Within our recently proposed generalized nonlocal optical response (GNOR) model, where nonlocal response is included by taking into account both convective and diffusive currents of the conduction electrons, we revisit the fundamental problem of an optically excited plasmonic dimer. We consider the transition from separated dimers via touching dimers to finally overlapping dimers. In particular, we focus on the touching case, showing a fundamental limit on the hybridization of the bonding plasmon modes due to nonlocality. Using transformation optics, we determine a simple analytical equation for the resonance energies. (C) 2015 Optical Society of America