section *fibsec* **parents** *circus_toolkit*

channel $out : \mathbb{N}$

process $Fib \mathrel{\widehat=}$ **begin**
state $FibState == [x, y : \mathbb{N}]$
$InitFibState == [FibState' \mid x' = y' = 1]$
$InitFib \mathrel{\widehat=} out\,!1 \longrightarrow out\,!1 \longrightarrow InitFibState$
$OutFibState == [\Delta FibState;\ next! : \mathbb{N} \mid next! = y' = x + y \land x' = y]$
$OutFib \mathrel{\widehat=} \mu\ X \bullet (\mathbf{var}\ next : \mathbb{N} \bullet OutFibState\ ;\ out\,!next \longrightarrow X) \bullet InitFib\ ;\ OutFib$
end