

characteristic has been proposed to describe their behavior in the electronic decoding process. Frequency-contrast characteristics for different orientations of image structure, with reference to the stripe domains, are given. — S.C.G.

An Introduction to Polavision, Edwin H. Land, *Photographic Science and Engineering*, 21: 225-236, No. 5, Sept./Oct. 1977.

The first instant color movie system is described. It is based upon a new process for making a hyperfine additive color screen, an integral silver transfer film and an associated process which is essentially dry. The film is exposed, processed, viewed and rewound for re-viewing without being removed from its sealed cassette. The insertion of the cassette and the motion of the film within the cassette give all instructions to the player from start to rewind.

PROJECTION

Points in the Projection of Three-Dimensional Images Onto a Rear Projection Lenticular Screen (in Russian), A. M. Solovich, L. V. Akimkina and L. V. Dudareva, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*, 52-59, No. 82, 1976.

An analysis is made of the action of a rear projection lenticular screen when three-dimensional subjects are projected onto it, and of factors limiting the depth of sharpness of the image formed on the screen. Some mathematical relations have been obtained to determine the resolution of the image, and the problem of optimizing the properties of the lenticular screen and the projection system is discussed. — S.C.G.

(Translated from *Ref. Zh., Fotokinotekhnika.*)

SOUND

The Quality of Photographic Soundtracks on Film Prints (in Russian), V. A. Burgov, E. P. Gerasimova, G. M. Reznikov, M. S. Tkacheva, N. N. Usachev, N. A. Fridman and Z. V. Tsirulina, *Tekh. Kino Telev.*, 27-29, Jan. 1977.

Photographic soundtracks on motion-picture films printed in the Lenfilm Studios and the Leningrad Motion-Picture Printing Factory have much more linear distortion than the original magnetic tape recording. This is blamed on the deficient compensation in printing the soundtracks from the tapes. The distortion could be lowered by instituting more control in the printing stage. — S.C.G.

Progress in the Technology of Sound Recording for Motion-Pictures (in Russian), T. Yu. Rozinkina, *Tekh. Kino Telev.*, 14-22 April 1977.

A review is given of the progress of the technology of sound recording in the USSR since the 1950s. The technical specifications of the materials and apparatus in use over this period are tabulated. — S.C.G.

TELEVISION

Shooting Motion-Picture Frames with a Television Image (in Russian), N. L. Kul'chitskii, Yu. F. Malm'gin, and I. M. Ponomarev (Kiev Kino Studio), *Tekh. Kino Telev.*, 20: 13-19 Nov. 1976.

The use of television facilities and magnetic

video recording is becoming an important method of making combination frames and trick shots in feature films. These methods are less time-consuming, have wider possibilities, and are more economic with materials than conventional methods. Technical problems arising in practice are discussed. — S.C.G.

Evaluation of the Production of Video Films by Electronic Editing (in Russian), V. G. Makoveev, E. S. Uakin and K. O. Zagorovskii, *Tekh. Kino Telev.*, 3-7, April 1977.

Some features in the production of films and television programs recorded on videotape by electronic editing are discussed. Critical path analysis is shown to be readily applicable to the optimization of complicated editing work involving the use of several videotape units. — S.C.G.

Application of the High Resolution Return Beam Vidicon, Michael J. Cantella, *Optical Engineering*, 16: 257-261, No. 3, May/June 1977.

The Return Beam Vidicon (RBV) is a high performance electronic image sensor and electrical storage component. It can accept continuous or discrete exposures. Information can be read out with a single scan or with many repetitive scans for either signal processing or display. Resolution capability is 10,000 TVL/Height and at 100 lp/mm, performance matches or exceeds that of film, particularly with low contrast imagery. Electronic zoom can be effectively employed for image magnification. The high performance and flexibility of the RBV permit wide application in systems for reconnaissance, scan conversion, information storage and retrieval, and automatic inspection and test.

Between the unfolding of the history of America and the development of mass media in the U.S. there exist a parallel course and a mutual interaction that Prof. Gordon discusses with persuasive eloquence, well researched documentation and a broad approach to the diverse phenomena that shaped our destiny.

In the course of his volume, Prof. Gordon traces, from their beginnings to the present, the progress of American newspapers, magazines, movies, radio and television — an historic survey that covers the social, cultural, political and economic growth of our country from the colonial era to current times.

The organization of the book follows the chronological path of development of the mass media. After a rapid review of the evolution of the daily newspaper in other parts of the world (Great Britain, China, France), Prof. Gordon points out that freedom of the press was, if not an American invention, at least a firmly upheld tradition since the famous 1733 trial of Peter Zenger.

But the expansion of the true mass media was a distinctive contribution of our country — movies, radio and television achieving here a scope, a technology and an influence unparalleled abroad. The social consequences of their growth, their industrial and scientific effects on culture, their repercussion on politics, handled with the skill with which Prof. Gordon intertwines the various strands into a brilliant and engrossing historic tapestry, give a well deserved lasting value to a perceptive, informative and eminently readable volume. — *George L. George*, N.Y. Directors Council, Directors Guild of America, 685 West End Ave., New York, NY 10025.

Book Reviews

Current Developments in Copyright Law

(Two Volumes) Ed. Morteon David Goldberg. Published by the Practising Law Institute, 810 Seventh Ave., New York, NY 10019. Vol. I, 768 pp.; Vol. II, 712 pp. 5 × 8½ in. Price (two-volume set) \$20.

Volume I of the set gives the overall legislative history of the "new" copyright law, P.L. 94-533; Volume II contains the complete text of the law which became effective on 1 January 1978.

The many ramifications of the legislation affecting ownership of copyrights since the 1909 Federal Copyright Law, in effect with only minor amendments until 1978, make fascinating reading.

One of the most important aspects of the new law is the extension of the fair use doctrine to motion pictures, television and other audiovisual works. Fair Use has been the subject of bitter controversy over the years. Sections of the new Copyright Act dealing directly with this sensitive area include Sections 107, 108 and 110 dealing with limitations on exclusive rights, and section 504 — Remedies for Infringement, Statutory

Damages, Innocent Infringement. It should be noted that the new law has teeth in it. In addition to provisions regarding recovery of damages courts are empowered to order destruction of articles made or used in violation of the copyright owners rights including tapes, film negatives and other articles.

Detailed and clearly expressed explanations of how the new law affects motion pictures, audiovisual works and television are given in Volume I by Harry R. Olsson, Jr. (pp. 533-543) and Raymond D. Weisbond (pp. 545-556).

The two-volume set is a course handbook, one of some 150 published each year by the Practising Law Institute. The handbooks are intended to serve as educational supplements to each program. They may also be used by attorneys as reference manuals.

The Communications Revolution: A History of Mass Media in the United States

By George N. Gordon. Published (1977) by Hastings House Publishers, 10 E. 40 St., New York, NY 10016. 338 + viii pp. 6 × 9 in. Price (hardcover) \$14.95 (softcover) \$7.95.