

29

tuning to each of said level of said contrast pyramid to produce a spatially oriented output; and

- a pooler, coupled between said transducer and said distancer, for averaging said transducer output over a kernel of pixels to produce a pooled output.

11. Apparatus for assessing visibility of differences between two input image sequences having a plurality of input images, said apparatus comprising:

- a temporal filter for filtering each of the input image sequences into a lowpass temporal response and a bandpass temporal response; and

- a spatial discriminator, coupled to said temporal filter, for generating an image metric from said lowpass and bandpass temporal responses, where said spatial discriminator comprises a contrast transform for computing a contrast pyramid having a plurality of levels for each image of said lowpass and bandpass temporal responses and where said spatial discriminator further comprises a gain control, coupled to said contrast transform, for applying cross masking of visual threshold to said contrast pyramids.

12. The apparatus of claim 11, wherein each of said input images contains a chrominance component and wherein said lowpass temporal response includes a chrominance lowpass temporal response.

13. A method of assessing visibility of differences between two input image sequences having a plurality of input images, where each of said input image contains a chrominance component, said method comprising the steps of:

- (a) filtering the chrominance components of each of the input image sequences into a lowpass temporal response; and
- (b) discriminating said lowpass temporal responses to generate an image metric.

14. The method of claim 13, further comprising the steps of:

- (a') generating a set of color coordinates for each image pixel of said input image from said input image sequences, where said input image sequences to said filtering step (a) comprises said color coordinates.

15. The method of claim 14, wherein said generating step (a') comprises the steps of:

- (a'1) generating CIE (Commission Internationale de l'Eclairage) coordinates for each image pixels of said input image from the input image sequences;

30

- (a'2) transforming said CIE coordinates into cone responses; and

- (a'3) generating said set of color coordinates from said cone responses.

16. The method of claim 15, wherein said set of color coordinates of step (a'3) is expressed as:

$$yb=(S/Y)-(S/Y)_{Des}$$

and

$$rg=(L/Y)-(L/Y)_{Des}$$

17. The method of claim 15, wherein said set of color coordinates of step (a'3) is expressed as:

$$yb=S$$

and

$$rg=(L-M)$$

18. The method of claim 13, where each of the input image further contains a luminance component, where said filtering step (a) further comprises the steps of:

- (a1) filtering the luminance components of each of the input image sequences into a second lowpass temporal response and a bandpass temporal response.

19. The method of claim 18, wherein said discriminating step (b) comprises the steps of:

- (b1) generating a contrast pyramid having a plurality of levels for each image of said lowpass and bandpass temporal responses; and
- (b2) applying cross masking of visual threshold to said contrast pyramids.

20. The method of claim 19, further comprising the step of:

- (a'') sampling each of the input image sequences to produce a retinal sampled image sequence, where said input image sequences to said filtering step (a) are said retinal sampled image sequences.

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