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(54) Method and apparatus for visual motion recognition

(57) Disclosed is a moving object (31) recognition system. The system generates an optical flow vector field (28) based on a two-dimensional brightness signal (24). The system employs a bi-directional optical flow neural network (27) extended with a motion selective neural network (5). The motion selective neural network (5) interacts with the optical flow neural network (27) by

providing an attentional bias (12) for each of the optical flow neurons (3, 4). The motion selective neural network (5) is adjustable by input (15) to focus on a certain expected motion. The motion selective neural network (5) can be influenced by additional neural networks (37) which receive a bottom-up input (36) from the motion selective neural network (5).

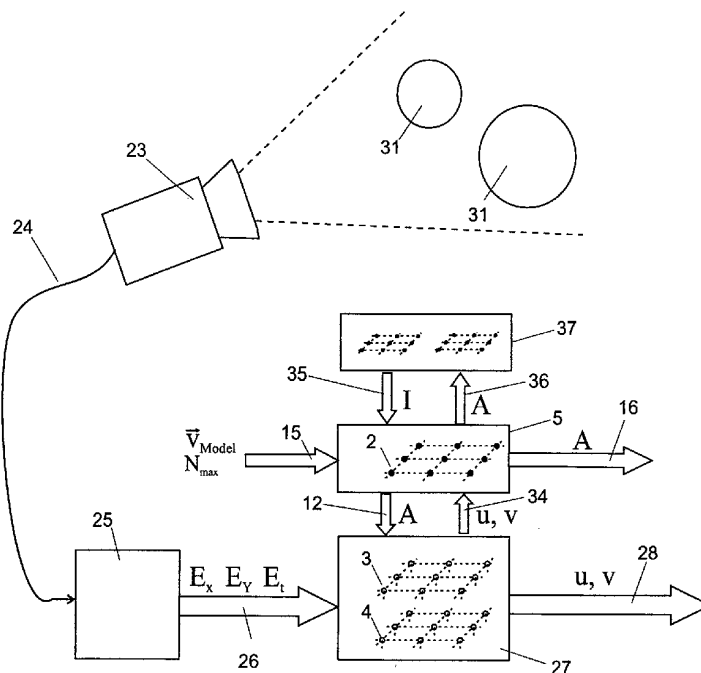


Fig. 9

