

WHAT IS CLAIMED IS:

1. A computer-implemented method for encoding a target value for storage and/or transmission comprising:
 - constructing a set of values, the constructed set of values including the target value and the constructed set of values being characterized by a constructed set descriptor;
 - differentiating the target value from the constructed set of values by determining a differentiation descriptor; and
 - representing the target using the constructed set descriptor and the differentiation descriptor.
2. The computer-implemented method of claim 1 wherein constructing a set of values includes identifying a senior most bit of the target value.
3. The computer-implemented method of claim 1 wherein constructing a set of values includes computing a number of on bits of the target value.
4. The computer-implemented method of claim 1 wherein constructing a set of values includes computing a number of off bits of the target value.
5. The computer-implemented method of claim 1 wherein constructing a set of values includes creating a combinatorial ordered set.
6. The computer-implemented method of claim 5 wherein the combinatorial ordered set is defined by a senior most bit of the target value and a number of on bits of the target value.
7. The computer-implemented method of claim 5 wherein the combinatorial ordered set is defined by a senior most bit of the target value and a number of off bits of the target value.
8. The computer-implemented method of claim 6 wherein the constructed set descriptor includes the senior most bit of the target value and the number of on bits of the target value.