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    to
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    inv_1: $to \in \mathbb{N}$
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Initialisation
    begin
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        init_1: $to := 0$
    end
Event copy $\langle ordinary \rangle$ $\widehat{=}$
    begin
        act_0: $to := from$
    end
END

MACHINE Simple1
REFINES Simple
VARIABLES

from

to

tmp

copying

INVARIANTS

inv1_1: $tmp \in \mathbb{N}$

inv1_2: $copying \in BOOL$

inv1_3: $copying = TRUE \Rightarrow tmp = from$

EVENTS
Initialisation ⟨extended⟩

begin

init_0: $from :\in \mathbb{N}$

init_1: $to := 0$

init1_1: $tmp :\in \mathbb{N}$

init1_2: $copying := FALSE$

end
Event copyStart ⟨ordinary⟩ $\widehat{=}$

when

grd1_1: $copying = FALSE$

then

act1_1: $tmp := from$

act1_2: $copying := TRUE$

end
Event copyDone ⟨ordinary⟩ $\widehat{=}$
refines copy

when

grd1_1: $copying = TRUE$

then

act1_1: $to := tmp$

grd1_2: $copying := FALSE$

end
END