

## IMAGE COMPRESSION

Xerox Corporation

### Initial Bidding Guidance: Mid 6 Figures

With early priority dates from September 1997, the disclosed portfolio covers techniques for compressing and decompressing data, including, but not limited to, the following:

1. Method for decompressing digital image data (e.g., JPEG files) that improves decompression rates using a variable block size inverse discrete cosine transform on a subset of the original data—e.g., data with a particular arrangement of zero values and location of “end of block” in the compressed serial data—without the data loss associated with high compression rates. [6,778,707]
2. Method of compression that digitizes and segments the image into a plurality of different classes—each of which is subsequently compressed individually—and determines and balances both the bit rate and extent of image distortion resulting from each compression in order to optimize image quality. [6,975,742]
3. Method and apparatus to control image quality and compression ratios in image segmentation via classifying pixel blocks of an image and determining how each image block should be compressed—e.g., with a lossy or a lossless technique—to achieve improved compression ratios and image quality. [7,218,784]
4. Processing compressed image sequences, where an image sequence is a temporal sequence of digitized image frames, with the intention to identify time instants in the image sequence, or regions within an image plane frame, that have particular characteristics, without the requirement to decompress the image sequence. [6,058,210]

**Forward Citing Companies:** Broadcom, Canon, Cisco, Citrix Systems, E.ON AG, Ericsson, Fujifilm, Hewlett-Packard, IBM, LG Electronics, LSI Corporation, Microsoft, Objectvideo, Pixel Tools Corporation, RealVNC Limited, Ricoh, Schneider Electric SA, Seiko, Sharp, Siecor, STMicroelectronics, The Carlyle Group

**Priority Date:** 09-15-1997

**Representative Claim:** US 7,218,784 – Claim #17

An apparatus comprising: means for receiving an image comprised of blocks; means for sequentially analyzing the blocks to determine at least two metrics therefor; means for determining a manner in which each block will be compressed based on the at least two metrics; and, means for compressing each block based on the determining means.

#### Contact:

For more information on the assets available for sale in this portfolio, contact Paul Greco.

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#### TECHNOLOGY

DATA COMPRESSION  
AND DECOMPRESSION  
(CODECS)

#### NOVELTY

FAST AND EFFICIENT  
ELECTRONIC DATA  
TRANSMISSION

#### IMPORTANCE

A VALUABLE PORTFOLIO  
FOR IMAGING, SOFTWARE,  
AND COMMUNICATION  
SYSTEMS COMPANIES

#### NUMBER OF ASSETS

16

#### PATENTS (13)

US 6,058,210  
US 6,778,707  
US 6,975,742  
US 7,218,784  
CA 2327063  
DE 60134291.7  
EP 1152594  
FR 1152594  
GB 1152594  
JP 3980332  
JP 4641650  
JP 4680377  
MX 237976

#### APPLICATIONS (3)

BR P100059161  
EP 00127178.2  
EP 01127876.9