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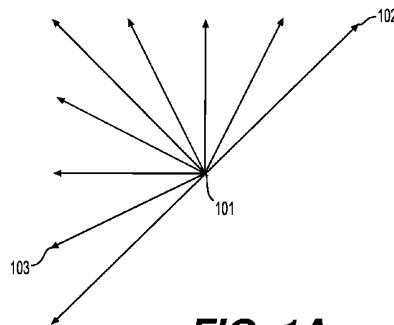
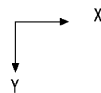
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(54) Title: CONTENT-ADAPTIVE ONLINE TRAINING WITH FEATURE SUBSTITUTION IN NEURAL IMAGE COMPRESSION

|     | R01 | R02 | R03 | R04 | R05 | R06 | R07 | R08 | R09 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| R10 | S11 | S12 | S13 | S14 |     |     |     |     |     |
| R20 | S21 | S22 | S23 | S24 |     |     |     |     |     |
| R30 | S31 | S32 | S33 | S34 |     |     |     |     |     |
| R40 | S41 | S42 | S43 | S44 |     |     |     |     |     |
| R50 |     |     |     |     |     |     |     |     |     |
| R60 |     |     |     |     |     |     |     |     |     |
| R70 |     |     |     |     |     |     |     |     |     |



**FIG. 1A**

(57) Abstract: Aspects of the disclosure provide a method and an apparatus for video encoding. The apparatus includes processing circuitry configured to generate an initial feature representation from an input image to be encoded and perform an iterative update of values of a plurality of elements in the initial feature representation. The iterative update includes generate a coded representation corresponding to a final feature representation based on the final feature representation that has been updated from the initial feature representation by a number of iterations of the iterative update. A reconstructed image corresponding to the final feature representation is generated based on the coded representation. An encoded image corresponding to the final feature representation having updated values of the plurality of elements is generated. One of (i) a rate-distortion loss corresponding to the final feature representation or (ii) the number of iterations of the iterative update satisfies a pre-determined condition.

[Continued on next page]

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