```
sfa_doc_some_via_so  THM

⊢  ∀A:Type, B:(A→Prop).
|  (∃x:A. B(x)) ⟺ (∀C:Prop. (∀x:A. B(x) ⇒ C) ⇒ C)  by UnivCD
|
1. A : Type
2. B : A→Prop
⊢  (∃x:A. B(x)) ⟺ (∀C:Prop. (∀x:A. B(x) ⇒ C) ⇒ C)
| by 2 Times Analyze
|
|\
| 3. ∃x:A. B(x)
| ⊢  ∀C:Prop. (∀x:A. B(x) ⇒ C) ⇒ C  by Analyze-1
| |
| 3. x : A
| 4. B(x)
| ⊢  ∀C:Prop. (∀x:A. B(x) ⇒ C) ⇒ C  by Auto
| |
| 5. C : Prop
| 6. ∀x:A. B(x) ⇒ C
| ⊢  C  by FwdThru: Hyp:-1 on [ B(x) ]
|
.\
. 3. ∀C:Prop. (∀x:A. B(x) ⇒ C) ⇒ C
. ⊢  ∃x:A. B(x)  by BackThru: Hyp:-1
. |
. 4. x : A
. 5. B(x)
. ⊢  ∃x:A. B(x)  by Witness: x
END
```