```
d[pd_PD, a_] := S[pd, a] /. {
    (c_x_ c_y_ → c_z_ ) * _. :>
      {vp_x vp_y → vp_z, vp_x vm_y → vm_z, vm_x vp_y → vm_z,
       vm_x vm_y → 0}, (c_z_ → c_x_ c_y_) * _. :>
      {vp_z → vp_x vm_y + vm_x vp_y, vm_z → vm_x vm_y}
  }
```