

Algorithm

```
A1 function SEND( $m$ )
A2   RB-cast( $self, m, \text{hash}(H)$ )
A3 end function

A4 function RB-RECEIVED( $j, m, h$ )
A5    $\text{queue}[j] \leftarrow \text{queue}[j].\text{push}(\{(m, h)\})$ 
A6   if  $|\text{queue}[j]| = 1$  then                                 $\triangleright$  If this is the first message in the queue, process it
A7     processQueue()
A8   end if
A9 end function

A10 function PROCESSQUEUE
A11   for  $j$  such that  $\text{queue}[j] \neq \emptyset$  do
A12      $\{(m, h)\} \leftarrow \text{queue}[j].\text{pop}()$ 
A13     if  $\exists A : A \subseteq H \wedge \text{hash}(A) = h$  then
A14        $H \leftarrow H \cup \{m\}$ ;  $\text{recv}(m)$ ;  $\text{queue}[j] \leftarrow \text{queue}[j] \setminus \{(m, h)\}$ 
A15       processQueue(); return ;
A16     end if
A17   end for
A18 end function
```
