Claims

1. A method comprising:

applying an inverse tone mapping process comprising:

obtaining first standard dynamic range data;

obtaining an inverse tone mapping curve adapted to generate high dynamic range data from the first standard dynamic range data and inserting information representing the inverse tone mapping curve in metadata; and

generating high dynamic range data from the first standard dynamic range data using inverse tone mapping curve; and

applying a pre-processing process comprising:

obtaining the high dynamic range data and the metadata; and

generating second standard dynamic range data from the high dynamic range data applying a tone mapping curve resulting from an inversion of the inverse tone mapping curve derived from the information representing the inverse tone mapping curve inserted in the metadata.

2. The method according to claim 1 comprising computing a first look-up table and a second look-up table from the inverse of the inverse tone mapping curve, the first look-up table being adapted for tone mapping a luminance component of high dynamic range data and the second look-up table being adapted for correcting color components of the high dynamic range data and estimating first variables representative of a tone mapping function and second variables representative of a color correction function from the first and second look-up tables, the first and the second variables being the information representing the inverse tone mapping curve inserted in the metadata.

3. The method of claim 1 wherein the method is applied for each picture of the first standard dynamic range data or for groups of pictures of the first standard dynamic range data.

4. A device comprising electronic circuitry configured for:

applying an inverse tone mapping process comprising:

obtaining first standard dynamic range data;

obtaining an inverse tone mapping curve adapted to generate high dynamic range data from the first standard dynamic range data and inserting information representing the inverse tone mapping curve in metadata; and

generating high dynamic range data from the first standard dynamic range data using inverse tone mapping curve; and

applying a pre-processing process comprising:

obtaining the high dynamic range data and the metadata; and

generating second standard dynamic range data from the high dynamic range data applying a tone mapping curve resulting from an inversion of the inverse tone mapping curve derived from the information representing the inverse tone mapping curve inserted in the metadata.

5. The device according to claim 4 wherein, the electronic circuitry is further configured for computing a first look-up table and a second look-up table from the inverse of the inverse tone mapping curve, the first look-up table being adapted for tone mapping a luminance component of high dynamic range data and the second look-up table being adapted for correcting color components of the high dynamic range data and for estimating first variables representative of a tone mapping function and second variables representative of a color correction function from the first and second look-up tables, the first and the second variables being the information representing the inverse tone mapping curve inserted in the metadata.

6. Non-transitory information storage medium storing program code instructions for implementing the method according to claim 1.