```
ma-outlinks-join  THM

⊢  ∀A,B:MsgAForm, ltg:(IdLnk×Id×Type), i:Id.
|  (ltg ∈ ma-outlinks(A ⊕ B;i))
|  ⇒
|  (ltg ∈ ma-outlinks(A;i)) ∨ (ltg ∈ ma-outlinks(B;i))
| by Repeat (Analyze 0 THENA Complete Auto)
|
1. A : MsgAForm
2. B : MsgAForm
3. ltg : IdLnk×Id×Type
4. i : Id
⊢  (ltg ∈ ma-outlinks(A ⊕ B;i))
|  ⇒
|  (ltg ∈ ma-outlinks(A;i)) ∨ (ltg ∈ ma-outlinks(B;i))
| by RepeatFor 8 (Analyze -4) THEN RepeatFor 8 (Analyze -3)
|    THEN
|    Repeat
|    (Unfolds [‘ma-outlinks‘;‘ma-join‘;‘mk-ma‘] 0 THEN Reduce 0)
|
1. x:Id fp-> Top
2. A3 : x:Knd fp-> Type
3. x:Id fp-> Top
4. x:Id fp-> Top
5. x:Knd×Id fp-> Top
6. x:Knd×IdLnk fp-> Top
7. x:Id fp-> Top
8. x:IdLnk×Id fp-> Top
9. Top
10. x:Id fp-> Top
11. B3 : x:Knd fp-> Type
12. x:Id fp-> Top
13. x:Id fp-> Top
14. x:Knd×Id fp-> Top
15. x:Knd×IdLnk fp-> Top
16. x:Id fp-> Top
17. x:IdLnk×Id fp-> Top
18. Top
19. ltg : IdLnk×Id×Type
20. i : Id
⊢  (ltg ∈ da-outlinks(A3 ⊕ B3;i))
   ⇒
   (ltg ∈ da-outlinks(A3;i)) ∨ (ltg ∈ da-outlinks(B3;i))
  by Auto
     THEN
     BackThru
     Thm* ∀ltg:(IdLnk×Id×Type), i:Id, da1,da2:k:Knd fp-> Type.
          (ltg ∈ da-outlinks(da1 ⊕ da2;i))
          ⇒
          (ltg ∈ da-outlinks(da1;i)) ∨ (ltg ∈ da-outlinks(da2;i))
     {da_DASH_outlinks_DASH_join}
END
```