The right hand side of the equation:

$$\cosh\left(b_{\mathcal{V}_1} + W_{\mathcal{V}_{1_5}}\sigma_5^z + W_{\mathcal{V}_{1_6}}\sigma_6^z + W_{\mathcal{V}_{1_{16}}}\sigma_{16}^z - W_{\mathcal{V}_{1_1}}\sigma_1^z\right)\cosh\left(b_{\mathcal{V}_2} + W_{\mathcal{V}_{2_7}}\sigma_7^z + W_{\mathcal{V}_{2_8}}\sigma_8^z + W_{\mathcal{V}_{2_9}}\sigma_9^z - W_{\mathcal{V}_{2_2}}\sigma_2^z\right)\times$$
$$\cosh\left(b_{\mathcal{V}_3} + W_{\mathcal{V}_{3_{10}}}\sigma_{10}^z + W_{\mathcal{V}_{3_{11}}}\sigma_{11}^z + W_{\mathcal{V}_{3_{12}}}\sigma_{12}^z - W_{\mathcal{V}_{3_3}}\sigma_3^z\right)\cosh\left(b_{\mathcal{V}_4} + W_{\mathcal{V}_{4_{13}}}\sigma_{13}^z + W_{\mathcal{V}_{4_{14}}}\sigma_{14}^z + W_{\mathcal{V}_{4_{15}}}\sigma_{15}^z - W_{\mathcal{V}_{4_4}}\sigma_4^z\right)\times$$
$$\cosh\left(b_{\mathcal{V}} - W_{\mathcal{V}_1}\sigma_1^z - W_{\mathcal{V}_2}\sigma_2^z - W_{\mathcal{V}_3}\sigma_3^z - W_{\mathcal{V}_4}\sigma_4^z\right)\cosh\left[i\frac{\pi}{4}\left(\sigma_{15}^z + \sigma_{16}^z - \sigma_1^z - \sigma_4^z\right)\right]\times \qquad (1)$$
$$\cosh\left[i\frac{\pi}{4}\left(\sigma_7^z + \sigma_8^z - \sigma_1^z - \sigma_2^z\right)\right]\cosh\left[i\frac{\pi}{4}\left(\sigma_9^z + \sigma_{10}^z - \sigma_2^z - \sigma_3^z\right)\right]\cosh\left[i\frac{\pi}{4}\left(\sigma_{12}^z + \sigma_{13}^z - \sigma_3^z - \sigma_4^z\right)\right].$$

The left hand side of the equation:

$$\cosh\left(b_{\mathcal{V}} + W_{\mathcal{V}_1}\sigma_1^z + W_{\mathcal{V}_2}\sigma_2^z + W_{\mathcal{V}_3}\sigma_3^z + W_{\mathcal{V}_4}\sigma_4^z\right)\cosh\left(b_{\mathcal{V}_1} + W_{\mathcal{V}_{1_5}}\sigma_5^z + W_{\mathcal{V}_{1_6}}\sigma_6^z + W_{\mathcal{V}_{1_{16}}}\sigma_{16}^z + W_{\mathcal{V}_{1_1}}\sigma_1^z\right)\times$$
$$\cosh\left(b_{\mathcal{V}_2} + W_{\mathcal{V}_{2_7}}\sigma_7^z + W_{\mathcal{V}_{2_8}}\sigma_8^z + W_{\mathcal{V}_{2_9}}\sigma_9^z + W_{\mathcal{V}_{2_2}}\sigma_2^z\right)\cosh\left(b_{\mathcal{V}_3} + W_{\mathcal{V}_{3_{10}}}\sigma_{10}^z + W_{\mathcal{V}_{3_{11}}}\sigma_{11}^z + W_{\mathcal{V}_{3_{12}}}\sigma_{12}^z + W_{\mathcal{V}_{3_3}}\sigma_3^z\right)\times$$
$$\cosh\left(b_{\mathcal{V}_4} + W_{\mathcal{V}_{4_{13}}}\sigma_{13}^z + W_{\mathcal{V}_{4_{14}}}\sigma_{14}^z + W_{\mathcal{V}_{4_{15}}}\sigma_{15}^z + W_{\mathcal{V}_{4_4}}\sigma_4^z\right)\cosh\left[i\frac{\pi}{4}\left(\sigma_{15}^z + \sigma_{16}^z + \sigma_1^z + \sigma_4^z\right)\right]\times \qquad (2)$$
$$\cosh\left[i\frac{\pi}{4}\left(\sigma_7^z + \sigma_8^z + \sigma_1^z + \sigma_2^z\right)\right]\cosh\left[i\frac{\pi}{4}\left(\sigma_9^z + \sigma_{10}^z + \sigma_2^z + \sigma_3^z\right)\right]\cosh\left[i\frac{\pi}{4}\left(\sigma_{12}^z + \sigma_{13}^z + \sigma_3^z + \sigma_4^z\right)\right].$$

$$\sigma_i = \pm 1, \quad i = 1, ..., 16.$$

The parameters : $\quad b_{\mathcal{V}_\mu}, W_{\mathcal{V}_\mu i}, b'_{\mathcal{V}_\mu}, W'_{\mathcal{V}_\mu i}; \quad$ for $\mu = 1, ..., 4.$