```
closed_term_mng  THM

⊢  ∀t:Term, e,s,a1,a2,tr:Top.
|  closed_term(t) ⇒ ([[t]] e s a1 tr ∼ [[t]] e s a2 tr)
| by D 0 THENA Auto THEN TermInd (-1)

|    THEN Unfold ‘term_mng‘ 0 THEN Reduce 0
THEN Try (Complete Auto)
|
THEN Try (Fold ‘term_mng‘ 0)

|    THEN RepeatFor 6 (D 0 THENA Auto)
|
|\
| 1. Term
| 2. u : Term→Type
| 3. t:{v:Term| u(v) }→∀e,s,a1,a2,tr:Top.
|    closed_term(t) ⇒ ([[t]] e s a1 tr ∼ [[t]] e s a2 tr)
| 4. x : Label
| 5. Top
| 6. Top
| 7. a1 : Top
| 8. a2 : Top
| 9. Top
| 10. closed_term(x)
| ⊢  a1 ∼ a2
|   by Unfold ‘closed_term‘ (-1) THEN
|
|      Unfold ‘term_free_vars‘ (-1) THEN
|
|      Reduce (-1) THEN SimpHyp (-1)
|
.\
. 1. Term
. 2. u : Term→Type
. 3. t:{v:Term| u(v) }→∀e,s,a1,a2,tr:Top.
.    closed_term(t) ⇒ ([[t]] e s a1 tr ∼ [[t]] e s a2 tr)
. 4. y1 : {v:Term| u(v) }
. 5. y2 : {v:Term| u(v) }
. 6. e : Top
. 7. s : Top
. 8. a1 : Top
. 9. a2 : Top
. 10. tr : Top
. 11. closed_term(y1 y2)
. ⊢  ([[y1]] e s a1 tr([[y2]] e s a1 tr)) ∼ ([[y1]] e s a2 tr
.                                             ([[y2]] e s a2 tr))
.   by RWW "closed_tapp" (-1) THENA Auto
.
.      THEN EqCD THEN BackThruSomeHyp THEN Auto
END
```