

## comp-atom-ap<sup>0,22</sup>

```
comp-atom-ap(g; f; x; a)
≡def let f' = λa. g ∘ f in
      let x' = λa. x in
      let F = λb, c. f'(b, x'(c)) in
      let L = atoms-in(F) in
      let b = new-atom((a.L)) in
      if F(b, a) =2 a ∈ Atom → inr(f'(b))
      ; F(a, b) =2 a ∈ Atom → inl(λf. g(f(x'(b))))
      else inr(λx. hd(list-diff(AtomDeq; monitor((f'(b, x))); b.L))) fi
```