Conversion from Alt Azi to RA Dec

See <http://star-www.st-and.ac.uk/~fv/webnotes/chapter7.htm> or

<https://sceweb.sce.uhcl.edu/helm/WEB-Positional%20Astronomy/Tutorial/Conversion/Conversion.html>

Here are all the equations together:

**sin(δ) = sin(a)sin(φ) + cos(a) cos(φ) cos(A)**

**sin(H) = - sin(A) cos(a) / cos(δ)**

**cos(H) = { sin(a) - sin(δ) sin(φ)} / cos(δ) cos(φ)**

**α = t – H**

**φ=latitude**

**α=RA**

**δ=Dec**

**a=altitude (=90deg-zenith)**

**A=Azimuth angle (east of north)**

**H=hour angle of object**

**t=local sidereal time**