## String#rpartition(regexp) has bug, when regexp contains quantifier

**04/25/2011 01:20 PM - yimutang (Joey Zhou)**

### Status:
Rejected

### Priority:
Normal

### Assignee:

### Target version:

```
ruby -v:
ruby 1.9.2p180 (2011-02-18)
[i386-mingw32]
```

### Description

```
=begin
For example:
str = "abc123def456ghi"
ary1 = str.partition(/\d+/)
ary2 = str.rpartition(/\d+/)
p ary1 #=> ["abc", "123", "def456ghi"]
p ary2 #=> ["abc123def45", "6", "ghi"]

What I expected is: ary2 is ["abc123def", "456", "ghi"].
["abc123def45", "6", "ghi"] may be the result of str.rpartition(/\d/)

I have no knowledge about C language, so I can't read the source code.
But I guess the matching procedure may be such:

Go from the right side of str, attempting to match the regexp:
matched_substr?

1  take "i"  false  go to next char
2  take "h"  false  go to next char
3  take "g"  false  go to next char
4  take "6"  true("6")  go to next char
5  add  "5"  true("56")  go to next char
6  add  "4"  true("456")  go to next char
7  add  "f"  false  exit, return last matched string "456"

It seems that the actual procedure exit at step 4, whenever true, and return "6".

Maybe it should be a filp-flop condition, when matching become true, go ahead, exit when it becomes false again.
=end
```

### History

#### #1 - 04/27/2011 05:23 PM - yimutang (Joey Zhou)

```
=begin
Well, String#rindex act the same way:

str = "abc123def456ghi"
puts str.rindex(/\d+)/ # 11, not 9
=end
```

#### #2 - 04/27/2011 06:07 PM - nobu (Nobuyoshi Nakada)

- Status changed from Open to Rejected
It's the way how regexp engines work.

Try:
"abc123def456ghi".rpartition(/(?<=\D|\A)\d+/)
or
"abc123def456ghi".partition(/\d+(?!.*\d)/)