COMPACT and its complement are proper classes

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In[1]: = SetDirectory["i:"]; << goedel62.08a; << tools.m
:Package Title: goedel62.08a 2004 October 8 at 9:55 a.m.
It is now: 2004 Oct 9 at 11:2
Loading Simplification Rules
TOOLS.M Revised 2004 September 25
weightlimit = 40

COMPACT is a proper class

In[2]:= Map[not, SubstTest[implies, and[subclass[u, v], member[v, V]],
member[u, V], {u -> FINITE, v -> COMPACT}]]


In[3]:= % /. Equal -> SetDelayed

In[4]:= member[COMPACT, x] // AssertTest


In[5]:= member[COMPACT, x_] := False

complement[COMPACT] is a proper class

In[6]:= Map[member[# , V] &,
ImageComp[inverse[POWER], COARSER, complement[Image[COARSER, FINITE]]]]


In[7]:= % /. Equal -> SetDelayed

In[8]:= Map[member[# , V] &,
ImageComp[BIGCUP, COARSER, complement[Image[COARSER, FINITE]]]] // Reverse

Out[8]= member[complement[COMPACT], V] = False

In[9]:= % /. Equal -> SetDelayed
In[10]:= member[complement[COMPACT], x] // AssertTest

out(10)= member[complement[COMPACT], x] == False

In[11]:= member[complement[COMPACT], x_] := False