GENERALIZED SMARANDACHE PALINDROME

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A Generalized Smarandache Palindrome is a number of the form: $a_1a_2...a_na_n...a_2a_1$ or $a_1a_2...a_{n-1}a_na_{n-1}...a_2a_1$, where all $a_1, a_2, ..., a_n$ are positive integers of various number of digits.

Examples:

a) 1235656312 is a GSP because we can group it as (12)(3)(56)(56)(3)(12), i.e. ABCCBA.

b) Of course, any integer can be consider a GSP because we may consider the entire number as equal to a_1, which is smarandachely palindromic; say $N = 176293$ is GSP because we may take $a_1 = 176293$ and thus $N = a_1$. But one disregards this trivial case.

Very interesting GSP are formed from smarandacheian sequences.

Let us consider this one:

$$11, 1221, 123321, ..., 123456789987654321,$$

$$12345678910109876543 21, 123456789101111109876543 21, ...$$

all of them are GSP.

It has been proven that 12345678910109876543 21 is a prime (see

$$http://www.kottke.org/notes/0103.html,$$

and the Prime Curios site).

A question: How many other GSP are in the above sequence?