A JOINT MOTION SEGMENTATION ALGORITHM FOR VIDEO CODING (MonPmPO3)

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**Abstract:**
Motion compensation is an essential problem in video coding. The main drawback of the usual motion estimation methods is that they divide the images into blocks or patches which do not correspond to moving objects. In this paper, we propose a method to estimate the motion in regions instead of blocks. We define a cost functional to estimate simultaneously the segmentation and the motion of the regions. We introduce a joint motion estimation and segmentation algorithm based on the derivation of this cost functional. We show some encouraging results for video compression.