

spec My_Checker =

SFO and Nat

then

sorts integer < Nat; Nat < DATA

pred design_Distance: Thing * Thing * Nat

pred standard_Distance: Thing * Thing * Nat

pred proper_Distance: Thing * Thing * Boolean

forall a,b:Thing

.exist c:Nat

Hole(a) \wedge Hole(b) \wedge c in Nat \Rightarrow standard_Distance(a,b,c)

forall a,b:Thing

.exist c:Nat

Hole(a) \wedge Hole(b) \wedge c in Nat \Rightarrow design_Distance(a,b,c)

forall a,b:Thing;c,d:Nat

.design_Distance(a,b,c) \wedge standard_Distance(a,b,d) \wedge (d < c) \Rightarrow proper_Distance(a,b,True)