```
decidable_functionality  THM

⊢  (P ⟺ Q) ⇒ (Dec(P) ⟺ Dec(Q))  by GenUnivCD
|
|\
| 1. P : Prop
| 2. Q : Prop
| 3. P ⟺ Q
| 4. Dec(P)
| ⊢  Dec(Q)
|   by Using [‘A’,P]
|      (BackThru
|       Thm* Dec(A) ⇒ (A ⟺ B) ⇒ Dec(B)
|       {iff_preserves_decidability})
|
.\
. 1. P : Prop
. 2. Q : Prop
. 3. P ⟺ Q
. 4. Dec(Q)
. ⊢  Dec(P)
. | by Using [‘A’,Q]
. |    (BackThru
. |     Thm* Dec(A) ⇒ (A ⟺ B) ⇒ Dec(B)
. |     {iff_preserves_decidability})
. |
. |\
. | ⊢  Dec(Q)  by Trivial
. |
. .\
. . ⊢  Q ⟺ P  by InvertRel 3
END
```