$$\left(\sinh(x+23^{x})^{x}\right)' = \sinh(x+23^{x}) \cdot x \cdot \left(\frac{\cosh(x+23^{x}) \cdot (1+\ln(23) \cdot 23^{x})}{\sinh(x+23^{x})} \cdot x + \ln(\sinh(x+23^{x}))\right)$$