Other attributes of the engine include:

(i) the ability to treat graphs and arcs as equivalent when an arc label in fact denotes a graph – this gives the engine recursive power; and

(ii) the ability to create multiple instances of the same arc and execute them in parallel with management of failure of the parallel branches. I.e. when one branch of a parallel arc fails, the engine automatically fails all the other executing parallel branches.

The detailed logic of the coordination engine 210 is as follows:

```
Vector executionQueue // queue of nodes awaiting execution
Vector messageQueue // queue of new messages
Vector messageWaitQueue // queue of nodes awaiting messages

public void run() {
  Node node;

  while(running) {
    node = (Node)dequeue();
    node.run(this);
  }
}

void enqueue(Node node) {
  add node to the executionQueue
  wake up the engine if it is sleeping
}
Node dequeue() {
  Node node;
  Time t;
```