TECHNOLOGY

Method and Apparatus for Compressing and Decompressing Images

OVERVIEW

Researchers at the University of Maryland have developed an efficient image compression method for transmission or storage where one or more regions of interest are emphasized. The regions of interest can be selected either by the user or system that is initially encoding the image, or by the user or system that receives and decodes the image.

For example, if user A is sending a photograph of five people to user B, user A could select the face of one person in the photograph as a region of interest. The entire image would then begin to be transmitted to user B; however on user B's computer the resolution of the selected face would be improved faster than the resolution of the remaining portions of the photograph. Similarly, user B who is receiving the photograph, could identify a second face that would also be transmitted faster and with higher resolution.

Transmission times and storage requirements may be reduced because the areas of lower resolution, i.e. the areas not selected as regions of interest, may contain less data. Other applications for the invention include digital cameras and digitally reproduced motion pictures.

For more information, contact the Office of Technology Commercialization, 301-405-3947 or otc@umd.edu.

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Additional Information

INSTITUTION

University of Maryland, College Park

LICENSE STATUS

Contact OTC for licensing information

CATEGORIES

- Information Technology

EXTERNAL RESOURCES

- Office of Technology Commercialization
- University of Maryland
- US Patent 6,801,665

- US Patent 6,891,973
- US Patent 7,221,804
- US Patent 7,257,266
- US Patent 7,697,771

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