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(74) Agent: **OWENS, Jonathan, O.**; 162 North Wolfe Road,
Sunnyvale, California 94086 (US).

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(71) Applicant (for all designated States except US): **SONY CORPORATION** [JP/JP]; 1-7-1 Konan, Minato-ku, Tokyo, Tokyo 108-0075 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MAANI, Ehsan** [IR/US]; 3507 Palmilla Drive, Unit 3175, San Jose, California 95134 (US). **LIU, Wei** [CN/US]; 1376 Meadow Ridge Cir., San Jose, California 95131 (US). **TABATABAI, Ali** [US/US]; 10265 E. Estates Dr., Cupertino, California 95014 (US).

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[Continued on next page]

(54) Title: DIFFERENTIAL CODING OF INTRA DIRECTIONS (DCIC)

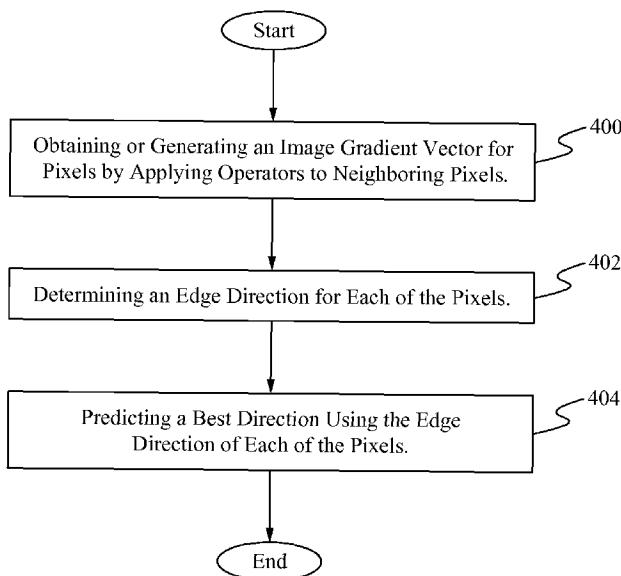
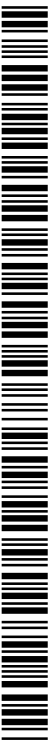


Fig. 4

(57) Abstract: Spatial domain directional intra prediction has been shown to be very effective to remove the correlation between the pixels in the current block and reconstructed neighbors. In AVC, 8 directional prediction modes (plus the DC prediction mode) are defined. The prediction mode number is signaled to the decoder using a simple predictive coding method. The previous intra prediction methods have two major disadvantages: lack of precision for arbitrary directional patterns and accuracy lack of accuracy to exploit geometric dependency between blocks. To address these issues, a new method accurately predicts the intra directions from reconstructed neighboring pixels and differentially encode the intra directions. This allows a more precise directional prediction without the significant increase in the cost for transmitting the side information.



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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	US 2010/0128995 A1 (GRUGEON et al) 27 May 2010 (27.05.2010) entire document	1, 2, 5-11, 14-20, 23-26 ----- 3, 4, 12, 13, 21, 22, 27-36
Y	US 6,697,660 B1 (ROBINSON) 24 February 2004 (24.02.2004) entire document	3, 12, 21, 30
Y	US 6,381,285 B1 (BORER) 30 April 2002 (30.04.2002) entire document	4, 13, 22, 31
Y	US 2009/0296808 A1(REGUNATHAN et al) 03 December 2009 (03.12.2009) entire document	27-36
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