

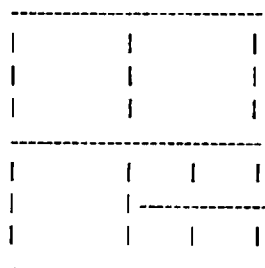
Source: AT&T Bell Laboratories (Authors: M. Reha Civanlar, Glenn L. Cash, Barry G. Haskell)

Title: Only P-frame coding for multipoint video

Subject: Multiple video displays with MPEG-2

Introduction:

Picture-in-picture or, in its more general form, simultaneous multiple video displays is a common feature for higher-end TV's of today. An economical way of providing this functionality with MPEG-2 based video is to code every frame as a P frame and use I macroblocks within these streams when needed. It is a relatively easy task to merge multiples of such bitstreams whose resolutions may add up to the full resolution with simple header manipulations so that the merged stream can be decoded by a regular decoder. Encoders may simulcast such lower resolution streams for this purpose. A possible screen with multiple video displays is shown below:



1/4 and 1/16 Resolutions in a Multi-Video Display

Syntax:

A sequence level indicator for P-only coding is needed.