stepComp(currentBsState)

```
1: currentContext ← context[currentBsState]
2: for each state in states[currentContext] do
3:    tran ← trOut[state]
4:    while tran ≠ NIL do
5:       if isEventPresent(currentContext, tran) and isBufferFree(currentContext, tran) and
         isTransitionObservable(currentContext, tran) then
6:          newContext ← createNewContext(currentContex, tran)
7:          newTransition ← createNewTransition(currentContext, tran)
8:          item ← contextSearch(newContext, ctHashMap)
9:          if item ≠ NIL then
10:            destinationBsState ← subValue[item]
11:            dest[newTransition] ← destinationBsState
12:         else
13:            createNewState(newContext, tran)
14:            stepComp(destinationBsState)
15:         end if
16:      end if
17:   end while
18: end for
```

createNewContext(context,transition)

1: $newContext \leftarrow initializeContext()$
2: $state \leftarrow dest[transition]$
3: $actionRequest \leftarrow actIn[transition]$
4: $eventRequest \leftarrow event[actionRequest]$
5: **if** $eventRequest \neq NIL$ **then**
6: $\quad eventBuffer \leftarrow NIL$
7: **end if**
8: $actionProduced \leftarrow actOut[tran]$
9: **while** $actionProduced \neq NIL$ **do**
10: $\quad l2 \leftarrow link[actionProduced]$
11: $\quad pos2 \leftarrow index[l2]$
12: $\quad buffer[newContext][pos2] \leftarrow actionProduced$
13: $\quad actionProduced \leftarrow next[actionProduced]$
14: **end while**
15: **********
16: $obsIndex[newContext] \leftarrow obsIndex[newContext] + 1$
17: $currentObs[newContext] \leftarrow prev[currentObs[newContext]]$
18: {la lista parte dalla coda e poi va verso la testa, gli eventi sono specchiati rispetto ai valori di input}
19: **********
20: **return** $newContext$

createNewState(context,transition)

1: $destinationBsState \leftarrow initializeState()$
2: $context[destinationBsState] \leftarrow context$
3: **if** $isFinal(context)$ **then**
4: $\quad final[destinationBsState] \leftarrow TRUE$
5: **else**
6: $\quad finale[destinationBsState] \leftarrow FALSE$
7: **end if**
8: **********
9: **if** $currentObs[context] \neq NIL$ **then**
10: $\quad final[destinationBsState] \leftarrow FALSE$
11: **end if**
12: **********
13: $netBs \leftarrow addState(destinationBsState)$
14: $dest[transition] \leftarrow destinationBsState$
15: $addContextToHashMap(context)$

isTransitionObservable(context,transition)

1: $label \leftarrow NIL$
2: $currentObservation \leftarrow currentObs[context]$
3: {Controllo sulla presenza della lista di osservazioni}
4: **if** $currentObservation \neq NIL$ **then**
5: $\quad label \leftarrow currentObervation$
6: $\quad transitionLabel \leftarrow obs[tansition]$
7: $\quad idObsarvation \leftarrow id[transitionLabel]$
8: **end if**
9: **return** $transitionLabel \neq NIL$ **and** ($label \neq NIL$ **or** $idLabel \neq idObsarvation$)