SPG Program
Extended Penalty function

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    Project: Simple Bounded Optimization
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    SPG Program - E.G.Birgin, J.M.Martinez and M.Raydan.
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    Date: ---  Month: 8  Day:17  Year: 2010

    Termination criteria:
    cginfn .le. eps
    cgtwon .le. eps2**2
    where :
    cginfn is the gradient infinite-norm, and eps=
.0000000000000E+00
    cgtwon is the gradient 2-norm, and eps2=
.1000000000000E-05

    Line search interpolation:
    Line search with safeguarded quadratic interpolation

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    Extended Penalty function:    n=   1000

 F=          8.8319407507D+02
 CGINFNORM=  9.6923988957D-07
 CGTWONORM=  9.8242610036D-07
 FLAG=       1

 ITER=          22
 FCNT=          23
 GCNT=          23
 TIME(csec.)=      0

    Extended Penalty function:    n=   2000

 F=          1.8140636649D+03
 CGINFNORM=  7.1585899224D-07
 CGTWONORM=  7.9552752698D-07
 FLAG=       1

 ITER=          23
 FCNT=          24
 GCNT=          24
 TIME(csec.)=      0

    Extended Penalty function:    n=   3000

 F=          2.7559737495D+03
 CGINFNORM=  8.3768012560D-07
 CGTWONORM=  8.3768034824D-07
 FLAG=       1

 ITER=          26
 FCNT=          27
 GCNT=          27
 TIME(csec.)=      0

    Extended Penalty function:    n=   4000

 F=          3.7040705349D+03
 CGINFNORM=  1.2268209293D-08
 CGTWONORM=  1.2338305320D-08
 FLAG=       1

 ITER=          26
 FCNT=          27
 GCNT=          27
 TIME(csec.)=      6

    Extended Penalty function:    n=   5000

 F=          4.6563339237D+03
 CGINFNORM=  4.5091399741D-07
 CGTWONORM=  4.6022047656D-07
 FLAG=       1
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 FLAG=       1
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ITER=          21
FCNT=          22
GCNT=          22
TIME(csec.)=      5

   Extended Penalty function:    n=   6000

F=          5.6116766591D+03
CGINFNORM=  2.0064769872D-08
CGTWONORM=  3.0470373772D-08
FLAG=       1

ITER=          25
FCNT=          26
GCNT=          26
TIME(csec.)=      6

   Extended Penalty function:    n=   7000

F=          6.5694285607D+03
CGINFNORM=  5.0172389111D-07
CGTWONORM=  5.0172389661D-07
FLAG=       1

ITER=          27
FCNT=          28
GCNT=          28
TIME(csec.)=      5

   Extended Penalty function:    n=   8000

F=          7.5291396385D+03
CGINFNORM=  7.6260394116D-07
CGTWONORM=  7.8076086447D-07
FLAG=       1

ITER=          26
FCNT=          27
GCNT=          27
TIME(csec.)=      6

   Extended Penalty function:    n=   9000

F=          8.4904892815D+03
CGINFNORM=  4.0234447715D-07
CGTWONORM=  4.0239121018D-07
FLAG=       1

ITER=          27
FCNT=          28
GCNT=          28
TIME(csec.)=     11

   Extended Penalty function:    n=  10000

F=          9.4532388528D+03
CGINFNORM=  7.0311303869D-07
CGTWONORM=  7.0398768271D-07
FLAG=       1

ITER=          24
FCNT=          25
GCNT=          25
TIME(csec.)=     11
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FCNT=          22
GCNT=          22
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FLAG=       1

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