```
append_wf  THM

⊢  ∀T:Type, as,bs:T List. (as @ bs) ∈ T List  by UnivCD
|
1. T : Type
2. as : T List
3. bs : T List
⊢  (as @ bs) ∈ T List  by ListInd 2
|
|\
| ⊢  (nil @ bs) ∈ T List  by RecCaseSplit ‘append‘
|
.\
. 4. u : T
. 5. v : T List
. 6. (v @ bs) ∈ T List
. ⊢  ((u.v) @ bs) ∈ T List  by RecCaseSplit ‘append‘
. |
. ⊢  u.(v @ bs) ∈ T List  by Analyze THEN Trivial
END
```