(1) Entrée : $\langle A0 \rangle_x$, $\langle A1 \rangle_y$

Sortie en libre $\langle A2 \rangle = \text{angle}(x,y) \in]-\pi, \pi]$

(2) Met $\langle A0^e \rangle = |\langle A0^e \rangle|$ ($\frac{\pi}{4}$ est connu)

```
XFFANG: BCLR  #7,2(A0)
        BNE   ML94          → x < 0
                            ↓ x > 0
ML86 :  MOVE.L A6,-(SP)
        MOVE.L (A1),-(SP)   donne le sgn(y)
        BCLR  #7,2(A1)      |y|
        BSR   XFLCMP        compare A0 et A1
        MOVE.L (SP)+,A2     } remet le signe
        MOVEM.L A2/A2,(A1)  }
        BMI   ML92          → x < |y|
        EXG   A0,A1         ↓ |y| < x
        BSR   XFLDIV        u = y/x
        MOVE.L A2,A0
        BSR   XFFATN3       α = Arctg(u)
        BRA   KL860
```

```
CMP  #$4000,2(A0)
BNE  ML86        → x = 0
BTST #7,2(A1)
BEQ  ML86        → y ≥ 0
MOVE.L A0,A2   } pour π/2
BSR  ML82      }
BSET #7,2(A2)  -π/2
RTS
```

```
ML92: BSR   XFLDIV      u = x/y
                        → voir p 152.1
      MOVE.L A2,A0
      BSR   XFFATN3     β = Arctg(u)
      BRA   ML800       met α = (π/2 - β) sgn(β)
```

```
ML94: MOVE.L A6,-(SP)   MOVE 2(A1),-(SP) signe de y ⊗
      BSR   ML86        β = angle(-x, y)
      ADDQ  #2,(A2)     BSR XFFDV4  β/4
      BCLR  #7,2(A2)    |β|
      BEQ   ML96        TST (SP)+ ⊗
      BSR   ML82        BPL ML96 → y ≥ 0
      SUBQ  #1,(A2)     π/2 + β/2
      BRA   ML860       π + β
ML96: BSR   ML82        π/2 - β/2
      SUBQ  #1,(A2)     π - β
      BRA   ML860       → β < 0 π - β
```

```
ML92:MOVE  2(A1),-(SP)      signe (y)
     BSR   XFLDIV           u = x/y
     MOVE.L A2,A0
     BSR   XFFATN3          β = Arctg(u)
répète → BSR   XFFDV2       β/2
ML800    BCLR  #7,2(A2)
         TST   (SP)+        teste sgn(β) car β peut être nul, avec y<0
                            [angle (1/x ε, -ε/y)]
         BPL   ML80. →      β ≥ 0
         BRA   ML802        met α = (π/2 - β) sgn(y)
```