Abstract

Current television transmission standards in Europe and other parts of the world operate with a 50Hz display refresh rate. The process of refreshing a CRT display causes a change of light intensity with time, called flicker. One method of removing the visibility of this flicker is to refresh the display at a higher frequency. The data in the additional fields may be generated from the original input signal when the images are static. When the images move, the subjective effect in each case is one of a double image. This is due to the data in the new fields being displayed in the wrong temporal position, and when the eye tracks the motion across the screen, a double image of one form or another results.
This appearance of a double image around moving objects may be reduced or removed by generating motion compensated 100Hz fields with the object in the correct position. When, however, the results of this technique are applied to motion compensated upconversion, objects or parts of the picture which fall outside the range of measurable velocities appear on the upconverted display with a very strong double image, resulting from the display of information in the wrong temporal position generated by uncompensated or 'fallback processing'.
According to the invention, the subjective strength of the double image is reduced by low pass filtering in a horizontal direction the components in the new fields of the upconverted signal which cause this double image.

Fig.6

This Sheet Has Been Replaced

