Nice Problem! Thanks for making my brain work for the first time in 24 hours.

Remember $P_AV_A = n_ART$, so $[A] = n_A/V_A = P_A/ RT$
Similarly $[B] = n_B/V_B = P_B/ RT$
$[C] = n_C/V_C = P_C/ RT$
$[D] = n_D/V_D = P_D/ RT$

Hence,

Kc = $\frac{[C]^c[D]^d}{[A]^a[B]^b}$ for aA + bB = cC + dD

Substituting the first paragraph's equations into the above:

$$Kc = \frac{[P_C / RT]^c[P_D / RT]^d}{[P_A / RT]^a[P_B / RT]^b} = \frac{P_C P_D}{P_A P_B}\frac{(RT)^a(RT)^b}{(RT)^c(RT)^d}$$

But Kp = $\frac{P_C P_D}{P_A P_B}$, so

$$Kc = Kp\frac{(RT)^a(RT)^b}{(RT)^c(RT)^d}$$

Isolate Kp:

$$Kp = K_C\frac{(RT)^c(RT)^d}{(RT)^a(RT)^b} = K_C\frac{(RT)^{c+d}}{(RT)^{a+b}}$$

$$Kp = K_C\,(RT)^{(c+d)-(a+b)}$$

$$Kp = Kc\,(RT)^{\Delta n}$$