

Title (en)

REAL-TIME TRACKING OF AN OBJECT OF INTEREST USING A HYBRID OPTICAL AND VIRTUAL ZOOMING MECHANISM

Title (de)

ECHTZEITVERFOLGUNG EINES GESUCHTEN OBJEKTS MIT HYBRIDEM OPTISCHEN UND VIRTUELLEN ZOOMMECHANISMUS

Title (fr)

SUIVI D'UN OBJET D'INTERET EN TEMPS REEL UTILISANT UN MECANISME HYBRIDE DE VARIATION DE FOCAL OPTIQUE ET VIRTUELLE

Publication

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Application

**EP 00954423 A 20000627**

Priority

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Abstract (en)

[origin: WO0101685A1] A video processing system tracks an object of interest using a hybrid combination of (i) optical zooming by a pan-tilt-zoom (PTZ) camera, and (ii) virtual zooming on an image generated by that camera. The object of interest (22-*k*) is initially detected in an image (40) generated by the camera (18). An optical zooming operation (34) then adjusts pan and tilt settings to frame the object of interest (22-*k*), and zooms in on the object of interest (22-*k*) until one or more designated stopping criteria are met. A virtual zooming operation (36) processes the resulting optically-zoomed image (44) to identify and extract a particular region of interest (47), and then interpolates the extracted region of interest to generate a virtually-zoomed image (46). The designated stopping criteria may indicate, e.g., that the optical zooming continues until the object of interest (22-*k*) occupies a fixed or dynamic percentage of the resulting optically-zoomed image.

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**H04N 7/15**; **G01S 3/786**

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