researcher_globaltime.imi

3 clocks	4 parameters	1 discrete		Initial
x t global_time	pTotal pNeed MAXBREAK pCoffee		nb	pCoffee >= 0 & MAXBREAK >= 0 & pNeed >= 1 & pTotal >= 0 & t = 0 & global_time = 0 & x = 0

researcher

working | pTotal >= x

5*x >= 4*pTotal

workingFast | pTotal >= x
| x' = 2

pTotal = x
done
x := 0
t := 0

restart
x := 0
t := 1/2*pNeed
nb := 0

pTotal = x
done
x := 0
t := 0

5*x >= 4*pTotal
& pCoffee = t
drunk
t := 0

MAXBREAK >= 1 + nb
& 5*t >= 3*pNeed
drink
t := 0
nb := nb + 1

MAXBREAK >= 1 + nb
& t >= pNeed
drink
t := 0
nb := nb + 1

pCoffee = t
drunk
t := 0

finished | True
| stop x,t

coffeeing | pCoffee >= t
| stop x