$$\frac{19}{(114)} \quad \lim_{x\to\frac{\pi}{4}} \frac{1-\tan^2 x}{\sin 4x} = \lim_{x\to\frac{\pi}{4}} \frac{1-\frac{\sin^2 x}{\cos^2 x}}{2\sin 2x \cos 2x} = \lim_{x\to\frac{\pi}{4}} \frac{\cos^2 x - \sin^2 x}{2\sin 2x \cos 2x \cos^2 x} = \lim_{x\to\frac{\pi}{4}} \frac{\cos 2x}{2\sin 2x \cos 2x \cos^2 x} = \lim_{x\to\frac{\pi}{4}} \frac{1}{2\sin 2x \cos^2 x} =$$

$$= \frac{1}{2\cdot 1\cdot \frac{1}{2}} = \frac{1}{1} = 1$$