CLAIMS

1. A video encoding method comprising:

splitting an intra coding block in at least two transform blocks,

applying (601) a first transform on the transform blocks of the coding block,

in response to a decision (602) that a second transform is to be applied:

signaling (603) the use of a second transform for a coding block,

performing (604) the second transform on all the transform blocks of the coding block,

encoding the coding block with signaling information representative of the use of the second transform for the coding block.

2. A video decoding method comprising:

in response to information representative of a second transform for a coding block (650) that is split in at least two transform blocks:

performing the second inverse transform (660) on all the transform blocks of the coding block and

performing first inverse transforms (680) on the transform blocks of the coding block,

decoding the inversed transform blocks.

3. The method of any of claims 1 or 2 wherein the second transform is a Low-Frequency-Non-Separable Transform.

4. The method of any of claims 1 or 2 wherein the first transform is a 2D DCT2 transform in case a second transform is to be applied.

5. The method of any of claims 1 or 2 wherein the second transform is selected as an index in a list of transforms.

6. The method of any of claims 1 or 2 wherein the second transform is selected as a predetermined index in a list of transforms.

7. The method of any of claims 1 or 2 wherein the second transform is to be applied when the size of the coding block is greater than a threshold in width and height or when the size of the coding block is greater than a threshold in width or height or when the size of the coding block is smaller than a threshold in width and height, or when the size of the transform block is greater than a threshold in width and height, or when the size of the transform block is greater than a threshold in width or height or when the size of the transform block is smaller than a threshold in width and height.

8. A video encoding apparatus (100, 300) comprising means for:

applying (601) a first transform over a coding block,

splitting an intra coding block in at least two transform blocks,

applying (601) a first transform over a coding block,

in response to a decision (602) that a second transform is to be applied:

signaling (603) the use of a second transform for a coding block,

performing (604) the second transform on all the transform blocks of the coding block,

encoding the coding block with signaling information representative of the use of the second transform for the coding block.

9. A video decoding apparatus (200, 300) comprising means for

in response to information representative of a second transform for a coding block (650) that is split in at least two transform blocks:

performing the second inverse transform (660) on all the transform blocks of the coding block and

performing first inverse transforms (680) on the transform blocks of the coding block,

decoding the inversed transform blocks.

10. Computer-readable medium comprising instructions which, when executed by a computer, cause the computer to carry out the method of claim 1 or 2.