procedure $SplitPATH(\hat{T})$

$T_1 := \alpha^{-1}(\widehat{s_1}) \cap S_0$;

$j := 1$;

if $T_1 = \emptyset$ **then output** "*spurious initial state*";

while $T_j \neq \emptyset$ and $j < n$ **do**

$j := j + 1$;

$T_j := Image(T_{j-1}) \cap \alpha^{-1}(\widehat{s_j})$;

end while

if $T_j \neq \emptyset$ **then**

output "*counterexample exists*";

else

output $j - 1, T_{j-1}$;

end if

end procedure