We present a technique for transforming certain esoteric spaces into $N$-compact ones with special properties and give two applications. Both examples are metrizable.

If $X$ is $E$-compact, then $Exp_E X$ denotes the smallest cardinal $\kappa$ for which $X$ embeds in $E^\kappa$ as a closed set. Also, $N([0, 1])$ denotes the Novak number of $[0, 1]$. The first example $X$, assuming $\omega_1 < c = N([0, 1])$, satisfies $Exp_R X < Exp_N X$, and thus gives a consistent solution to a problem of Mrowka and van Douwen (in his ”Handbook of set theoretic topology” article). The second example $Y$ illustrates, consistently, that there is no completion theorem for $N$-compact metrizable spaces. That is, assuming CH fails, $Y$ is an $N$-compact metrizable space which admits no $N$-compact completion. (Received September 08, 2016)