

Sampling method

H03M-007/40*

H03M

Coding Method

Software

Algorithm

Communication processes

Signals Processing

```

1  namespace Game
2  {
3      public class Vehicle
4      {
5          public virtual void PostInitialization() {}
6          public virtual void Tick() {}
7          public virtual void Receive() {}
8          public virtual void Feedback() {}
9      }
10
11      public class BuggyPam : Vehicle
12      {
13          public override void PostInitialization() {}
14          public override void Tick() {}
15          public override void Receive() {}
16          public override void Feedback() {}
17      }
18
19      public class Program
20      {
21          static void Main()
22          {
23              var vehicle = new Vehicle();
24              vehicle.PostInitialization();
25              vehicle.Tick();
26              vehicle.Receive();
27              vehicle.Feedback();
28          }
29      }
30  }

```



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Distributed arithmetic coding method



Description

The process of arithmetic coding, object of the patent, is based on a probabilistic estimates, according to the "Elias Encoding" (in symbols through recursive intervals).

The source code is divided into sub-intervals, representing a partition of original one, and each of these is associated with a symbol.

The algorithm is able to reconstruct the original sequence of the code, with an a-priori knowledge(or having a very accurate

estimate) of both the probability that each symbol can occur and the amplitude of the interval. Then, a simpler step of encoding / decoding of the transmitted signal is allowed at equal bit rate.

Applications

- Analysis and processing of signals
- Wireless Sensor Networks
- Encoding and decoding communication channels
- Channel codes
- Frames Video Sequence

Advantages

- Simplified and reduced costs of communication and coding between two or more dependent data sources (eg. Wireless sensor networks)
- Simplified communication coding in the case of a single source artificially subdivided into sub-sources encoded separately (eg. Frames video sequence)
- Higher bit-rate
- No loss of data due to encoding

