameters of the image objects on their perception by a person. An application has been developed that allows to automate the process of the experiment on the study of the effect of the simultaneous contrast and to obtain its results in numerical form.

Keywords: balanced contrast, lightness, machine vision, visual difference.

O.A. Vinokurova, A.V. Kopyrina

BLOCK OF THE AUTOMATED ASSESSMENT OF OPERATIONAL INDICATORS OF THE EQUIPMENT IN THE COURSE OF PERFORMANCE OF THE PRINTING ORDER	9
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In this work the technique for evaluating operational performance indicators is considered using the example of modern bookbinding and finishing equipment. Classification of typical equipment failures of this type is proposed. The impact of the applied mathematical models of equipment failure and recovery processes on the result of performance calculation is estimated.

The general and modular structure of the block of the automated estimation of operational indicators of use of the equipment is developed.

Keywords: bookbinding equipment, refusals, recovery, operational characteristic, reliability, averaged time estimates, stationary random process, nonstationary random process, Markov model, availability coefficient, downtime coefficient, reliability coefficient.

F.A. Doronin, V.P. Stolyarov, A.G. Evdokimov, G.O. Rytikov, V.G. Nazarov

PROSPECTS OF APPLICATION OF SURFACE OXYFLUORINATION TO IMPROVE THE QUALITY OF INKJET PRINTER CARTRIDGES	23
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The prospect of using surface treatment with a gas mixture of fluorine and oxygen (oxyfluorination) of polymer parts of inkjet printer cartridges is considered. By the example of polyethylene, polypropylene and polyethylene terephthalate it is shown that such treatment leads to an improvement in the wettability of a polymer with water and an increase in surface energy. This effect can play a positive role both in the technology of manufacturing cartridges for inkjet printers by increasing the reliability and tightness of the bonding site, and in improving their performance, associated primarily with the performance of the inkjet printer.

Keywords: cartridge, oxyfluorination, polymer, inkjet printing, wetting.

E.P. Cherkasov, A.P. Kondratov, U.J. Eshbaeva, A.A. Djalilov, A.S. Rafikov

ACRYLIC EMULSION — GLUING OF THE COMPOSITE PAPERS ON BASE OF THE COTTON CELLULOSE AND SYNTHETIC FILAMENTS	30
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To give the paper necessary mechanical toughness applied as polymeric smearing material acrylic emulsion. It's using brings to increasing of mechanical toughness that is indicative of formation new intermolecular hydrogen relationships. For the purpose of clarification of the mechanism of interaction of synthetic polymers with fibrous components of paper and determination of structure of the received composition IR-spectroscopic and X-ray diffraction researches are conducted.

Keywords: rosin, an acrylic emulsion, the polymeric gluing substances, cotton cellulose, synthetic polymers.

N.F. Efremov, A.N. Utekhin, V.A. Kanaiceva, P.P. Sursina

EXTRUSION MACHINES: INFLUENCE OF THE HEIGHT OF THE LINE OF CRYSTALLIZATION ON THE PHYSICAL MODIFICATION OF THE BLOWN FILM OF HIGH DENSITY POLYETHYLENE	37
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It was found that for extrusion plants with a diameter of the outlet slit of the annular head of 30 mm and a width of 1 mm with a multiplicity of longitudinal drawing $K_0 = 7.2$ at the height of the crystallization line of 25 cm there is a significant change in the shape of the sleeve.

It is shown that in the region below this boundary, the increase of the height of the crystallization line leads to the orientation of polymer chains on amorphous sites, an increase in the content of large and medium-sized crystals, a significant reduction in the number of small crystals, which reduces the thickness of high-pressure polyethylene (HDPE) films, increasing their strength.

The increase of the height of the crystallization line of more than 25 cm, despite the increase of the degree of longitudinal drawing, causes a decrease of the strength of the films, which can be explained by a decrease in the content of large and medium-sized crystals, as well as a significant increase in the number of small crystals.

Keywords: extrusion machines, line of crystallization, film of HDPE, sleeve blowing, durability, the degree of crystallinity.

A.P. Kondratov, B.M. Korolev, O.M. Bocharova

ELECTRICAL CHARACTERISTICS AND RESISTANCE TO DAMAGE OF ANTENNAS OF RFID-TAGS FOR MACHINE PARTS AND ROBOTICS, MANUFACTURED BY SCREEN PRINTING	51
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By means of screen printing with the use of electrically conductive paints containing dispersions of silver and graphite, laboratory samples of antennas of RFID-tags on substrates of polyethylene terephthalate and polypropylene films with modified surface were made.

Experimentally determined I-V characteristics, electrical conductivity and the dependence of the resistance of the footprint of the antenna from the frequency of the alternating current in the range of 10–150 kHz.

The method of estimation and quantification of stability of laboratory samples of RFID-tags and RFID-tags of “Avery Dennison” (USA) to mechanical damage and deformation of antennas is offered.

Keywords: diagnostics of machines, marking, antennas of RFID-tags, press, silver dispersion, conductivity, printed electronics.

M.V. Kononova, A.P. Kondratov, O.L. Mitryakova

THE CHOICE OF TECHNICAL MEANS FOR MARKING THE PLASTIC PACKAGING IN BRAILLE	60
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The generalized analysis of theoretical and experimental data about the known technical means and methods of protection of goods against counterfeiting by relief labeling of packaging using Braille is given. A specific example of the calculation and comparison of fixed and variable costs for the labeling of plastic packaging ways: screen printing, 3D printing and laser thermal modification.

Keywords: screen printing, inkjet printing, sterilization, embossing, thermomodification, tactile marking, relief-point symbol, fixed and variable costs of the enterprise.

ISSUES OF ECONOMICS OF MEDIABUSINESS

Y.V.A. Biryukov

TECHNIQUE OF ASSESSMENT OF COMPETITIVE CAPACITY OF MASS MEDIA	70
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The author's technique of assessment of competitive capacity of the mass media (MM) on the basis of calculation of integrated indicators is presented in article. The characteristic of the key aspects of activity of the modern media organization influencing the level of her competitive potential is provided. Practical recommendations about increase in competitiveness of mass media on the basis of assessment of their potential are developed.

Keywords: technique, assessment, competitiveness, competitive potential, mass media, recommendation, key indicator.

M.V. Livson

PROMOTION OF THE CHANNEL ON THE BASIS OF EVENT MARKETING TOOLS	80
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The topic of the article is relevant, as it discusses issues related to the possibility of using innovative tools to keep the attention of the media audience, on the example of television. The paper presents an analysis of the features of the use of event marketing for the promotion of television content and proved its feasibility to attract the viewer's attention to television content, and as a consequence, increase the profitability of TV channels.

Keywords: content, audience, tools, profitability, television, promotion, event marketing, advertising, ATL marketing, BTL marketing.

G.N. Stepanova, V.A. Biryukov, A.S. Filonova

DEVELOPMENT OF STRATEGY OF A BRAND MANAGEMENT IN THE CONDITIONS
OF NEW ECONOMY OF THE 21ST CENTURY 90

Article is devoted to development of strategy of a brand management in the conditions of post-industrial economy of 21 centuries. Features of branding, advertising, communications in the conditions of a virtualization of production and consumption are described. Lines of the transindustries defining rules of conducting media industry in modern conditions are revealed. Special attention is paid to ways of information transfer by the modern media companies.

Keywords: branding, advertising, marketing, brand management, virtualization, media industry, organization, media company.

P.N. Sharonin

DEVELOPMENT OF A CONCEPTUAL MODEL TO IMPROVE THE EFFICIENCY
OF BUSINESS STRUCTURES OF THE MEDIA INDUSTRY 98

The article reveals the distinctive features of the Russian media industry market, which make it necessary to form a new approach to improve the efficiency of business structures of the media industry. And as a result, an author's model for managing the effectiveness of business structures of the media industry based on an integration strategy has been developed.

Keywords: model, efficiency, media industry, entrepreneurial structures, integration interaction.