CLAIMS

1. An image decoding method, comprising:

performing arithmetic decoding on a first flag indicating whether or not an SAO parameter for a target block to be decoded is identical to an SAO parameter for a left neighboring block immediately left of the target block, the SAO parameter for the target block indicating details of Sample Adaptive Offset (SAO) processing;

performing arithmetic decoding on the SAO parameter for the target block, when the first flag indicates that the SAO parameter for the target block is different from the SAO parameter for the left neighboring block; and

performing, according to the first flag, SAO processing on a luminance signal, a chrominance Cb signal, and a chrominance Cr signal which are included in the target block, by using one of: the SAO parameter for the target block which has been applied with the arithmetic decoding; and the SAO parameter for the left neighboring block,

wherein, in the performing of the arithmetic decoding on the first flag, a single first context is used to perform the arithmetic decoding on the first flag for the luminance signal, the chrominance Cb signal, and the chrominance Cr signal,

the single first context is used in common for decoding a plurality of the first flag in a same picture.

2. The image decoding method according to Claim 1, further comprising

performing arithmetic decoding on a second flag indicating whether or not the SAO parameter for the target block is identical to an SAO parameter for an upper neighboring block immediately above the target block,

wherein, in the performing of the arithmetic decoding on the first flag and the performing of the arithmetic decoding on the second flag, a same context determination method is used to determine both: a context to be used in the arithmetic decoding on the first flag; and a context to be used in the arithmetic decoding on the second flag.

3. The image decoding method according to any one of Claims 1 and 2,

wherein, in the performing of the arithmetic decoding on the first flag, a single context is used to perform arithmetic decoding on: a luminance first flag that is the first flag for the luminance signal; a Cb first flag that is the first flag for the chrominance Cb signal; and a Cr first flag that is the first flag for the chrominance Cr signal.

4. The image decoding method according to any one of Claims 1 and 2,

wherein in the performing of the arithmetic decoding on the first flag, the single context is used to perform the arithmetic decoding on, as the first flag, a single first fiag for the luminance signal, the chrominance Cb signal, and the chrominance Cr signal.

5. The image decoding method according to any one of Claims 1 to 4,

wherein, in the performing of the SAO processing,

each of pixels included in the target block is classified to one of categories,

the each of the pixels is added with an offset value corresponding to the classified one of the categories, and

the SAO parameter includes: information indicating a method of classifying to the categories; and information indicating the offset value.

6. An image decoding apparatus, comprising:

control circuitry; and

storage accessible from the control circuitry,

wherein the control circuitry executes:

performing arithmetic decoding on a first flag indicating whether or not an SAO parameter for a target block to be decoded is identical to an SAO parameter for a left neighboring block immediately left of the target block, the SAO parameter for the target block indicating details of Sample Adaptive Offset (SAO) processing;

performing arithmetic decoding on the SAO parameter for the target block, when the first flag indicates that the SAO parameter for the target block is different from the SAO parameter for the left neighboring block; and

performing, according to the first fiag, SAO processing on a luminance signal, a chrominance Cb signal, and a chrominance Cr signal which are included in the target block, by using one of: the SAO parameter for the target block which has been applied with the arithmetic decoding; and the SAO parameter for the left neighboring block,

wherein, in the performing of the arithmetic decoding on the first flag, a single first context is used to perform the arithmetic decoding on the first flag for the luminance signal, the chrominance Cb signal, and the chrominance Cr signal,

the single first context is used in common for decoding a plurality of the first flag in a same picture.